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The wild bees (Hymenoptera: Apoidea) of Morocco

PATRICK LHOMME *et al.*



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Abstract

Morocco is a well known hot-spot of biodiversity in the Mediterranean basin. While some taxa like vascular plants are relatively well recorded, important groups of pollinators like bees are still understudied. This article presents an updated checklist of the bee species of Morocco and includes a summary of global and regional distribution of each species. A total of 961 species belonging to six bee families and 68 genera are recorded: Andrenidae (8 genera, 217 species); Apidae (15 genera, 241 species); Colletidae (2 genera, 74 species), Halictidae (12 genera, 144 species), Megachilidae (28 genera, 271 species) and Melittidae (3 genera, 14 species). Among them, 67 species are recorded for the first time in Morocco. Around 70% of the bee fauna of Morocco consists of widespread Palearctic species. Only 18% of Moroccan species recorded are restricted to North Africa and 8% are Moroccan single-country endemics (81 species). Afrotropical elements in the Moroccan fauna are few, with only 3% of Morocco species co-occurring in that region. This checklist is intended to stimulate new regional research on bees including their taxonomy and biogeography. As many groups of bees have been understudied, discovery of new species for science and new records for the country can be expected. Additional research including inventorying, monitoring, and integrative taxonomic studies are needed to develop a comprehensive strategy for bee conservation in Morocco.

Key words: Anthophila, checklist, endemism, pollinators, Mediterranean, Sahara

Introduction

Located in the northwestern fringes of Africa, Morocco is situated south of Europe, at a crossroad between the Atlantic Ocean in the west, the Mediterranean Sea in the north and the Sahara Desert in the south (Figure 1). This privileged geographical position has led to an unusually high diversity of climates, from the Mediterranean climates along the north coast to the desertic climates in the south, and from the oceanic climates of the west coast to the montane climates of the interior of the country. This high climatic diversity has in turn resulted in a multitude of habitats and ecoregions currently hosting the second highest terrestrial biodiversity in the Mediterranean basin. With an estimated 4,200 vascular plant taxa of which more than 20% are endemic (Valdés *et al.* 2002; Rankou *et al.* 2013), only Turkey surpasses Morocco for its floral richness in this region (Piles 2013), with both countries having similar surface areas (783,356 km² and 710,850 km² respectively).

Like the rest of the world, Morocco has suffered important biodiversity degradation and loss in the last decades, mainly due to human activities (IPBES 2018). For example, 24% of Moroccan plant diversity is listed as threatened (Rankou *et al.* 2015) including many wild relatives of domesticated crops (Lala *et al.* 2018). Plant biodiversity loss is often associated with pollinator biodiversity loss due to their interlinked relationships (e.g. Schleuning *et al.* 2016). Animal pollinators contribute, to different extent, to the sexual reproduction of more than 80% of plant spe-

cies worldwide (Ollerton *et al.* 2011). Among them, bees are usually considered as the most important, especially for their role in crop pollination (Klein *et al.* 2007; Potts *et al.* 2016). However, despite their importance for crops yield and wild plants conservation of Morocco, the bee fauna of Morocco remains poorly documented. To protect this major group of pollinators, the first step would be to monitor current population trends however to do so basic taxonomic and distributional informations are needed (Berenbaum *et al.* 2007; Gonzalez *et al.* 2013; Nieto *et al.* 2014).



FIGURE 1. Map of Morocco (in red) represented within the Mediterranean Basin.

The first and only extensive taxonomic study focusing specifically on the bees of Morocco was published more than a century ago by Spanish melittologist José María Dusmet y Alonso (1915). This list included 86 bee species, notably few in comparison to the high species richness of this country. Other entomologists contributed significantly to our knowledge of the bees of Morocco including Swiss melittologist Anton von Schulthess-Rechberg (1924), with 76 species recorded, the American entomologist Theodore Dru Allison Cockerell (1931a,b,c,d,e,f,g; 1937; 1938a,b), with 98 species described or recorded, and especially French melittologist Raymond Benoist (1927; 1928; 1930; 1937; 1941; 1943; 1950a,b; 1957a,b; 1961), who published several taxonomic and faunistic papers documenting 211 species. Nadig & Nadig (1933) did not describe any new species but listed a relatively extensive 227 bee species from Morocco in their study of Moroccan and west-Algerian Hymenoptera. Subsequent authors described or reported many additional species from Morocco in studies focusing on major bee genera such as *Eucera* Scopoli (Dusmet y Alonso 1928), *Halictus* Latreille, *Lasioglossum* Curtis (Cockerell 1938b; Ebmer 1976; 1985), and *Megachile* Latreille (Mavromoustakis 1947). Most other country records available to date were published in revisions of West-Palaearctic and Palaearctic species published in the past several decades for various bee taxa (see checklist and references herein). Unfortunately, several of these publications are now outdated, and given the pressing need to inventory and monitor Moroccan bee populations, an updated assessment of its species diversity is needed, with input from taxonomic experts familiar with recent advances in bee research such as resolution of cryptic species complexes using integrative taxonomy. The aim of this study is to present in a single study: (i) a review of historical records from the literature on the bee fauna of Morocco, especially information about relevant primary types in descriptive works, and (ii) recent records compiled from contemporary entomologists, including critical review of specimen records assembled in publicly-accessible specimen datasets. The result is an updated checklist of the bee species of Morocco.

Methods

The list of bees was compiled using regional records from several sources including scientific literature, online databases (Ascher & Pickering 2019; Kuhlmann *et al.* 2019; Rasmont & Haubruge 2019) and records compiled by the authors based on study of public museum and private collections. Bee nomenclature follows Michener (2007) with some updates in light of recent taxonomic advances, *e.g.*, the genus *Neanthidium* was recently put in synonymy with *Pseudoanthidium* (Litman *et al.* 2016), the genus *Tetraloniella* has been synonymized with *Tetralonia* and moved in genus *Eucera* (Dorchin *et al.* 2018) and the subgenera *Vestitohalictus* and *Seladonia* have been recognized in European sources as distinct genera (Rasmont *et al.* 2017). The genus *Lasioglossum* has a complex and unstable subgeneric classification, although recent phylogenetic and molecular studies have been published (Gibbs *et al.* 2013; Gibbs 2018), these do not yet fully cover groups of Palearctic species. We prefer here to adopt a more conservative classification here to minimize the need to infer without substantive basis subgeneric placements for species of ambiguous position that are not yet sequenced. We have thus kept here the subgeneric classification used by Ebmer (1976, 1985) for Moroccan species, although this classification is already considered obsolete due in part to nomenclatural difficulties (*e.g.*, multiple names pertaining to weak-veined *Lasioglossum sensu lato* have priority over *Evyllaesus*). The complete checklist of the bees of Morocco is organized alphabetically by family, genus and species. The full name (including subgenus when available) of the species is given first followed by information about Moroccan type material, when applicable, global and regional records, and bibliographic references for each species. Notes are also provided in some cases to specify taxonomic uncertainties and recent synonymies. The assessment of global species distribution was divided into six main areas: Moroccan endemic, Near endemic (species also present in Iberian Peninsula, Algeria, Tunisia or Mauritania), North Africa, West-Palearctic, Palearctic and Sub-Saharan Africa.

Abbreviations of bee collections:

AMNH: American Museum of Natural History (New York, USA)
AWE: Andreas Werner Ebmer Collection (Puchenau, Austria)
BT: Borek Tkalců Collection (Linz, Austria)
DAAN: Natural History Museum (Limassol, Cyprus)
ETHZ: Eidgenössische Technische Hochschule (Zürich, Switzerland)
FSAG: Zoologie Generale et Appliquée (Gembloux, Belgium)
INRA: Institut National de la Recherche Agronomique (Versailles, France)
IRSNB: Institut Royal des Sciences Naturelles de Belgique (Brussels, Belgium)
KW: Klaus Warncke Collection (Linz, Austria)
MFNB: Museum für Naturkunde (Berlin, Germany)
MHNG: Muséum d'Histoire Naturelle (Geneva, Switzerland)
MNCN: Museo Nacional de Ciencias Naturales (Madrid, Spain)
MNHN: Muséum National d'Histoire Naturelle (Paris, France)
MSAA: Max Schwarz Collection (Ansfelden, Austria)
MZLS: Musée Zoologique (Lausanne, Switzerland)
NHMUK: The Natural History Museum (London, United Kingdom)
OLML: Oberösterreichisches Landesmuseum (Linz, Austria)
RMNH: Naturalis Biodiversity Center (Leiden, Netherlands)
SEMC: Snow Entomological Museum Collection (Kansas, USA)
TJW: Thomas Wood Collection (Mons, Belgium)
UMBB: Übersee-Museum (Bremen, Germany)
USNM: National Museum of Natural History (Washington DC, USA)
ZISP: Russian Academy of Sciences, Zoological Institute (Saint Petersburg, Russia)

Results and discussion

Diversity of Moroccan bees

Investigation of the various data sources resulted in 961 valid species for Morocco (Table 1), including 68 genera (Figure 2). Family Megachilidae has the highest species richness (28 genera; 271 species), followed by Apidae (15 genera; 241 species), Andrenidae (8 genera; 217 species), Halictidae (12 genera; 144 species), Colletidae (2 genera; 74 species) and Melittidae (3 genera; 14 species). Interestingly, Megachilidae are notably well represented compared to other checklists where Apidae or Andrenidae are often the richest bee families (Ortiz-Sánchez 2011; Nieto *et al.* 2014; Baldock *et al.* 2018; Drossart *et al.* 2019). The bee genera with highest species richness are the *Andrena* (180 species), followed by *Hoplitis* (78 species), *Nomada* (71 species), *Lasioglossum* (65 species), *Eucera* (54 species) and *Osmia* (51 species). These 6 genera combined represent more than half of the Moroccan bee fauna. Adding to these the genera *Anthophora* (45 species), *Hylaeus* (44 species), *Megachile* (37 species) and *Colletes* (30 species) and the 10 largest genera represent more than two third of the bee species diversity of Morocco (Figure 2). The high species richness of these genera (e.g. *Eucera* and *Anthophora*) and relatively high number of panurgines is typical from xeric or Mediterranean countries like Morocco or Portugal (Baldock *et al.* 2018, Wood *et al.* 2020a). In addition, range-restricted and in some cases relictual genera occur in different bee families, e.g., *Promelitta* (Melittidae), *Fidelia* and *Pararophites* (Megachilidae), and *Plesiopanurgus* (Andrenidae). The presence of these bee lineages, some of which are phylogenetically distinctive, is consistent with the xeric origin of the proto-bees (Michener 2007; Danforth *et al.* 2013).

The high number of species identified from Morocco, despite historical lack of resident bee experts and consequently the relatively poor sampling effort, can be explained by its unique biogeographical context (Rankou *et al.* 2013). Globally, Morocco is ranked 15th in species richness (based on totals for all world countries and other major areas updated from Ascher & Pickering 2019), and most countries with higher totals are much larger and/or have a long history of bee discovery and description by resident bee experts. Among countries smaller in size than Morocco, only Greece and Italy in the Mediterranean Basin, well-known hotspots for bee diversity, have higher known species richness. Morocco is currently ranked in 5th position among the richest countries of the Mediterranean Basin in terms of bee species diversity, following the two above-mentioned countries and also Turkey and Spain (Figure 3), and in 2nd position in Africa after South Africa (Ascher & Pickering 2019). Such globally high species richness for Moroccan bees is quite impressive considering how little bee research has been done in the country as compared to most other European and world countries with similar richness. To exemplify lack of research on bees within Morocco it is worth highlighting the lack of any Moroccan-born describer of bees and description of only 54 bee taxa in Moroccan journals (all by Benoist; 22 are currently considered to be valid species).

In comparison to North African countries Morocco has somewhat higher documented richness than Algeria (830 species according to updated totals from Ascher & Pickering 2019) and considerably higher than Tunisia (650), Egypt (466) and Libya (275). Possible non-exclusive explanations include decreasing richness from West to East in this region, lower richness in countries with more extreme or general aridity, higher richness in countries with more extensive and complex mountains ranges, and higher richness in areas with greater historical sampling by researchers from more diverse countries. With respect to the latter, Morocco has been enriched by extensive historical sampling by collectors from both France and Spain, among other countries.

Morocco is vastly richer in known species than are countries of the Sahel to the south of it, such as Mauritania (a mere 32 species), Mali (50 species), Niger (57 species), and Chad (38 species). Species totals for Sahelian countries having an order of magnitude lower than those for North African countries reflects artifacts of generally poor knowledge of the Afrotropical fauna and poor sampling of those relatively inaccessible areas. However, they genuinely lack Mediterranean elements that so greatly enrich the North African bee fauna, and a genuinely impoverished fauna would be consistent with expectations for a tropical xeric area (Michener 1979; Orr *et al.* 2020).

Bee species richness in Morocco is almost half of European bee diversity (2051 species according to Rasmont *et al.* 2017) while surface area of Morocco represents only 7% of the European surface area. Remarkably, high species richness in Morocco can be explained in part by the probable dual origin of its fauna which is characterized (i) by West Mediterranean species such as species of the genera *Andrena* and *Melitta* that were probably isolated from eastern populations during the last glaciations (e.g. Hewitt 1999; Dellicour *et al.* 2015; Lecocq *et al.* 2016) and crossed the Gibraltar straight to Morocco and (ii) by an Asiatic source of species that migrated from the East through North Africa (e.g. species of the genus *Promelitta*; Michez *et al.* 2007). During the interglacial periods there was a wide North African band of Mediterranean steppes conducive to spread of bees to Morocco (Patiny 2001) followed by disjunctions during glacial periods (White 1986) that favored isolation and subsequent speciation. This could ex-

plain the general Moroccan singularity in terms of diversity and endemism. Although near 70% of Moroccan species are to some degree widespread throughout the Palearctic, a considerable number (18%, 175 species) are restricted to North Africa, 18% are near endemics (176 species) and 8% of the species (81 species, Table 2) are single-country endemics, ranking Morocco as 27th among world countries and equivalent major areas (J. S. Ascher, unpublished). Among countries in the Mediterranean Basin, Morocco ranks 4th in single-country endemic bee species after Turkey, Spain and Greece (Figure 4) (note that if non-Mediterranean Canary Islands endemics are excluded Spain has only 58 single-country endemics, fewer than Morocco). Only 3% of Moroccan species (32 species) co-occur in the Afrotropics, and most of these are also distributed throughout North Africa and the Mediterranean Basin, with no Moroccan bee species restricted outside of Morocco to the Afrotropics.

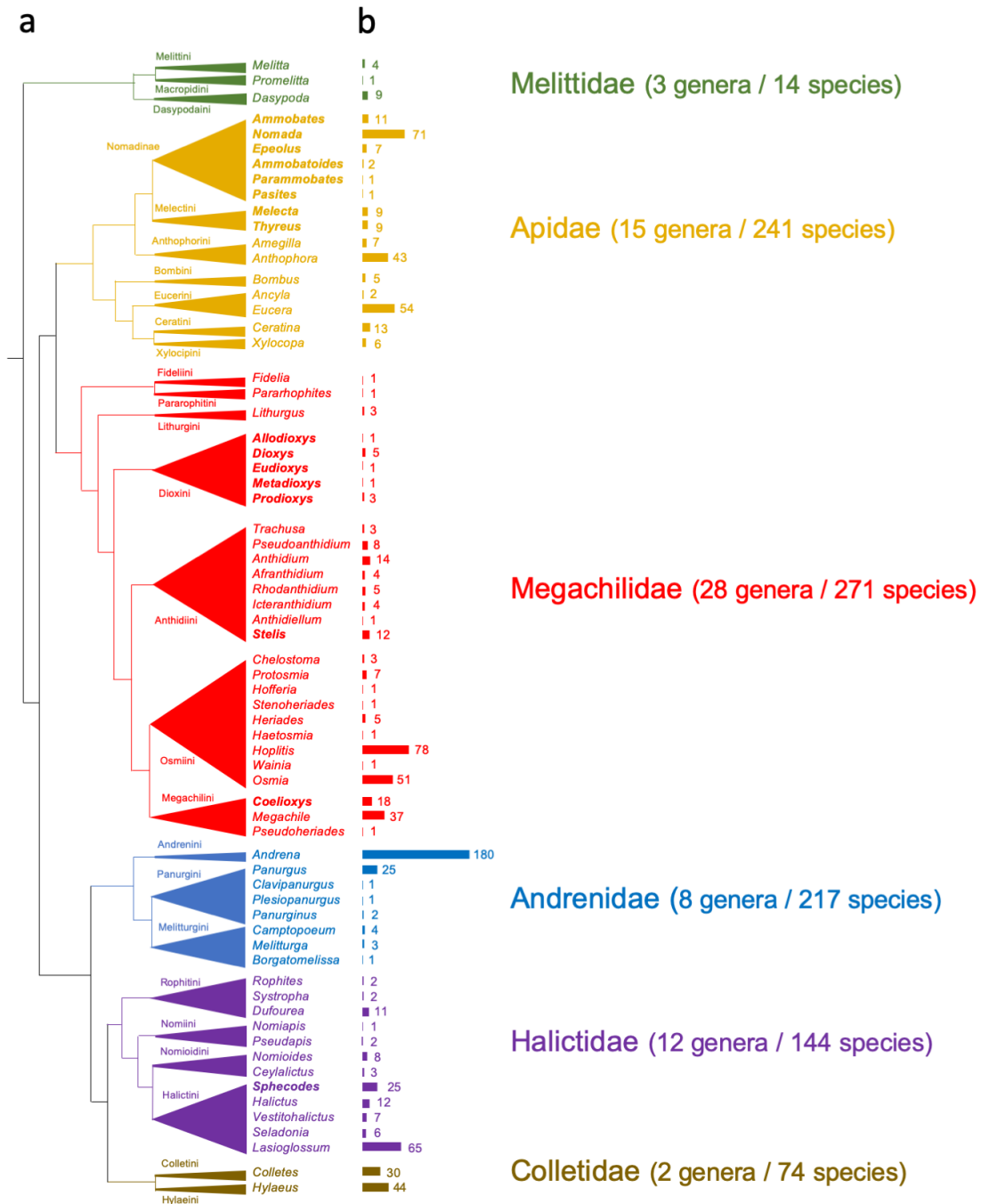


FIGURE 2. (a) List of Moroccan bee tribes and genera ordered phylogenetically (based on Praz *et al.* 2008, Almeida & Danforth 2009, Michez *et al.* 2009, Gonzalez *et al.* 2012, Danforth *et al.* 2013, Litman *et al.* 2016, Dorchin *et al.* 2018, Bossert *et al.* 2019). (b) Histogram showing the number of known species for each genus. Parasitic genera are bolded.

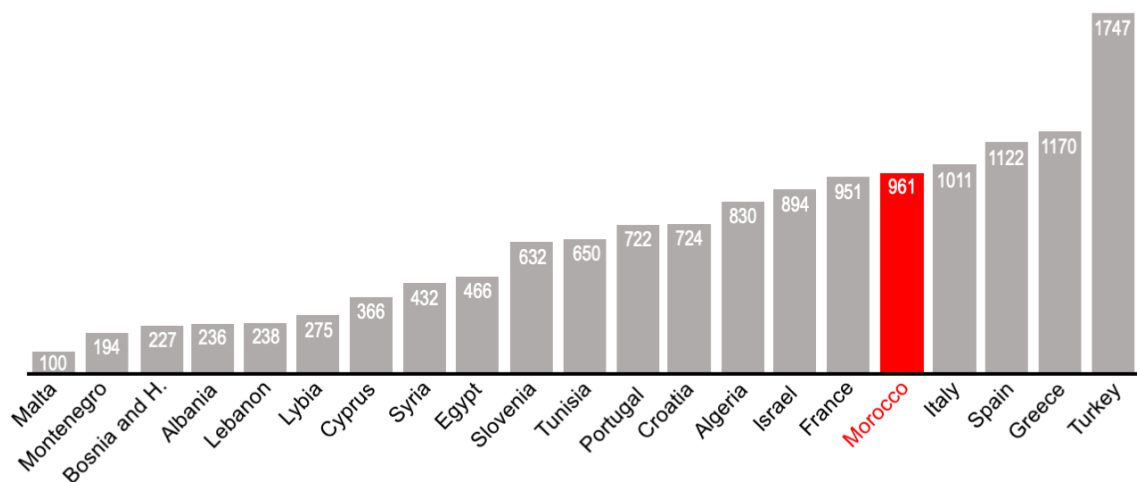


FIGURE 3. Bee richness of countries in the Mediterranean Basin (data source: Ascher & Pickering 2019).

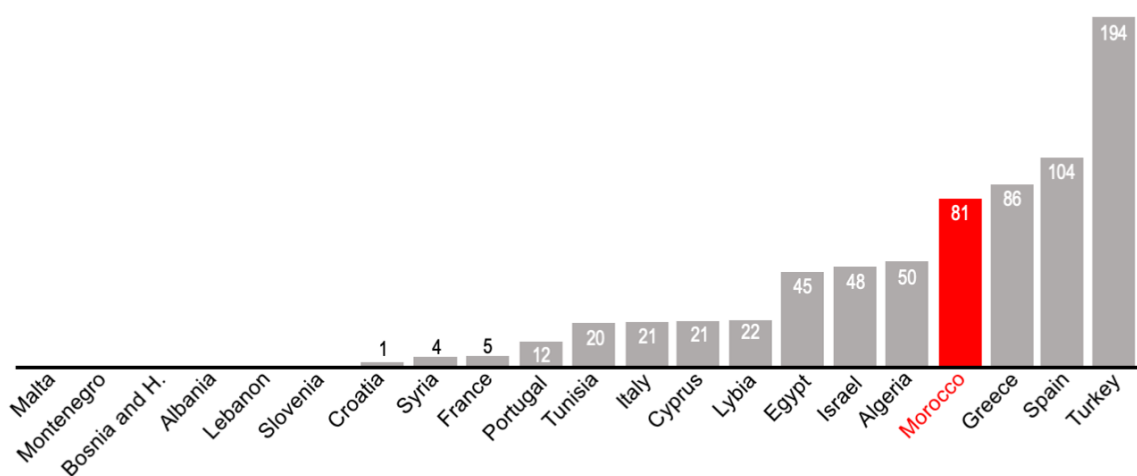


FIGURE 4. Number of endemic bee species of countries in the Mediterranean Basin (data source: Ascher & Pickering 2019).

Distribution of Moroccan bees

The number of species recorded from each region varies greatly (Figure 5a). The four regions with the highest species richness, Marrakesh-Safi (511 species), Fès-Meknès (465 species), Souss-Massa (446 species) and Drâa-Tafilalet (425 species) are all crossed by the Atlas Mountain chains (Middle and High Atlas and Anti-Atlas). In contrast, regions showing the lowest number of bee species are either semi-arid areas dominated by cereal agriculture (Casablanca-Settat; 135 species) or desertic areas characterized by a scarcity of water and floral resources like Laâyoune-Sakia El Hamra (17 species) and Dakhla-Oued Ed-Dahab (6 species). Such high variations in species totals between regions however certainly also reflect differences in sampling effort rather than true bee species richness. The mountainous areas surrounding major touristic cities like Marrakech, Agadir, Fès or Ouarzazate have been more thoroughly investigated than the remote desertic areas of southern or Eastern Morocco. Moreover the mountain chains are known to constitute an extended transition gradient where Mediterranean and Saharan species often co-occur (Patiny & Michez 2007a), probably explaining a genuinely high richness in this area.

The same pattern is observed concerning the regional species richness of endemic species (Figure 5B). The three regions with the highest records of endemic species, Marrakesh-Safi (39 species), Souss-Massa (38 species) and Drâa-Tafilalet (33 species), are bordering the Atlas Mountains. Similar hotspots of plant biodiversity in Morocco are the Atlas and the Rif mountain chains (Médail & Quézel 1997). Western Anti-Atlas and the Souss region can be considered as refuge areas for many relict plants/insects of the Tertiary period (Médail & Diadema 2009) like Southern European Mountains (*e.g.*, Alps, Pyrennees; Dellicour *et al.* 2015). This probably explains why areas like the western end of the Anti-Atlas, the Souss, the High Atlas and the Middle Atlas are also the richest in bee species diversity and endemic species diversity. The high percentage of endemic plants (20%; Rankou *et al.* 2013), the

diversity of its climates and habitats and its biogeographical history (Médial & Diadema 2009) probably explains this quite high level of bee endemism in Morocco. Based on authors unpublished data, additional endemic species can be expected to be described.

Interestingly, some groups exhibit high levels of specific endemism, it is the case particularly within the Panurgini tribe (genera *Clavipanurgus*, *Panurgus*, *Panurginus* and *Plesiopanurgus*) with 25% of endemic species and within the Rophitini tribe (genera *Dufourea*, *Systropha* and *Rophites*) with 46% of endemic species. Considering genus *Panurgus*, more than a third of its Moroccan species are single-country endemics, and 70% of global species are present in Morocco, this country can clearly be considered as of the center of greatest diversification of *Panurgus* (Patiny 2001). This high endemism is explained by the partition of the country in three main areas that favored isolation and speciation during the glacial periods where glaciers covered the Riff and Atlas Mountains: An Atlantic plain east of Riff and the Atlas Mountains; a plain south of Anti Atlas and high Atlas in the Souss region where most endemic species occur (Patiny 2001); and a vast plain east of the Anti-Atlas extending until Algeria. This partition of the country probably also promoted speciation in the other groups of bees. An additional factor promoting diversification in both Panurgini and Rophitini tribes is their propensity to be oligolectic, *i.e.* with narrow host-plant preferences (Patiny 2001; Patiny & Michez 2007b). Pollen specialization may have limited dispersal of these groups of bees and facilitated accumulation of syntopic congeners.

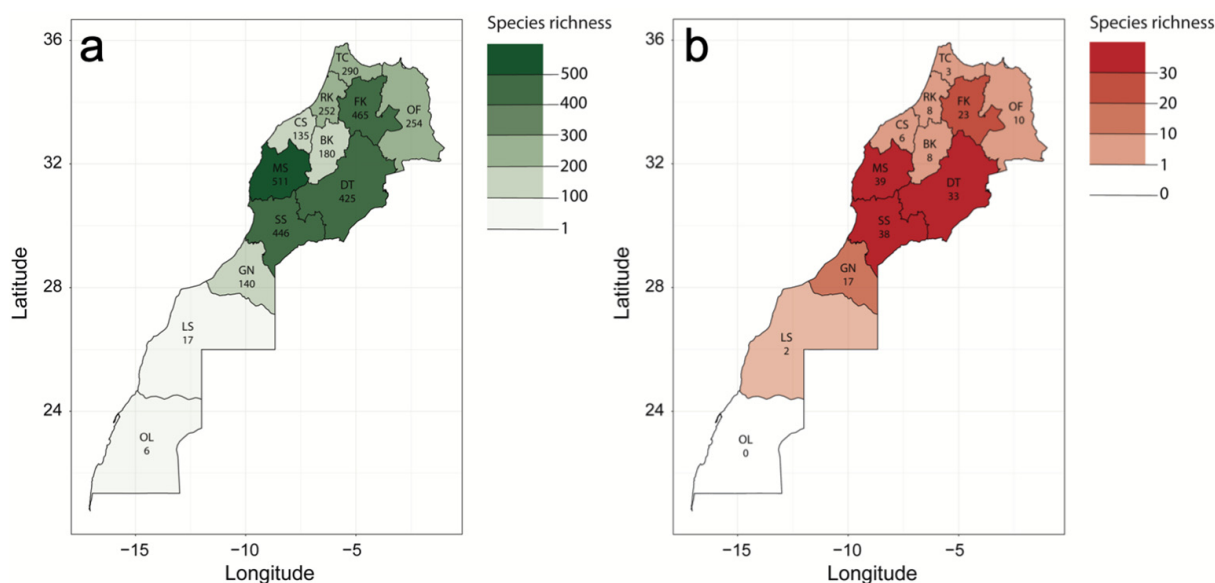


FIGURE 5. Maps of Morocco showing regions colored by their known (a) bee species richness and (b) endemic bee species richness (Abbreviations, TC: Tanger-Tetouan-Al Hoceima region; OF: Oriental region; FK: Fès-Meknès region; RK: Rabat-Salé-Kénitra region; BK: Béni Mellal-Khénifra region; CS: Casablanca-Settat region; MS: Marrakesh-Safï region; DT: Drâa-Tafilalet region; SS: Souss-Massa region; GN: Guelmim-Oued Noun region; LS: Laâyoune-Sakia El Hamra region; OL: Dakhla-Oued Ed-Dahab region).

Complete checklist of the wild bees of Morocco

Family Andrenidae Latreille, 1802

Genus *Andrena* Fabricius, 1775

Andrena (*Micrandrena*) *abjecta* Pérez, 1895

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Dardon *et al.* (2014); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) abrupta* Warncke, 1967**

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Notandrena) acutidentis* Wood, 2020**

Andrena acutidentis Wood, 2020—♀ (OLML), Holotype, 10 km SE Ait Baha (Morocco)

Andrena acutidentis Wood, 2020—♂♀ (OLML, RMNH, TJW), Paratypes, 10 km SE Ait Baha, 10 km W Tiznit, 30 km SE Taliouine, Biougra-Taфраout (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Wood *et al.* (2020b)

***Andrena (Chrysandrena) aegyptiaca* Friese, 1899**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Aenandrena) aeneiventris* Morawitz, 1872**

Global distribution: Palearctic

Regional distribution: Casablanca-Settat; Fès-Meknès; Tanger-Tétouan-Al Hoceima

References: Gusenleitner & Schwarz (2002); Benoist (1961); Lindbergh (1934); Warncke (1974); Rasmont *et al.* (2013)

***Andrena (Carandrena) aerinifrons* Dours, 1873**

Andrena atlantis Friese, 1924: 303—♂ (MFNB), Type unknown, Jbel Zalagh, Moulay Idriss (Morocco)

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1974); Schulthess (1924); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) aetherea* Warncke, 1974**

Andrena aetherea Warncke, 1974: 36—♂ (OLML), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Dylewska (1983); Gusenleitner & Schwarz (2002)

***Andrena (Agandrena) agilissima* (Scopoli, 1770)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Benoist (1943; 1961); Warncke (1967; 1974); Grünwaldt (1976); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) agnata* Warncke, 1967**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) albifacies* Alfken, 1927**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Oriental; Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) albopunctata* (Rossi, 1792)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa

References: Nadig & Nadig (1933); Benoist (1961); Grünwaldt (1976); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) alchata* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Fez-Meknès; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Casablanca-Settat

References: Warncke (1980a); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013); Wood *et al.* (2020b)

***Andrena (Micrandrena) alfenella* Perkins, 1914**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chrysandrena) alluaudi* Benoist, 1961**

Andrena Alluaudi Benoist, 1961: 87—♀ (MNHN), Holotype, Essaouira (Morocco)

Global distribution: Near endemic (Morocco, Tunisia, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Benoist (1961); Warncke (1967; 1974); Rasmont *et al.* (2013)

***Andrena (Proxiandrena) ampla* Warncke, 1967**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Fès-Meknès; Rabat-Salé-Kénitra; Oriental

References: Warncke (1974); Schmid-Egger (2005); Rasmont *et al.* (2013)

***Andrena (Ptilandrena) angustior* (Kirby, 1802)**

Andrena angustior impressa Warncke, 1967: 234—♂ (KW), Holotype, Tanger (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Guelmim-Oued Noun; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1967); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

Notes: The subspecies *A. angustior impressa* is quite distinct from *A. angustior angustior* and should probably be raised to a valid species.

***Andrena (Simandrena) antigana* Pérez, 1895**

Andrena rungsii Benoist, 1937: 165—♂ (MNHN), Holotype, Insgane (Morocco)

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Fès-Meknès; Guelmim-Oued Noun; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Benoist (1924; 1937; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Graecandrena) argyreofasciata* Schmiedeknecht, 1900**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont *et al.* (2013)

***Andrena (Agandrena) asperrima* Pérez, 1895**

Andrena asperrima alascana Warncke, 1974: 36—♀ (KW), Holotype, Tizi n'Talrhem, near Midelt (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1974); Grünwaldt (1976); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) assimilis* Radoszkowski, 1876**

Andrena barnei Cockerell, 1931: 344—♀ (USNM), Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra

References: Cockerell (1931a); Rasmont *et al.* (2013)

Notes: *Andrena gallica* Schmiedeknecht, 1883 and *A. assimilis* are treated here as synonyms because of a lack of clarity over the status of taxa allied to *A. assimilis* across its entire range. The status of *A. barnei* remains unclear, since it could be either a subspecies or a distinct species. Following Warncke (1967) it is regarded here as a subspecies of *A. assimilis*, but type revision is necessary to resolve this issue.

***Andrena (Avandrena) avara* Warncke, 1967**

Andrena avara Warncke, 1967: 219—♀ (OLML), Holotype, Tanger (Morocco)

Andrena avara eureka Warncke, 1974: 28—♀ (KW), Holotype, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) bellidis* Pérez, 1895**

Andrena azuriventris Friese, 1924: 303—♀ (ETHZ), Syntypes, Kenitra (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat

References: Schulthess (1924); Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Euandrena) bicolor* Fabricius, 1775**

Andrena bicolor agraria Warncke, 1974: 22—Sex unknown (MNHN), Type unknown, Tanger (Morocco)

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Schulthess (1924); Benoist (1961); Warncke (1974); Grünwaldt (1976); Rasmont *et al.* (2013)

***Andrena (Hyperandrena) bicolorata* (Rossi, 1790)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Nadig & Nadig (1933); Schulthess (1924); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Plastandrena) bimaculata* (Kirby, 1802)**

Andrena gaetula Benoist, 1961: 89—♀ (MZLS), Holotype, Midelt-Errachidia (Morocco)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Grünwaldt (1976); Rasmont *et al.* (2013)

***Andrena (Carandrena) binominata* Smith, 1853**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa
References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Simandrena) biskrensis* Pérez, 1895**

Andrena biskrensis var. *Hassani* Benoist, 1950a: 40—♀ (MNHN), Holotype, Fom el Hassan (Morocco)

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Benoist (1950a; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) blanda* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain)

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Souss-Massa

References: Maidl (1933); Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) boyerella* Dours, 1872**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Benoist (1961); Warncke (1974); Grünwaldt (1976); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) breviceps* Wood, 2020**

Andrena breviceps Wood, 2020 —♀ (OLML), Holotype, 10 km N Erfoud (Morocco)

Andrena breviceps Wood, 2020 —♂♀ (OLML, TJW), Paratypes, 10 km N Erfoud, 20 km E Agdz, Tagounite (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Simandrena) breviscopa* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Spain)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Pallandrena) byrsicola* Schmiedeknecht, 1900**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Taeniandrena) caesia* Warncke, 1974**

Andrena caesia Warncke, 1974: 47—♀ (OLML), Holotype, Marrakech (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Marrakech-Safi; Oriental; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Campylogaster) caroli* Pérez, 1895**

Global distribution: Palearctic

Regional distribution: Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Benoist (1950a); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) cinerea* Brullé, 1832**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Alfken (1930); Maidl (1933); Warncke (1974); Rasmont *et al.* (2013)

***Andrena (Brachyandrena) colletiformis* Morawitz, 1874**

Global distribution: Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Alfken (1931); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Nobandrena) compta* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Oriental

References: Maidl (1933); Warncke (1967; 1974); Schwenninger (2015); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) curtivalvis* Morice, 1899**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) cyanomicans* Pérez, 1895**

Andrena maderensis fratella Warncke, 1968: 71—♀ (KW), Holotype, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Dylewska (1983); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Holandrena) decipiens* Schenck, 1861**

Andrena decipiens capta Warncke, 1974: 46—♀ (KW), Holotype, El Hajeb (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Warncke (1974); Rasmont *et al.* (2013)

***Andrena (Zonandrena) discors* Erichson, 1841**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Fumandrena) djelfensis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès; Oriental; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) doursana* Dufour, 1853**

Andrena doursana agadira Warncke, 1980a: 84—♀ (KW), Holotype, Agadir (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Schulthess (1924); Warncke (1967; 1980a); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) eddaensis* Gusenleitner, 1998**

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Souss-Massa

References: Gusenleitner (1998); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) euzona* Pérez, 1895**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) exigua* Erichson, 1835**

Global distribution: Near endemic (Morocco, Spain)

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Fumandrena) fabrella* Pérez, 1903**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) farinosoides* Wood, 2020**

Andrena farinosoides Wood, 2020 —♀ (OLML), Holotype, 40 km S Guercif (Morocco)

Andrena farinosoides Wood, 2020 —♂♀ (OLML, TJW), Paratypes, 40 km S Guercif, 30 km E Midelt, 10 km N Rich (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Oriental; Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Truncandrena) ferrugineicrus* Dours, 1872**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi

References: Schulthess (1924); Rasmont *et al.* (2013)

***Andrena (Zonandrena) flavipes* Panzer, 1799**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Nadig & Nadig (1933); Benoist (1943; 1961); Warncke (1974); Pagliano (1994); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) florea* Fabricius, 1793**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Guelmim-Oued Noun; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Hyperandrena) florentina* Magretti, 1883**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1967); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Aciandrena) fulica* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Oriental

References: Rasmont *et al.* (2013); Wood *et al.* (2020b)

***Andrena (Taeniandrena) fuliginata* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Rabat-Salé-Kénitra

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Notandrena) fulvicornis* Schenck, 1853**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Wood *et al.* (2020b)

***Andrena (Fumandrena) fumida* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Fès-Meknès; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002) [as *Andrena nitidiuscula* Schenck, 1853]; Rasmont *et al.* (2013)

***Andrena (Melanapis) fuscata* Erichson, 1835**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Rasmont *et al.* (2013)

***Andrena (Euandrena) granulosa* Pérez, 1902**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Taeniandrena) gregaria* Warncke, 1974**

Andrena gregaria Warncke, 1974: 47—♀ (OLML), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Casablanca-Settat; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) guichardi* Warncke, 1980**

Andrena guichardi Warncke, 1980a: 85—♀ (NHMUK), Holotype, Sidi-Ifni (Morocco)

Andrena guichardi Warncke, 1980a: 85—♀ (OLML), Allotype, 10 km S Taroudant (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun, Souss-Massa

References: Warncke (1980a); Rasmont *et al.* (2013)

***Andrena (Poliandrena) guttata* Warncke, 1969**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) hebescens* Wood, 2020**

Andrena hebescens Wood, 2020 —♀ (OLML), Holotype, Guelmim (Morocco)

Andrena hebescens Wood, 2020 —♀♂ (OLML, RMNH, TJW), Paratypes, Guelmim, Tassademt, Aoulouz-Talioine (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa; Guelmim-Oued Noun

References: Wood *et al.* (2020b)

***Andrena (Aenandrena) hedikae* Jaeger, 1934**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chrysandrena) hesperia* Smith, 1853**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) hirticornis* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) hispania* Warncke, 1967**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Warncke (1967; 1974); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) humilis* Imhoff, 1832**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Aenandrena) hystrix* Schmiedeknecht, 1883**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) icterina* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria, Spain)

Regional distribution: Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Graecandrena) impunctata* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Oriental

References: Warncke (1969); Rasmont *et al.* (2013)

***Andrena (Melittoides) innesi* Gribodo, 1894**

Andrena innesi tantana Warncke, 1980a: 84—♀ (NHMUK), Holotype, 31 km Goulimine-Tan Tan Road (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Warncke (1980a); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) insignis* Warncke, 1974**

Andrena (Chlorandrena) insignis Warncke, 1974: 29—♂ (OLML), Holotype, Imlil-Asni (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) isis* Schmiedeknecht, 1900**

Andrena Panousei Benoist, 1950a: 42—♀ (MNHN), Holotype, Akka (Morocco)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Oriental; Souss-Massa

References: Benoist (1950a); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) kamarti* Schmiedeknecht, 1900**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Holandrena) labialis* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Nadig & Nadig (1933); Warncke (1974; 1975); Grünwaldt (1976); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Biareolina) lagopus* Latreille, 1809**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Warncke (1967); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Notandrena) langadensis* Warncke, 1965**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) laurivora* Warncke, 1974**

Andrena laurivora Warncke, 1974: 46—♀ (OLML), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Simandrena) lepida* Schenck, 1861**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Oriental

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Leucandrena) leptopyga* Pérez, 1895**

Andrena maroccana Benoist, 1950a: 41—♀ (MNHN), Syntypes, Tata (Morocco)

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Guelmim-Oued Noun; Rabat-Salé-Kénitra; Souss-Massa

References: Benoist (1950a; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Notandrena) lepurana* Warncke, 1974**

Andrena lepurana Warncke, 1974: 50—♀ (OLML), Holotype, Koudia (Morocco)

Global distribution: North Africa

Regional distribution: Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) leucocyanea* Pérez, 1895**

Global distribution: North Africa

Regional distribution: Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) leucophaea* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Notandrena) leucura* Warncke, 1974**

Global distribution: North Africa

Regional distribution: Marrakech-Safi

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) limata* Smith, 1853**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013); Wood *et al.* (2020b)

***Andrena (Chlorandrena) livens* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1967); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Distandrena) longibarbis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Fès-Meknès; Marrakech-Safi; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) macroptera* Warncke, 1974**

Andrena macroptera Warncke, 1974: 45—♀ (OLML), Holotype, Koudia (Morocco)

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) mara* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Distandrena) mariana* Warncke, 1968**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Oriental; Tanger-Tétouan-Al Hoceima
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) marsae* Schmiedeknecht, 1900**

Global distribution: North Africa
Regional distribution: Casablanca-Settat; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) medeninensis* Pérez, 1895**

Andrena medeninensis abunda Warncke, 1974: 34—♀ (KW), Holotype, Koudia (Morocco)
Andrena medeninensis tiznita Warncke, 1980: 83—♀ (KW), Holotype, Tiznit (Morocco)
Global distribution: West-Palearctic
Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Drâa-Tafilalet
References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) mediovittata* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Canary Islands)
Regional distribution: Guelmim-Oued Noun
References: Benoist (1950a; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Avandrena) melacana* Warncke, 1967**

Global distribution: North Africa
Regional distribution: Fès-Meknès
References: Wood *et al.* (2020b)

***Andrena (Poliandrena) melaleuca* Pérez, 1895**

Global distribution: North Africa
Regional distribution: Fès-Meknès
References: Wood *et al.* (2020b)

***Andrena (Margandrena) menahemella* Scheuchl & Pisanty, 2016**

Global distribution: West-Palearctic
Regional distribution: Fès-Meknès
References: Wood *et al.* (2020b)

***Andrena (Distandrena) merimna* Saunders, 1908**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Drâa-Tafilalet; Fès-Meknès
References: Wood *et al.* (2020b)

***Andrena (Chlorandrena) microcardia* Pérez, 1895**

Global distribution: West-Palearctic
Regional distribution: Marrakech-Safi; Souss-Massa
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Brachyandrena) miegiella* Dours, 1873**

Andrena tingitana Pérez, 1895: 48—♀ (MNHN), Type unknown, locality unknown (Morocco)
Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet
References: Pérez (1895); Benoist (1961); Warncke (1974); Pagliano (1994); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) minapalumboi* Gribodo, 1894**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Benoist (1961); Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) minutula* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Rabat-Salé-Kénitra;

References: Schulthess (1924); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) minutuloides* Perkins, 1914**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Orandrena) monilia* Warncke, 1967**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Souss-Massa

References: Wood *et al.* (2020b)

***Andrena (Graecandrena) montarca* Warncke, 1975**

Andrena andina Warncke, 1974: 45—♂ (KW), Holotype, Tamlalet el Djedid (Morocco)

Global distribution: Near endemic (Morocco, Tunisia, Spain)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Rasmont *et al.* (2013)

***Andrena (Melandrena) morio* Brullé, 1832**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Schulthess (1924); Nadig & Nadig (1933); Benoist (1961); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Didonia) mucida* Kriechbaumer, 1873**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) nana* (Kirby, 1802)**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) nigroaenea* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Saunders (1909); Benoist (1943; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) nigroolivacea* Dours, 1873**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra

References: Schulthess (1924); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Carandrena) nigroviridula* Dours, 1873**

Andrena cupreoviridis Benoist, 1950: 98—♀ (MNHN), Holotype, Maamora forest (Morocco)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Rabat-Salé-Kénitra

References: Benoist (1950a); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Cnemidandrena) niveofacies* Wood, 2020**

Andrena niveofacies Wood, 2020 —♀ (OLML), Holotype, Asni, S Imlil (Morocco)

Andrena niveofacies Wood, 2020 —♂ (OLML), Paratype, Asni, S Imlil (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Wood *et al.* (2020b)

***Andrena (Thysandrena) numida* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Schulthess (1924); Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Distandrena) obsoleta* Pérez, 1895**

Global distribution: North Africa

Regional distribution: Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Distandrena) orana* Warncke, 1975**

Global distribution: Near endemic (Morocco, Algeria, Spain, Portugal)

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974; 1975); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Rufandrena) orbitalis* Morawitz, 1871**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1967; 1974); Rasmont *et al.* (2013)

***Andrena (Nobandrena) ounifa* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Taeniandrena) ovatula* (Kirby, 1802)**

Andrena lecerfi Benoist, 1961: 92—♀ (MNHN), Holotype, Tenfecht (Morocco)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Nadig & Nadig (1933); Benoist (1961); Rasmont *et al.* (2013)

***Andrena (Poliandrena) oviventris* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Spain, Portugal)
Regional distribution: Béni Mellal-Khénifra; Fès-Meknès; Rabat-Salé-Kénitra
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Simandrena) palumba* Warncke, 1974**

Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Lepidandrena) pandellei* Pérez, 1895**

Global distribution: West-Palearctic
Regional distribution: Oriental; Tanger-Tétouan-Al Hoceima
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Fumandrena) pandosa* Warncke, 1968**

Andrena pandosa heliaca Warncke, 1974: 41—♀ (KW), Holotype, Marrakech (Morocco)
Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Avandrena) panurgina* De Stefani, 1889**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Orandrena) pela* Warncke, 1974**

Andrena pela Warncke, 1974: 31—♂ (OLML), Holotype, Casablanca (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Casablanca-Settat; Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) petrosa* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Plastandrena) pilipes* Fabricius, 1781**

Global distribution: Palearctic
Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima
References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) planiventris* Dours, 1872**

Global distribution: North Africa
Regional distribution: Marrakech-Safi; Souss-Massa
References: Rasmont *et al.* (2013)

***Andrena (Aciandrena) pratincola* Warncke, 1974**

Global distribution: North Africa
Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun
References: Wood *et al.* (2020b)

***Andrena (Simandrena) propinqua* Schenck, 1853**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Ta-filalet

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Campylogaster) pruinosa* Erichson, 1835**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Rasmont *et al.* (2013)

***Andrena (Distandrena) purpurascens* Pérez, 1895**

Global distribution: North Africa

Regional distribution: Fès-Meknès

References: Rasmont *et al.* (2013)

***Andrena (Carandrena) ranunculi* Schmiedeknecht, 1883**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Poliandrena) relata* Warncke, 1967**

Global distribution: Near endemic (Morocco, Spain)

Regional distribution: Oriental; Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Chlorandrena) rhenana* Stoeckhert, 1930**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Schwenninger (2007; 2015)

***Andrena (Simandrena) rhypara* Pérez, 1903**

Andrena pleione Benoist, 1961: 93—♀ (MNHN), Holotype, Tenfecht (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain)

Regional distribution: Béni Mellal-Khénifra; Drâa-Ta-filalet; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Souss-Massa

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) rhyssonota* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Fès-Meknès; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1967; 1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Cryptandrena) rotundata* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Truncandrena) rufescens* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Guelmim-Oued Noun; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Benoist (1961); Warncke (1974)

***Andrena (Rufandrena) rufiventris* Lepeletier, 1841**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Marrakech-Safi; Rabat-Salé-Kénitra

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Taeniandrena) russula* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Benoist (1943; 1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Lepidandrena) sardoa* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Schulthess (1924); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Suandrena) savignyi* Spinola, 1838**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Oriental; Souss-Massa

References: Rasmont *et al.* (2013)

***Andrena (Micrandrena) saxonica* Stoeckhert, 1935**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Tanger-Tétouan-Al Hoceima

References: Wood *et al.* (2020b)

***Andrena (Truncandrena) schmiedeknechti* Magretti, 1883**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Simandrena) selena* Gusenleitner, 1994**

Global distribution: North Africa

Regional distribution: Souss-Massa; Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Aciandrena) semiadesus* Wood, 2020**

Andrena semiadesus Wood, 2020 —♂ (OLML), Holotype, Laanoucer (Morocco)

Andrena semiadesus Wood, 2020 —♂♀ (OLML), Paratypes, Laanoucer, 20 km W Boudnib (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Chlorandrena) senecionis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) simontornyella* Noskiewicz, 1939**

Andrena simontornyella adianta Warncke, 1974: 38—♀ (KW), Holotype, Tanger (Morocco)

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Chlorandrena) sinuata* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Rasmont *et al.* (2013)

***Andrena (Zonandrena) soror* Dours, 1872**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Campylogaster) sparsipunctata* Wood, 2020**

Andrena sparsipunctata Wood, 2020 —♀ (OLML), Holotype, 10 km E Guelmin (Morocco)

Andrena sparsipunctata Wood, 2020 —♀♂ (OLML), Paratypes, 10 km E Guelmin, 10 km S Bouarfa (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Oriental; Guelmim-Oued Noun

References: Wood *et al.* (2020b)

***Andrena (Ulandrena) speciosa* Friese, 1899**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Wood *et al.* (2020b)

***Andrena (Aciandrena) spolata* Warncke, 1968**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) spreta* Pérez, 1895**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

Notes: *Andrena spreta* Pérez, 1895, *Andrena curtula* Pérez, 1903, *Andrena pauxilla* Stöckert, 1935, and *Andrena pusilla* Pérez, 1903, are considered as a species complex. More exhaustive studies are needed with an emphasis on individuals from North Africa to assess the distribution of this species (Warncke 1967; Gusenleitner & Schwarz 2002).

***Andrena (Andrena) synadelpha* Perkins, 1914**

Global distribution: West-Palearctic

Regional distribution: Fez-Meknès

References: Wood *et al.* (2020b)

***Andrena (Ulandrena) tadorna* Warncke, 1974**

Andrena tadorna assaka Warncke, 1980a: 83—♀ (KW), Holotype, 3 km NE Foug Assaka, Ifni (Morocco), published type locality based on confusion with paratype: Qued Chebeika / 50 km SW Tantan (Morocco)

Global distribution: North Africa

Regional distribution: Oriental; Souss-Massa

References: Warncke (1980a); Blank & Kraus (1994); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Parandrenella) tebessana* Scheuchl, Benarfa & Louadi 2011**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Casablanca-Settat; Fès-Meknès; Béni Mellal-Khénifra; Souss-Massa

References: Wood *et al.* (2020b)

***Andrena (incertae sedis) tenebricorpus* Wood, 2020**

Andrena tenebricorpus Wood, 2020 —♀ (OLML), Holotype, 10 km E Guelmin (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun

References: Wood *et al.* (2020b)

***Andrena (Micrandrena) tenuistriata* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Margandrena) testaceipes* Saunders, 1908**

Global distribution: North Africa

Regional distribution: Marrakech-Safi; Souss-Massa

References: Saunders (1909); Warncke (1974); Grünwaldt (1976); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Melandrena) thoracica* (Fabricius, 1775)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Micrandrena) tiaretta* Warncke, 1974**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Graecandrena) totana* Warncke, 1974**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Aciandrena) triangulivalvis* Wood, 2020**

Andrena triangulivalvis Wood, 2020 —♂ (OLML), Holotype, 20 km W Boudnib (Morocco)

Andrena triangulivalvis Wood, 2020 —♂ (OLML), Paratypes, 20 km W Boudnib (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet

References: Wood *et al.* (2020b)

***Andrena (Hoplandrena) trimmerana* (Kirby, 1802)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa
References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) truncatilabris* Morawitz, 1877**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Oriental; Rabat-Salé-Kénitra

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Lepidandrena) tuberculifera* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Benoist (1961); Warncke (1967); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Parandrena) tunetana* Schmiedeknecht, 1900**

Global distribution: West-Palearctic

Regional distribution: Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Notandrena) urdula* Warncke, 1965**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Marrakech-Safi

References: Warncke (1974); Rasmont *et al.* (2013)

***Andrena (Zonandrena) vachali* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Benoist (1950a); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) varia* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Casablanca-Settat; Fès-Meknès; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Holandrena) variabilis* Smith, 1853**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Aciandrena) varicornis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Oriental

References: Wood *et al.* (2020b)

***Andrena (Cordandrena) vaulogeri* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain)

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Cryptandrena) ventricosa* Dours, 1873**

Global distribution: Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Graecandrena) verticalis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Simandrena) vetula* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Guelmim-Oued Noun; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Schulthess (1924); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Truncandrena) villipes* Pérez 1895**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: None (Scheuchl, unpublished)

***Andrena (Zonandrena) vulcana* Dours, 1873**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Canary Islands, Portugal)

Regional distribution: Unknown

References: Alfken (1914); Rasmont *et al.* (2013)

***Andrena (Euandrena) vulpecula* Kriechbaumer, 1873**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima; Rabat-Salé-Kénitra; Fès-Meknès; Souss-Massa

References: Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

***Andrena (Taeniandrena) wilkella* (Kirby, 1802)**

Andrena beaumonti Benoist, 1961: 91—♀ (MZLS), Holotype, Asni-Aroumd (Morocco)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès

References: Benoist (1961); Warncke (1974); Gusenleitner & Schwarz (2002); Rasmont *et al.* (2013)

Notes: Warncke (1967) created the combination *A. wilkella beaumonti* for the taxon found in Morocco, and also Iberia (Warncke 1975). Ongoing genetic work suggests that the Moroccan taxon is likely to be distinct.

Genus *Borgatomelissa* Patiny, 2000

***Borgatomelissa flavimaura* Ortiz-Sánchez & Patiny, 2019**

Borgatomelissa flavimaura Ortiz-Sánchez & Patiny, 2019: 2—♀ (OLML), Holotype, Missour al Baten (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Ortiz-Sánchez & Patiny (2019)

Genus *Camptopoeum* Spinola, 1843

Camptopoeum (Epimethea) nadigi (Warncke, 1972)

Panurgus nadigi Warncke, 1972: 61—♂ (KW), Holotype, Meknes (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1972a); Patiny (2012a)

Camptopoeum (Epimethea) pseudorubrum (Warncke, 1987)

Panurgus pseudoruber Warncke, 1987: 81—♀ (KW), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Warncke (1987); Patiny (2012a)

Note : Although usually spelled *C. pseudoruber*, *Camptopoeum* is neuter, and “ruber” is an adjective, so the epithet becomes “pseudorubrum” in combination with that genus.

Camptopoeum (Epimethea) simile (Pérez, 1895)

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Maidl (1933); Warncke (1972a); Patiny (2012a)

Camptopoeum (Epimethea) variegatum (Morawitz, 1876)

Global distribution: Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Patiny (2012a)

Genus *Clavipanurgus* Warncke, 1972

Clavipanurgus desertus (Warncke, 1987)

Panurgus desertus Warncke, 1987: 101—♂ (KW), Holotype, 30 km W Ouarzazate (Morocco)

Panurginus politus Benoist, 1937: 164—♀ (MNHN), Holotype, Cap Ghir (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Benoist (1937); Warncke (1987); Patiny (2012c)

Genus *Melitturga* Latreille, 1809

Melitturga (Australomelitturga) albescens Pérez, 1895

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Patiny & Gaspar (2000a); Patiny (2012d)

Melitturga (Petruccianna) caudata Pérez, 1879

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Marrakech-Safi; Tanger-Tétouan-Al Hoceima

References: Rozen (1971); Patiny & Gaspar (2000a); Patiny (2012d)

Melitturga (Petruccianna) oraniensis Lepeletier, 1841

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1972a); Patiny & Gaspar (2000a); Patiny (2012d)

Genus *Panurginus* Nylander, 1848

Panurginus albopilosus (Lucas, 1849)

Global distribution: Near endemic (Morocco, Algeria, Spain, Portugal)

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Schulthess (1924); Benoist (1937); Rozen (1971); Warncke (1972a); Patiny (2003; 2012e)

Panurginus tunensis (Warncke, 1972)

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Patiny (2003; 2012e)

Genus *Panurgus* Panzer, 1806

Panurgus (Micropanurgus) acutus Patiny, 2002

Panurgus acutus Patiny, 2002: 41—♂ (NHMUK), Holotype, S Tafraoute, Col de Kerdous (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Souss-Massa

References: Patiny (2002; 2012b)

Panurgus (Panurgus) avarus Warncke, 1972

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Patiny & Gaspar (2000b); Patiny (2012b)

Panurgus (Euryvalvus) banksianus (Kirby, 1802)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima; Rabat-Salé-Kénitra; Casablanca-Settat

References: Warncke (1972a; 1988a); Patiny & Gaspar (2000b); Patiny (2012b)

Panurgus (Panurgus) buteus Warncke, 1972

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Oriental

References: Patiny & Gaspar (2000b); Patiny (2012b)

Panurgus (Panurgus) calcaratus (Scopoli, 1763)

Global distribution: Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Cockerell (1931a); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

Panurgus (Pachycephalopanurgus) calceatus Pérez, 1895

Panurgus calceatus Pérez, 1895: 59—♂ (MNHN), Holotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Pérez (1895); Schulthess (1924); Maidl (1933); Benoist (1943); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) canarius* Warncke, 1972**

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Drâa-Tafilalet

References: Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Pachycephalopanurgus) canescens* Latreille, 1811**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) catulus* Warncke, 1972**

Panurgus dentipes catulus Warncke, 1972: 81—♂ (KW), Holotype, Tamlalet el Djedid, near Marrakech (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Marrakech-Safi

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) cephalotes* Latreille, 1811**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Benoist (1943; 1950b); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Pachycephalopanurgus) convergens* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Benoist (1943; 1950b); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) dargius* Warncke, 1972**

Panurgus dargius Warncke, 1972: 86—♀ (KW), Holotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Fès-Meknès; Tanger-Tétouan-Al Hoceima

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2005; 2012b)

***Panurgus (Panurgus) dentatus* Friese, 1901**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Laâyoune-Sakia al Hamra; Marrakech-Safi; Souss-Massa

References: Patiny & Michez (2007a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Pachycephalopanurgus) farinosus* Warncke, 1972**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Rabat-Salé-Kénitra; Souss-Massa

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) intermedius* Rozen, 1971**

Panurgus intermedius Rozen, 1971: 32—♂ (AMNH), Holotype, Oued Cherrat, 33 km SW Rabat (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Rozen (1971); Patiny (2012b)

***Panurgus (Panurgus) maroccanus* Pérez, 1895**

Panurgus maroccanus Pérez, 1895: 56—Sex unknown (MNHN), Type unknown, Tanger (Morocco)

Panurgus apicalis Pérez, 1895: 56—♂ (MNHN), Lectotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Pérez (1895); Cockerell (1931c); Maidl (1933); Benoist (1943); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2005; 2012b)

***Panurgus (Micropanurgus) minor* Warncke, 1972**

Panurgus minor Warncke, 1972: 105—♂ (KW), Holotype, Taroudant (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Pachycephalopanurgus) nigriscopus* Pérez, 1895**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun; Marrakech-Safi; Souss-Massa

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) niloticus* Warncke, 1972**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Micropanurgus) ovatulus* Warncke, 1972**

Panurgus ovatulus Warncke, 1972: 73—♂ (KW), Holotype, Essaouira (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) perezi* Saunders, 1881**

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Schulthess (1924); Dusmet y Alonso (1935); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) pici* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Souss-Massa

References: Alfken (1931); Cockerell (1931a); Rozen (1971); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Euryvalvus) pyropygus* Friese, 1901**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Guelmim-Oued Noun

References: Patiny (2012b)

***Panurgus (Pachycephalopanurgus) rungsii* Benoist, 1937**

Panurgus rungsii Benoist, 1937: 163—♂ (MNHN), Holotype, Insgane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Souss-Massa

References: Benoist (1937; 1943); Warncke (1972a); Patiny & Gaspar (2000b); Patiny (2012b)

***Panurgus (Panurgus) vachali* Pérez, 1895**

Global distribution: North Africa

Regional distribution: Marrakech-Safi; Souss-Massa

References: Patiny & Gaspar (2000b); Patiny (2012b)

Genus *Plesiopanurgus* Cameron, 1907

***Plesiopanurgus (Zizopanurgus) zizus* (Warncke, 1987)**

Panurgus cinerarius zizus Warncke, 1987: 91—♂ (KW), Holotype, Errachidia (Morocco)

Plesiopanurgus hanno Baker, 1997: 199—♂ (NHMUK), Holotype, 37 km S of Errachidia, Oued Ziz (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Fès-Meknès

References: Warncke (1987); Baker (1997); Patiny (2012f)

Family Apidae Linnaeus, 1758

Genus *Amegilla* Friese, 1897

***Amegilla (Zebramegilla) albigena* (Lepeletier, 1841)**

Anthophora albida Dours, 1870: 78—Sex unknown (MNHN), Tanger (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dours (1870); Cockerell (1931a); Benoist (1950b); Rasmont (2014a); Grabener (2017)

Notes: Synonym of *Amegilla talaris* (Pérez, 1895)

***Amegilla (Micramegilla) andresi* (Friese, 1914)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Schwarz & Gusenleitner (2001); Rasmont (2014a); Grabener (2017)

***Amegilla (Micramegilla) byssina* (Klug, 1845)**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun

References: Benoist (1950a); Rasmont (2014a); Grabener (2017)

***Amegilla (Micramegilla) fasciata* (Fabricius, 1775)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1943); Rasmont (2014a); Guichard & Else (unpublished, SEMC)

***Amegilla (Zebramegilla) magnilabris* (Fedtschenko, 1875)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Souss-Massa; Marrakech-Safi

References: Cockerell (1931b); Nadig & Nadig (1933); Rasmont (2014a)

***Amegilla (Amegilla) ochroleuca* (Pérez, 1879)**

Global distribution: West-Palearctic
Regional distribution: Souss-Massa
References: None (Rasmont, unpublished)

Amegilla (Amegilla) quadrifasciata (de Villers, 1789)

Global distribution: Palearctic; Sub-Saharan Africa
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Rabat-Salé-Kénitra
References: Dours (1870); Schulthess (1924); Cockerell (1931b); Benoist (1950b); Rasmont (2014a); Grabener (2017)

Genus *Ammobates* Latreille, 1809

Ammobates (Ammobates) arsinoe Engel, 2009

Global distribution: North Africa
Regional distribution: Souss-Massa
References: None (Schmid-Egger, unpublished)

Ammobates (Ammobates) assimilis (Warncke, 1983)

Global distribution: North Africa
Regional distribution: Marrakech-Safi
References: Warncke (1983); Halada (unpublished, OLML)

Ammobates (Ammobates) buteus (Warncke, 1983)

Pasites buteus Warncke, 1983: 310—♀ (KW), Holotype, locality unknown (Morocco)
Global distribution: **Morocco. Endemic**
Regional distribution: Unknown
References: Warncke (1983)

Ammobates (Ammobates) dubius Benoist, 1961

Global distribution: Palearctic, Sub-Saharan Africa
Regional distribution: Drâa-Tafilalet
References: None (Roberts, unpublished, SEMC)

Ammobates (Ammobates) handlirschii Friese, 1895

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Fès-Meknès
References: None (Schwarz, unpublished)

Ammobates (Ammobates) minor (Pérez, 1902)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Unknown
References: Warncke (1983)

Ammobates (Euphileremus) muticus Spinola, 1843

Global distribution: West-Palearctic
Regional distribution: Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Souss-Massa; Marrakech-Safi; Drâa-Tafilalet
References: Warncke (1983); Rozen & Özbek (2003); Schwarz (unpublished, MSAA), Guichard (unpublished, SEMC)

Ammobates (Euphileremus) oraniensis (Lepeletier, 1841)

Global distribution: Palearctic

Regional distribution: Rabat-Salé-Kénitra; Fès-Meknès; Souss-Massa

References: Maidl (1933); Warncke (1983); Schwarz (1988); Pagliano (1994); Kullenberg (unpublished, SEMC)

Ammobates (Ammobates) punctatus (Fabricius, 1804)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Grabener (2017); Guichard (unpublished, SEMC)

Ammobates (Ammobates) syriacus Friese, 1899

Global distribution: West-Palearctic

Regional distribution: Souss-Massa

References: None (Schwarz, unpublished, MSAA)

Ammobates (Ammobates) verhoeffi Mavromoustakis, 1959

Ammobates verhoeffi Mavromoustakis, 1959: 35—♀ (DAAN), Holotype, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Mavromoustakis (1959); Warncke (1983); Schwarz (unpublished, MSAA)

Genus *Ammobatoides* Radoszkowski, 1867

***Ammobatoides schachtii* Schwarz, 1988**

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Schwarz (1988)

***Ammobatoides scriptus* (Gerstäcker, 1869)**

Global distribution: West-Palearctic

Regional distribution: Unknown

References: Warncke (1982a)

Genus *Ancyla* Lepeletier, 1841

***Ancyla brevis* Dours, 1873**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Baker (1998); Rasmont & Dehon (2014)

***Ancyla oraniensis* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Casablanca-Settat; Tanger-Tétouan-Al Hoceima

References: Warncke (1979a); Rasmont & Dehon (2014)

Genus *Anthophora* Latreille, 1803

***Anthophora (Pyganthophora) aestivalis* (Panzer, 1801)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi
References: Rasmont (2014b)

***Anthophora (Lophanthophora) affinis* Brullé, 1832**

Global distribution: Palearctic
Regional distribution: Oriental; Souss-Massa
References: Rasmont (1995; 2014b)
Notes: Synonym of *Anthophora biciliata* (Lepeletier, 1841)

***Anthophora (Lophanthophora) agama* Radoszkowski, 1869**

Global distribution: Palearctic
Regional distribution: Fès-Meknès; Marrakech-Safi
References: Rasmont (1995; 2014b)
Notes: Synonym of *Anthophora caucasica* (Radoszkowski, 1874)

***Anthophora (Pyganthophora) albicilla* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Unknown
References: Rasmont (2014b)

***Anthophora (Pyganthophora) albosignata* (Friese, 1896)**

Global distribution: West-Palearctic
Regional distribution: Marrakech-Safi; Souss-Massa
References: Rasmont (2014b)

***Anthophora (Paramegilla) alternans* (Klug, 1845)**

Global distribution: North Africa
Regional distribution: Drâa-Tafilalet
References: Rasmont (2014b)

***Anthophora (Pyganthophora) atriceps* Pérez, 1879**

Global distribution: Palearctic
Regional distribution: Oriental; Béni Mellal-Khénifra; Drâa-Tafilalet
References: Rasmont (2014b)

***Anthophora (Pyganthophora) atroalba* Lepeletier, 1841**

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet
References: Schulthess (1924); Rasmont (2014b); Grabener (2017)

***Anthophora (Paramegilla) balneorum* Lepeletier, 1841**

Anthophora balneorum var. *africana* Benoist, 1930: 120—♀ (MNHN), Syntype, Chichaoua (Morocco)
Anthophora balneorum var. *subcarinata* Benoist, 1930: 120—♀ (MNHN), Syntype, Sidi Bettache, Zaërs forest (Morocco)
Global distribution: West-Palearctic
Regional distribution: Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi
References: Benoist (1930); Rasmont (2014b)

***Anthophora (Heliophila) bimaculata* (Panzer, 1798)**

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Benoist (1943); Rasmont (2014b); Grabener (2017)

***Anthophora (Petalosternon) calcarata* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Benoist (1943); Rasmont (2014b); Grabener (2017)

***Anthophora (Anthophora) canescens* Brullé, 1832**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Casablanca-Settat

References: Schulthess (1924); Rasmont (2014b)

Notes: Synonym of *Anthophora subterranea* Germar, 1826 (*sensu auct.*)

***Anthophora (Petalosternon) crassipes* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Rasmont (2014b)

***Anthophora (Anthophora) crinipes* Smith, 1854**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

Notes: Synonym of *Anthophora salviae* (Panzer, 1804), see Scheuchl & Willner (2016)

***Anthophora (Lophanthophora) dispar* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Schulthess (1924); Rasmont (1995; 2014b); Grabener (2017)

Notes: *Anthophora speciosa* Friese, 1919 is regarded here as a subspecies of *A. dispar*.

***Anthophora (Paramegilla) femorata* (Olivier, 1789)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi

References: Rasmont (2014b)

***Anthophora (Paramegilla) ferruginea* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Rasmont (2014b)

***Anthophora (Pyganthophora) flabellata* Priesner, 1957**

Global distribution: West-Palearctic

Regional distribution: Oriental; Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Anthophora) fulvitorsis* Brullé, 1832**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Maidl (1933); Rasmont (2014b); Lieftinck (unpublished, SEMC)

***Anthophora (Heliophila) fulvodimidiata* Dours, 1870**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Nadig & Nadig (1933); Rasmont (2014b)

***Anthophora (Pyganthophora) hermanni* Schwarz & Gusenleitner, 2003**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b); Grabener (2017)

Notes: Synonym of *Anthophora scopipes* (*sensu* Priesner, 1957)

***Anthophora (Lophanthophora) hispanica* (Fabricius, 1787)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima Oriental; Fès-Meknès; Rabat-Salé-Kénitra

References: Rasmont (2014b)

***Anthophora (Pyganthophora) holoxantha* Pérez, 1895**

Anthophora Mercetiana Vachal, 1910: 176—♀ (MNHN), Syntypes, Casablanca (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi

References: Vachal (1910); Rasmont (2014b)

***Anthophora (Paramegilla) inclyta* Walker, 1871**

Global distribution: North Africa; Sub-Saharan Africa

Regional distribution: Souss-Massa; Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Paramegilla) kapnoptera* Alfken, 1936**

Global distribution: North Africa

Regional distribution: Rabat-Salé-Kénitra; Casablanca-Settat

References: Rasmont (2014b)

***Anthophora (Pyganthophora) libyphaenica* Gribodo, 1893**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Rasmont (2014b)

***Anthophora (Lophanthophora) mucida* Gribodo, 1873**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Rasmont (1995; 2014b)

Notes: Synonym of *Anthophora bicilata* (*sensu* Brooks, 1988)

***Anthophora (Anthophora) plumipes* (Pallas, 1772)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi

References: Schulthess (1924); Rasmont (2014a); Werner (unpublished, SEMC)

***Anthophora (Paramegilla) podagra* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès

References: Cockerell (1931b); Rasmont (2014b)

***Anthophora (Petalosternon) priesneri* Alfken, 1932**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Caranthophora) pubescens* (Fabricius, 1781)**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Cockerell (1931b); Benoist (1950b); Rasmont (2014b)

***Anthophora (Paramegilla) quadricolor* (Erichson, 1840)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Pyganthophora) retusa* (Linnaeus, 1758)**

Anthophora retusa var. *seminigra* Benoist, 1930: 120—♀ (MNHN), Syntypes, Azrou, Ras-el-Ma (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Schulthess (1924); Benoist (1930); Rasmont (2014b)

***Anthophora (Petalosternon) rivolleti* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Lophanthophora) robusta* (Klug, 1845)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Rasmont (2014b)

***Anthophora (Pyganthophora) romandii* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Pyganthophora) scopipes* Spinola, 1838**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Schulthess (1924); Benoist (1930); Rasmont (2014b)

***Anthophora (Paramegilla) semirufa* (Friese, 1898)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Anthophora) senescens* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Casablanca-Settat; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Rasmont (2014b)

***Anthophora (Heliophila) tarsalis* Priesner, 1957**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

***Anthophora (Pyganthophora) ventilabris* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet

References: Grabener (2017); Rasmont (2014b)

***Anthophora (Paramegilla) vidua* (Klug, 1845)**

Global distribution: West-Palearctic

Regional distribution: Unknown

References: Rasmont (2014b)

***Anthophora (Petalosternon) wegelini* Friese, 1914**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014b)

Genus *Bombus* Latreille, 1802

***Bombus (Melanobombus) lapidarius* (Linnaeus, 1758)**

Bombus lapidarius st. *atlanticus* Benoist, 1928: 212—Sex unknown (MNHN), Type unknown, Taza, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1928; 1941); Cockerell (1931b); Rasmont & Iserbyt (2014)

***Bombus (Thoracobombus) mocsaryi* Kriechbaumer, 1877**

Bombus laesus mocsaryi var. *aliceae* Cockerell, 1931: 280—Worker (NHMUK), Type unknown, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931b); Benoist (1941); Rasmont & Iserbyt (2014)

***Bombus (Megabombus) ruderatus* (Fabricius, 1775)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: Maidl (1933); Rasmont & Iserbyt (2014)

***Bombus (Bombus) terrestris* (Linnaeus, 1758)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Schulthess (1924); Cockerell (1931b); Benoist (1941; 1943); Rasmont & Iserbyt (2014)

***Bombus (Psithyrus) vestalis* (Geoffroy, 1785)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental

References: Rasmont & Iserbyt (2014); Lhomme & Hines (2019)

Genus *Ceratina* Latreille, 1802

Ceratina (Euceratina) albosticta Cockerell, 1931

Ceratina dallatorreana var. *albosticta* Cockerell, 1931: 351—♂ (NHMUK), Holotype, Fez (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Cockerell (1931a); Daly (1983); Terzo & Rasmont (2011)

Ceratina (Euceratina) callosa (Fabricius, 1794)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Daly (1983); Terzo & Rasmont (1997; 2011)

Ceratina (Euceratina) chalybea Chevrier, 1872

Ceratina callosa cephalica Cockerell, 1931: 350—♀ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Souss-Massa

References: Cockerell (1931a); Terzo *et al.* (2007); Terzo & Rasmont (2011)

Ceratina (Pithitis) citriphila Cockerell, 1935

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Souss-Massa

References: Terzo & Rasmont (2011)

Ceratina (Ceratina) cucurbitina (Rossi, 1792)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931a); Daly (1983); Pagliano (1994); Terzo & Rasmont (2011)

Ceratina (Euceratina) dallatorreana Friese, 1896

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Cockerell (1931a); Daly (1983); Terzo *et al.* (2007); Terzo & Rasmont (2011)

Ceratina (Euceratina) dentiventris Gerstäcker, 1869

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Terzo *et al.* (2007); Terzo & Rasmont (2011)

Ceratina (Euceratina) maghrebensis Daly, 1983

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Daly (1983); Terzo & Rasmont (1997; 2011)

Ceratina (Euceratina) mocsaryi Friese, 1896

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Terzo & Rasmont (2011)

***Ceratina (Dalyatina) parvula* Smith, 1854**

Ceratina scintilla Cockerell, 1931: 351—♀ (NHMUK), Lectotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931a); Daly (1983); Terzo & Rasmont (2011)

***Ceratina (Euceratina) saundersi* Daly, 1983**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Daly (1983); Terzo & Rasmont (1997; 2011)

***Ceratina (Pithitis) tarsata* Morawitz, 1871**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Benoist (1950a); Terzo & Rasmont (2011)

***Ceratina (Euceratina) verhoeffi* Terzo & Rasmont, 1997**

Ceratina verhoeffi Terzo & Rasmont, 1997: 231—♂ (RMNH), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Terzo & Rasmont (1997; 2011)

Genus *Epeolus* Latreille, 1802

***Epeolus aureovestitus* Pérez, 1894**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: None (Schwarz, unpublished)

***Epeolus collaris* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Souss-Massa; Drâa-Tafilalet; Fès-Meknès; Béni Mellal-Khénifra

References: Bogusch & Hadrava (2018); Schmid-Egger (unpublished)

***Epeolus fallax* Morawitz, 1872**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: None (Schmid-Egger, unpublished)

***Epeolus flavociliatus* Friese, 1899**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Bogusch & Hadrava (2018)

***Epeolus laevifrons* Bischoff, 1930**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Bogusch & Hadrava (2018)

***Epeolus transitorius* Eversmann, 1852**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Bischoff (1930); Bogusch & Hadrava (2018)

***Epeolus variegatus* (Linnaeus, 1758)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: None (Bogusch, unpublished)

Genus *Eucera* Scopoli, 1770

***Eucera (Tetralonia) agadirensis* (Benoist, 1943)**

Macrocera agadirensis Benoist, 1943: 43—♀ (MNHN), Holotype, Agadir (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Benoist (1943); Schmid-Egger (unpublished)

Notes: Previously known as *Tetraloniella agadirensis* (Benoist, 1943) (Dorchin *et al.* 2018)

***Eucera (Hetereucera) algeriensis* Dalla Torre, 1896**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Dusmet y Alonso (1928)

***Eucera (Hetereucera) algira* Brullé, 1840**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1928); Guichard & Else (unpublished, SEMC)

***Eucera (Synhalonia) alternans* (Brullé, 1832)**

Global distribution: Palearctic

Regional distribution: Rabat-Salé-Kénitra; Marrakech-Safi

References: Dusmet y Alonso (1928)

***Eucera (Synhalonia) andresi* (Alfken, 1926)**

Global distribution: Near endemic (Morocco, Spain)

Regional distribution: Fès-Meknès

References: None (Risch, unpublished)

***Eucera (Tetralonia) atrata* Klug, 1845**

Global distribution: North Africa

Regional distribution: Oriental; Drâa-Tafilalet

References: None (Schwarz, unpublished)

***Eucera (Hetereucera) atricornis* Fabricius, 1793**

Global distribution: North Africa

Regional distribution: Fès-Meknès

References: Dusmet y Alonso (1928); Maidl (1933)

***Eucera (Hetereucera) bequaerti* Alfken, 1914**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès

References: Risch (2001)

***Eucera (Synhalonia) biscrensis* (Alfken, 1933)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: None (Risch, unpublished)

***Eucera (Synhalonia) brachycera* (Gribodo, 1893)**

Global distribution: Near endemic (Morocco, Algeria, Spain)

Regional distribution: Guelmim-Oued Noun

References: Dusmet y Alonso (1928); Guichard & Else (unpublished, SEMC)

Notes: Synonym of *Eucera atroalba* (Pérez, 1895)

***Eucera (Stilbeucera) clypeata* Erichson, 1835**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1928); Risch (2003)

***Eucera (Hetereucera) collaris* Dours, 1873**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra

References: Dusmet y Alonso (1928); Kullenberg (unpublished, SEMC)

***Eucera (Synhalonia) commixta* Dalla Torre & Friese, 1895**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: None (Schmid-Egger, unpublished)

***Eucera (Synhalonia) cuniculina* Klug, 1845**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Dusmet y Alonso (1928)

***Eucera (Eucera) dalmatica* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: None (Risch, unpublished)

***Eucera (Hetereucera) decolorata* Gribodo, 1924**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: None (Dorchin, unpublished)

***Eucera (Tetralonia) dentata* (Germar, 1839)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Fès-Meknès; Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1928); Tkalcû (1998); Else (unpublished, SEMC)

Notes: Previously known as *Tetraloniella dentata* (Germar, 1839) (Dorchin *et al.* 2018)

***Eucera (Eucera) dimidiata* Brullé, 1832**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun

References: Dusmet y Alonso (1928); Roberts (unpublished, SEMC)

***Eucera (Hetereucera) elongatula* Vachal, 1907**

Eucera elongatula Vachal, 1907: 377—♂ (MNHN), Syntypes, Tanger, Sfax (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Vachal (1907); Schulthess (1924); Nadig & Nadig (1933); Schmid-Egger (unpublished)

***Eucera (Pteneucera) eucnemidea* Dours, 1873**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Marrakech-Safi; Fès-Meknès

References: Schulthess (1924); Dusmet y Alonso (1928); Pagliano (1994); Risch (1997); Halada (unpublished, SEMC)

***Eucera (Eucera) ferruginea* Lepeletier, 1841**

Global distribution: North Africa

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1928); Schmid-Egger (unpublished); Guichard (unpublished, SEMC)

***Eucera (Tetralonia) fulvescens* (Giraud, 1863)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Guelmim-Oued Noun

References: Dusmet y Alonso (1928); Guichard & Else (unpublished, SEMC)

Notes: Previously known as *Tetraloniella fulvescens* (Giraud, 1863) (Dorchin *et al.* 2018)

***Eucera (Hetereucera) genovefae* Vachal, 1907**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Risch (2001); Schwarz (unpublished); Roberts (unpublished, SEMC)

***Eucera (Eucera) hispaliensis* Pérez, 1902**

Global distribution: West-Palearctic

Regional distribution: Unknown

References: Nadig & Nadig (1933)

***Eucera (Tetralonia) iberica* (Dusmet y Alonso 1926)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1928), Else & Else (unpublished, SEMC), Roberts (unpublished, SEMC)

Notes: Previously known as *Tetraloniella iberica* (Dusmet y Alonso 1926)

***Eucera (Synhalonia) lanuginosa* Klug, 1845**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Grabener (2017)

***Eucera (Synhalonia) lucasi* (Gribodo, 1893)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1928)

***Eucera (Synhalonia) maroccana* (Dusmet y Alonso, 1928)**

Tetralonia maroccana Dusmet y Alonso, 1928: 281—♂ (MNCN), Holotype, Essaouira (Morocco)

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Dusmet y Alonso (1928)

***Eucera (Eucera) mauritaniae* Tkalčú, 1984**

Eucera maroccana Tkalčú, 1984: 64—♀ (BT), Holotype, locality unknown (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Unknown

References: Dusmet y Alonso (1928); Tkalčú (1984)

***Eucera (Synhalonia) metallescens* (Morawitz, 1888)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Souss-Massa; Guelmim-Oued Noun

References: None (Schwarz, unpublished, OLML)

***Eucera (Synhalonia) nadigi* (Friese, 1924)**

Macrocera nadigi Friese, 1924: 297—♂ (MHNG), Type unknown, Kenitra, Maamora forest (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Rabat-Salé-Kénitra

References: Friese (1924); Schulthess (1924); Benoist (1950b)

***Eucera (Glazunovia) nigriceps* (Morawitz, 1895)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: None (Schmid-Egger, unpublished)

Notes: Previously known as *Tetraloniella nigriceps* (Morawitz, 1895)

***Eucera (Pteneucera) nigrifacies* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi

References: Schulthess (1924); Mairl (1933); Risch (1997)

***Eucera (Eucera) nigrilabris* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi

References: Schulthess (1924); Dusmet y Alonso (1928); Kullenberg (1961)

***Eucera (Heterucera) notata* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Cockerell (1920); Schulthess (1924); Dusmet y Alonso (1928); Benoist (1943; 1950b); Schmid-Egger (unpublished)

***Eucera (Eucera) numida* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra

References: Schulthess (1924); Dusmet y Alonso (1928)

***Eucera (Heterucera) obliterateda* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Fès-Meknès; Souss-Massa
References: Risch (2003); Schmid-Egger (unpublished)

***Eucera (Heterocera) occidentalis* Risch, 1999**

Eucera occidentalis Risch, 1999: 136—♂ (MSAA), Holotype, Ifrane (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Oriental; Fès-Meknès
References: Risch (1999)

***Eucera (Heterocera) oraniensis* Lepeletier, 1841**

Global distribution: West-Palearctic
Regional distribution: Marrakech-Safi
References: None (Schwarz, unpublished)

***Eucera (Heterocera) polita* Pérez, 1895**

Global distribution: North Africa
Regional distribution: Fès-Meknès; Guelmim-Oued Noun
References: None (Schwarz, unpublished, OLML; Halada, unpublished, OLML)

***Eucera (Synhalonia) pumila* Klug, 1845**

Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Grabener (2017)

***Eucera (Eucera) punctatissima* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Fès-Meknès; Souss-Massa; Guelmim-Oued Noun
References: Dusmet y Alonso (1928)

***Eucera (Synhalonia) rufa* (Lepeletier, 1841)**

Global distribution: West-Palearctic
Regional distribution: Marrakech-Safi; Souss-Massa
References: Schulthess (1924); Dusmet y Alonso (1926; 1928); Schmid-Egger (unpublished)
Notes: Previously known as *Tetraloniella rufa* (Lepeletier, 1841)

***Eucera (Tetralonia) ruficornis* (Fabricius, 1804)**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi
References: Dusmet y Alonso (1928)
Notes: Previously known as *Tetralonia ruficornis* (Fabricius, 1804)

***Eucera (Heterocera) saundersi* Friese, 1899**

Global distribution: North Africa
Regional distribution: Unknown
References: Dusmet y Alonso (1928)

***Eucera (Heterocera) spatulata* Gribodo, 1893**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Rabat-Salé-Kénitra; Fès-Meknès; Oriental; Marrakech-Safi; Souss-Massa
References: Dusmet y Alonso (1928); Risch (2003); Schmid-Egger (unpublished); Kullenberg (unpublished, SEMC)

***Eucera (Heterucera) squamosa* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: None (Schwarz, unpublished, OLML)

***Eucera (Tetralonia) strigata* (Lepeletier, 1841)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi

References: Dusmet y Alonso (1928); Schwarz (unpublished, SEMC)

Notes: Previously known as *Tetralonia strigata* (Lepeletier, 1841)

***Eucera (Synhalonia) tricincta* Erichson, 1835**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1926; 1928); Nadig & Nadig (1933)

Notes: Previously known as *Tetralonia tricincta* (Erichson, 1835)

***Eucera (Heterucera) vachali* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet

References: Risch (2003)

***Eucera (Eucera) vidua* Lepeletier, 1841**

Global distribution: Near endemic (Morocco, Algeria, Spain)

Regional distribution: Souss-Massa; Rabat-Salé-Kénitra; Drâa-Tafilalet

References: Dusmet y Alonso (1928); Kullenberg (unpublished, SEMC)

***Eucera (Heterucera) warnckeï* Risch, 1999**

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Risch (1999)

Genus *Melecta* Latreille, 1802

***Melecta (Melecta) aegyptiaca* Radoszkowski, 1876**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Drâa-Tafilalet

References: Lieftinck (1980); Rasmont (2016)

***Melecta (Melecta) albifrons* (Forster, 1771)**

Melecta novellai Dusmet y Alonso, 1915: 330—♀♂ (MNCN), Syntypes, Marrakech (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1915); Schulthess (1924); Benoist (1961); Rasmont (2016)

***Melecta (Melecta) duodecimmaculata* (Rossi, 1790)**

Global distribution: Palearctic

Regional distribution: Unknown

References: Rasmont (2016); Schwarz (unpublished)

***Melecta (Melecta) grandis* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Casablanca-Settat; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Lieftinck (1980); Rasmont (2016)

***Melecta (Melecta) guilochei* Dusmet y Alonso, 1915**

Melecta guilochei Dusmet y Alonso, 1915: 331—♂ (MNCN), Holotype, Oued Tigui (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1915); Lieftinck (1972; 1977); Rasmont (2016)

***Melecta (Melecta) italica* Radoszkowski, 1876**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Lieftinck (1980); Rasmont (2016); Kullenberg (unpublished, SEMC)

***Melecta (Melecta) leucorhyncha* Gribodo, 1893**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: Lieftinck (1980); Rasmont (2016)

***Melecta (Melecta) luctuosa* (Scopoli, 1770)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1915); Rasmont (2016)

***Melecta (Melecta) prophanta* Lieftinck, 1980**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: References: Lieftinck (1980); Rasmont (2016)

Genus *Nomada* Scopoli, 1770

***Nomada accentifera* Pérez, 1895**

Global distribution: Near endemic (Morocco, Tunisia, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Schwarz (1977)

***Nomada agrestis* Fabricius, 1787**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Dusmet y Alonso (1913; 1915)

***Nomada algira* Mocsáry, 1883**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: None (Schwarz, unpublished)

***Nomada ariasi* Dusmet y Alonso, 1913**

Global distribution: West-Palearctic
Regional distribution: Souss-Massa
References: None (Schwarz, unpublished)

***Nomada barbilabris* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi
References: Dusmet y Alonso (1915)

***Nomada basalis* Herrich-Schäffer, 1839**

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Dusmet y Alonso (1915)

***Nomada beaumonti* Schwarz, 1967**

Global distribution: West-Palearctic
Regional distribution: Béni Mellal-Khénifra
References: None (Schwarz, unpublished)

***Nomada biblica* Schwarz, Smit & Ockermüller, 2019**

Nomada biblica Schwarz, Smit & Ockermüller, 2019: 4—♀♂ (MSAA), Paratypes, Tiznit, Tafraoute (Morocco)
Global distribution: West-Palearctic
Regional distribution: Souss-Massa
References: Schwarz *et al.* (2019)

***Nomada bifasciata* Olivier, 1811**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet
References: Dusmet y Alonso (1915); de Beaumont (unpublished, SEMC)

***Nomada bispinosa* Mocsáry, 1839**

Global distribution: Palearctic
Regional distribution: Marrakech-Safi
References: None (Schwarz, unpublished)

***Nomada blepharipes* Schmiedeknecht, 1882**

Global distribution: Palearctic
Regional distribution: Drâa-Tafilalet
References: Dusmet y Alonso (1915); Schwarz (unpublished)

***Nomada brevis* Saunders, 1908**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun
References: None (Schwarz, unpublished)

***Nomada cadiza* Schwarz & Gusenleitner, 2013**

Global distribution: Near endemic (Morocco, Spain)
Regional distribution: Oriental
References: Schwarz & Gusenleitner (2013)

***Nomada carnifex* Mocsáry, 1883**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: None (Schwarz, unpublished)

***Nomada cleopatra* Schwarz, 1989**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet

References: Schwarz (1989)

***Nomada concolor* Schmiedeknecht, 1882**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1915)

***Nomada coronata* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: None (Schwarz, unpublished)

***Nomada cristata* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1913; 1915); Schwarz (1977)

***Nomada dira* Schmiedeknecht, 1882**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Pagliano (1994)

***Nomada discedens* Pérez, 1884**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: None (Schwarz, unpublished)

***Nomada discrepans* Schmiedeknecht, 1882**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1915); Pagliano (1994)

***Nomada distinguenda* Morawitz, 1874**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b)

***Nomada dolosa* Mocsáry, 1883**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Schwarz & Gusenleitner (2013)

***Nomada duplex* Smith, 1854**

Nomada duplex Smith, 1854: 244—♀ (NHMUK), Holotype, Tanger (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Smith (1854); Dusmet y Alonso (1915); Schwarz (1989)

***Nomada fallax* Pérez, 1913**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi

References: None (Schwarz, unpublished)

***Nomada femoralis* Morawitz, 1869**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915)

***Nomada fenestrata* Lepeletier, 1841**

Nomada ceballosi Dusmet y Alonso, 1915: 325—♂ (MNCN), Holotype, Essaouira (Morocco)

Nomada vicarioi Dusmet y Alonso, 1915: 311—♀♂ (MNCN), Syntypes, Essaouira (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Schwarz (1965; 1977)

***Nomada flavoguttata* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi

References: None (Schwarz, unpublished)

***Nomada flavoscutellata* Schwarz & Smit, 2018**

Nomada flavoscutellata Schwarz & Smit, 2018: 890 —♀ (MSAA), Holotype, 12 km O Agadir (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schwarz & Smit (2018)

***Nomada fucata* Panzer, 1798**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Schulthess (1924)

***Nomada fulvicornis* Fabricius, 1793**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Schwarz (1965)

***Nomada furva* Panzer, 1798**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915)

***Nomada fuscipennis* Lepeletier, 1841**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915)

***Nomada glaucopsis* Pérez, 1890**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b); Mavromoustakis (1957)

***Nomada hispanica* Dusmet y Alonso, 1913**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa

References: None (Schwarz, unpublished)

***Nomada ibanezi* Dusmet y Alonso, 1915**

Nomada Ibañezi Dusmet y Alonso, 1915: 316—♀ (MNCN), Lectotype, Essaouira and Tigui (Morocco)

Nomada Velardei Dusmet y Alonso, 1915: 322—♂ (MNCN), Syntypes, Essaouira (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Schwarz (1965)

***Nomada insignipes* Schmiedeknecht, 1882**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès

References: Dusmet y Alonso (1915)

***Nomada integra* Brullé, 1832**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: None (Schwarz, unpublished)

***Nomada italica* Dalla Torre & Friese, 1894**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: None (Schwarz, unpublished)

***Nomada keroanensis* Pérez, 1895**

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Guelmim-Oued Noun

References: None (Schwarz, unpublished)

***Nomada kohli* Schmiedeknecht, 1882**

Global distribution: West-Palearctic

Regional distribution: Oriental

References: None (Schwarz, unpublished)

***Nomada linsenmaieri* Schwarz, 1974**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Schwarz (1974)

***Nomada maculicornis* Pérez, 1884**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: None (Schwarz, unpublished)

***Nomada marrakechi* Schwarz & Smit, 2020**

Nomada marrakechi Schwarz & Smit, 2020: 687—♀ (MSAA), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Schwarz & Smit (2020)

***Nomada mauritanica* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b)

***Nomada melanura* Mocsáry, 1883**

Nomada gonzalezi Dusmet y Alonso, 1915: 314—♂ (MNCN), Holotype, Essaouira (Morocco)

Nomada palaciosi Dusmet y Alonso, 1915: 314—♀ (MNCN), Holotype, Essaouira (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1965)

***Nomada merceti* Alfken, 1909**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Dusmet y Alonso (1915)

***Nomada mideltiaca* Schwarz, Smit & Ockermüller, 2019**

Nomada mideltiaca Schwarz, Smit & Ockermüller, 2019: 12—♀ (MSAA), Holotype, Midelt (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Drâa-Tafilalet

References: Schwarz *et al.* (2019)

***Nomada minuscula* Noskiewicz, 1930**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra; Marrakech-Safi

References: Cockerell (1931a); Stöckert (1944); Schwarz (1988)

***Nomada mutabilis* Morawitz, 1870**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès

References: None (Schwarz, unpublished)

***Nomada nigrovaria* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Souss-Massa

References: None (Schwarz, unpublished)

***Nomada nitida* Schwarz, 1977**

Nomada nitida Schwarz, 1977: 62—♀ (MSAA), Holotype, Marrakech (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Schwarz (1977)

***Nomada nobilis* Herrich-Schäffer, 1839**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: None (Schwarz, unpublished)

***Nomada numida* Lepelletier, 1841**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: Dusmet y Alonso (1915); Schulthess (1924); Benoist (1943); Schwarz (1988)

***Nomada ortegai* Dusmet y Alonso, 1915**

Nomada ortegai Dusmet y Alonso, 1915: 328—♂ (MNCN), Holotype, Essaouira (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1915); Schwarz (1965)

***Nomada panurgina* Morawitz, 1869**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1915); Maidl (1922)

***Nomada panurginoides* Saunders, 1908**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: None (Schwarz, unpublished, MSAA; Ebmer, unpublished, SEMC)

***Nomada pectoralis* Morawitz, 1877**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: None (Schwarz, unpublished, MSAA)

***Nomada pruinosa* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Drâa-Tafilalet; Guelmim-Oued Noun

References: None (Schwarz, unpublished, MSAA)

***Nomada regli* Schwarz, Smit & Ockermüller, 2020**

Nomada regli Schwarz, Smit & Ockermüller, 2020: 704—♀ (MSAA), Holotype, Errachidia (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schwarz *et al.* (2020)

***Nomada rhenana* Morawitz, 1872**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Dusmet y Alonso (1915)

***Nomada rubiginosa* Pérez, 1884**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra

References: None (Schwarz, unpublished, MSAA)

***Nomada sabulosa* Radoszkowski, 1876**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: None (Schwarz, unpublished, MSAA)

***Nomada sanguinea* Smith, 1854**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Pagliano (1994)

***Nomada serricornis* Pérez, 1884**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: Schwarz (1978)

***Nomada sexfasciata* Panzer, 1799**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès

References: Schulthess (1924); Pagliano (1994)

***Nomada sheppardana* (Kirby, 1802)**

Nomada microsticta Cockerell, 1931: 412—♀ (NHMUK), Holotype, Asni (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931c); Stöckhert (1944)

***Nomada striata* Fabricius, 1793**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: None (Schwarz, unpublished, MSAA)

***Nomada succincta* Panzer, 1798**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Alfken (1912)

***Nomada tridentirostris* Dours, 1873**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: None (Schwarz, unpublished, MSAA)

***Nomada zonata* Panzer, 1798**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi

References: Dusmet y Alonso (1915)

Genus *Parammobatodes* Popov, 1932

***Parammobatodes maroccanus* (Warncke, 1983)**

Pasites maroccanus Warncke, 1983: 280—♂ (KW), Holotype, Foum Tangarfa (Morocco)

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Souss-Massa

References: Warncke (1983)

Genus *Pasites* Jurine, 1807

***Pasites maculatus* Jurine, 1807**

Pasites maculatus var. *brunneus* Friese, 1895: 141—♀ (Depository unknown), Tanger (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: Friese (1895); Dusmet y Alonso (1921); Warncke (1983)

Genus *Thyreus* Panzer, 1806

***Thyreus affinis* (Morawitz, 1874)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1915); Lieftinck (1968); Rasmont (2014c)

***Thyreus elegans* (Morawitz, 1877)**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Nadig & Nadig (1933); Rasmont (2014c)

***Thyreus hellenicus* Lieftinck, 1968**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Rasmont (2014c); Grabener (2017)

***Thyreus hirtus* (de Beaumont, 1940)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Rasmont (2014c); Schmid-Egger (unpublished)

***Thyreus histrionicus* (Illiger, 1806)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Dusmet y Alonso (1915); Lieftinck (1968); Beaumont (1939); Benoist (1950b); Rasmont (2014c)

***Thyreus orbatus* (Lepeletier, 1841)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1915); Benoist (1950b); Vergés (1958); Lieftinck (1968); Rasmont (2014c)

***Thyreus ramosus* (Lepeletier, 1841)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Cockerell (1931a); Beaumont (1939); Benoist (1950b); Lieftinck (1968); Rasmont (2014c)

***Thyreus tricuspis* (Pérez, 1883)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi

References: Dusmet y Alonso (1915); Benoist (1950b); Lieftinck (1968); Rasmont (2014c)

***Thyreus truncatus* (Pérez, 1883)**

Crocisa nadi Alfken, 1933: 136—♂ (Depository unknown), Holotype, El Hajeb (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra

References: Alfken (1933); Benoist (1950b); Lieftinck (1968); Rasmont (2014c)

Genus *Xylocopa* Latreille, 1802

***Xylocopa (Rhysoxylocopa) amedaei* Lepeletier, 1841**

Global distribution: Near endemic (Morocco, Algeria, Spain, Portugal)

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès

References: Codina (1923); Dusmet y Alonso (1924); Schulthess (1924); Benoist (1950b); Terzo & Rasmont (2014)

***Xylocopa (Rhysoxylocopa) cantabrita* Lepeletier, 1841**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès

References: Ortiz-Sánchez (1997); Terzo & Rasmont (2014)

***Xylocopa (Copoxylla) iris* (Christ, 1791)**

Xylocopa alicae Cockerell, 1931: 209—♂ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi

References: Dusmet y Alonso (1924); Schulthess (1924); Cockerell (1931d); Benoist (1950b); Ortiz-Sánchez (1997); Terzo & Rasmont (1997; 2014); Terzo *et al.* (2007)

***Xylocopa (Koptortosoma) pubescens* Spinola, 1838**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Benoist (1950a;b); Lieftinck (1964); Terzo & Rasmont (2014)

***Xylocopa (Xylocopa) valga* Gerstäcker, 1872**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Casablanca-Settat; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Codina (1923); Dusmet y Alonso (1924); Schulthess (1924); Benoist (1950b); Terzo & Rasmont (2014); Terzo *et al.* (2007)

***Xylocopa (Xylocopa) violacea* (Linnaeus, 1758)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi

References: Schulthess (1924); Maidl (1933); Terzo & Rasmont (2014); Terzo *et al.* (2007)

Family Colletidae Lapeletier, 1841

Genus *Colletes* Latreille, 1802

***Colletes abeillei* Pérez, 1903**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1978)

***Colletes acutiformis* Noskiewicz, 1936**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: None (Kuhlmann, unpublished)

***Colletes acutus* Pérez, 1903**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: Warncke (1978)

***Colletes albomaculatus* (Lucas, 1849)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Noskiewicz (1936); Benoist (1957b)

***Colletes atlassus* Kuhlmann, 2002**

Colletes atlassus Kuhlmann, 2002: 755—♂ (OLML), Holotype, Asni, Imlil (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Kuhlmann (2002)

***Colletes biskrensis* Noskiewicz, 1936**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1957b); Kuhlmann (unpublished)

Notes: The record of *Colletes eous* Morice, 1904 in Morocco by Benoist (1957b) is most probably *C. biskrensis*

***Colletes canescens* Smith, 1853**

Colletes Nadigi Noskiewicz, 1933: 48—♀ (MHNG), Holotype, Tizi n'Tichka (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Nadig & Nadig (1933); Noskiewicz (1933); Maidl (1933); Benoist (1957b); Warncke (1978)

***Colletes coriandri* Pérez, 1895**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet

References: None (Kuhlmann, unpublished)

***Colletes daourus* Warncke, 1978**

Colletes daourus Warncke, 1978: 346—♂ (KW), Holotype, Ben Mansour (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Rabat-Salé-Kénitra; Drâa-Tafilalet; Guelmim-Oued Noun

References: Warncke (1978)

***Colletes diodontus* Benoist, 1957**

Colletes diodontus Benoist, 1957: 164—♂ (MNHN), Holotype, Boulemane (Morocco)

Global distribution: Near endemic (Morocco, Mauritania)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Benoist (1957b); Warncke (1978)

***Colletes dusmeti* Noskiewicz, 1936**

Colletes restingensis Noskiewicz, 1936: 168—♀ (MNCN), Syntypes, Restinga (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Drâa-Tafilalet

References: Noskiewicz (1936); Warncke (1978)

***Colletes eatoni* Morice, 1904**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Laâyoune-Sakia El Hamra

References: Benoist (1957b); Warncke (1978)

***Colletes elegans* Noskiewicz, 1936**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Warncke (1978)

***Colletes escalerae* Noskiewicz, 1936**

Colletes escalerae Noskiewicz, 1936: 361—Sex unknown (MNCN), Type unknown, Essaouira and Marrakech (Morocco)

Global distribution: Near endemic (Morocco, Portugal, Spain, Tunisia)

Regional distribution: Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Noskiewicz (1936)

***Colletes formosus* Pérez, 1902**

Global distribution: West-Palearctic

Regional distribution: Oriental; Souss-Massa

References: None (Kuhlmann, unpublished; Roberts, unpublished, SEMC)

***Colletes foveolaris* Pérez, 1903**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Benoist (1957b); Warncke (1978)

***Colletes gallicus* Radoszkowski, 1891**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: None (Kuhlmann, unpublished)

***Colletes intricans* Spinola, 1838**

Global distribution: West-Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental

References: None (Kuhlmann, unpublished)

***Colletes lacunatus* Dours, 1872**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Dakhla-Oued Ed-Dahab

References: Warncke (1978)

***Colletes ligatus* Erichson, 1835**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Casablanca-Settat; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun; Rabat-Salé-Kenitra

References: Noskiewicz (1936); Benoist (1957b)

***Colletes maroccanus* Warncke, 1978**

Colletes maroccanus Warncke, 1978: 344—♂ (KW), Holotype, Jbel Tifernine (Morocco)

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1978); Schmid-Egger (unpublished)

***Colletes minutus* Kuhlmann, 2002**

Colletes minutus Kuhlmann, 2002: 745—♂ (OLML), Holotype, Akka (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Kuhlmann (2002; 2003)

***Colletes nanus* Friese, 1898**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra; Dakhla-Oued Ed-Dahab

References: Benoist (1957b); Warncke (1978)

***Colletes nigricans* Gistel, 1857**

Colletes alluaudi Cockerell, 1931: 415—♂ (NHMUK), Type unknown, Asni (Morocco)

Colletes flavescens Noskiewicz, 1936: 106—♀♂ (MNCN), Syntypes, Essaouira (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931c); Noskiewicz (1936); Benoist (1957a;b)

***Colletes niveatus* Kuhlmann, 2002**

Colletes niveatus Kuhlmann, 2002: 746—♂ (OLML), Holotype, 40 km W Ouarzazate (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet

References: Kuhlmann (2002)

***Colletes noskiewiczzi* Cockerell, 1942**

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Drâa-Tafilalet

References: None (Kuhlmann, unpublished)

***Colletes perezi* Morice, 1904**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1950a; 1957b)

***Colletes pumilus* Morice, 1904**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1950a; 1957b); Warncke (1978)

***Colletes similis* Schenck, 1853**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Warncke (1978)

***Colletes wahisi* Kuhlmann, 2002**

Colletes wahisi Kuhlmann, 2002: 749—♂ (FSAG), Holotype, Errachidia (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Drâa-Tafilalet; Souss-Massa

References: Kuhlmann (2002)

Genus *Hylaeus* Fabricius, 1793

***Hylaeus (Prosopis) absolutus* (Gribodo, 1894)**

Prosopis variegata obtusa Alfken, 1904: 322—Sex unknown (Depository unknown), Syntypes, Location unknown (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi

References: Alfken (1904); Moidl (1933)

***Hylaeus (Paraprosopis) albonotatus* (Walker, 1871)**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Drâa-Tafilalet; Guelmim-Oued Noun

References: Warncke (1992a); Dathe (1995)

***Hylaeus (Hylaeus) angustatus* (Schenck, 1861)**

Hylaeus pauperculus Cockerell, 1931: 536—♂ (NHMUK), Holotype, Asni (Morocco)

Prosopis curviscapa Benoist, 1960: 63—♂ (MNHN), Holotype, Ras el Ma (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi
References: Cockerell (1931e); Ebmer (2003)

***Hylaeus (Hylaeus) atlassus* (Warncke, 1981)**

Prosopis atlassa Warncke, 1981: 183—♂ (KW), Holotype, Oukaimeden (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Marrakech-Safi
References: Warncke (1981)

***Hylaeus (Hylaeus) beaumonti* (Benoist, 1957)**

Prosopis Beaumonti Benoist, 1957: 162—♀ (MNHN), Lectotype, Tinghir (Morocco)
Global distribution: Palearctic
Regional distribution: Drâa-Tafilalet
References: Benoist (1957b); Dathe (1995)

***Hylaeus (Dentigera) biarmicus* (Warncke, 1992)**

Global distribution: North Africa
Regional distribution: Fès-Meknès; Oriental
References: None (Schwarz, unpublished)

***Hylaeus (Dentigera) brachycephalus* (Morawitz, 1868)**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima
References: Dathe (2006)

***Hylaeus (Dentigera) brevicornis* Nylander, 1852**

Global distribution: Palearctic
Regional distribution: Fès-Meknès; Marrakech-Safi
References: Nadig & Nadig (1933)

***Hylaeus (Paraprosopis) clypearis* (Schenck, 1853)**

Hylaeus lineolellus Cockerell, 1938: 84—♀ (NHMUK), Holotype, Fez (Morocco)
Global distribution: West-Palearctic
Regional distribution: Fès-Meknès; Marrakech-Safi
References: Cockerell (1938a); Warncke (1972b); Benoist (1957b)

***Hylaeus (Hylaeus) communis* Nylander, 1852**

Global distribution: Palearctic
Regional distribution: Marrakech-Safi; Drâa-Tafilalet
References: Warncke (1972b)

***Hylaeus (Dentigera) conformis* Förster, 1871**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Benoist (1943); Dathe (1980; 2006)

***Hylaeus (Prosopis) coriaceus* (Pérez, 1895)**

Global distribution: West-Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima
References: Dathe (1980)

***Hylaeus (Abrupta) cornutus* Curtis, 1831**

Prosopis cornuta porzana Warncke, 1992: 796—♀ (KW), Holotype, Kenitra (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès

References: Cockerell (1931a); Warncke (1972b; 1992a)

***Hylaeus (Patagiata) difformis* (Eversmann, 1852)**

Global distribution: Palearctic

Regional distribution: Souss-Massa

References: Proshchalykin & Dathe (2012)

***Hylaeus (Lambdopsis) dilatatus* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Unknown

References: Warncke (1992a); Proshchalykin & Dathe (2012)

***Hylaeus (Paraprosopis) dinkleri* (Friese, 1898)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Dathe (1995)

Notes: Dathe (1995) considers that the “indication for Morocco is highly questionable and has to be rechecked”

***Hylaeus (Lambdopsis) euryscapus* Förster, 1871**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Nadig & Nadig (1933)

***Hylaeus (Prosopis) gazagnairei* (Vachal, 1891)**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra; Casablanca-Settat; Fès-Meknès; Drâa-Tafilalet

References: Benoist (1957b); Dathe (unpublished)

***Hylaeus (Prosopis) gibbus* Saunders, 1850**

Global distribution: Palearctic

Regional distribution: Unknown

References: Straka & Bogusch (2011); Dathe (unpublished)

***Hylaeus (Dentigera) gredleri* Förster, 1871**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: None (Dathe, unpublished)

***Hylaeus (Spatulariella) hyalinatus* Smith, 1842**

Global distribution: West-Palearctic

Regional distribution: Unknown

References: None (Ebmer, unpublished)

***Hylaeus (Dentigera) imparilis* Förster, 1871**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Benoist (1957b); Warncke (1972b)

***Hylaeus (Hylaeus) impressiventris* (Benoist, 1960)**

Prosopis impressiventris Benoist, 1960: 64—♀ (MNHN), Syntypes, Ain Leuh (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Souss-Massa

References: Benoist (1960)

***Hylaeus (Paraprosopis) lactipennis* (Benoist, 1957)**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: None (Dathe, unpublished)

***Hylaeus (Paraprosopis) lineolatus* (Schenck, 1861)**

Prosopis lineolata ferina Warncke, 1992: 781—♀ (KW), Holotype, Tizi n'Test (Morocco)

Global distribution: Palearctic

Regional distribution: Souss-Massa

References: Warncke (1992a)

***Hylaeus (Paraprosopis) livius* (Warncke, 1992)**

Prosopis livia Warncke, 1992: 779—♀ (KW), Holotype, Tizi n'Test / S Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Warncke (1992a)

***Hylaeus (Spatulariella) longimaculus* (Alfken, 1936)**

Global distribution: Palearctic

Regional distribution: Unknown

References: None (Dathe, unpublished)

***Hylaeus (Prosopis) luteobalteatus* (Dours, 1872)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1957b); Warncke (1972b)

***Hylaeus (Spatulariella) mauricus* (Warncke, 1981)**

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Marrakech-Safi

References: Warncke (1981)

***Hylaeus (Lambdopsis) melba* (Warncke, 1992)**

Prosopis melba Warncke, 1992: 773—♂ (KW), Holotype, 20 km SO Erfoud (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1992a); Dathe (1995)

***Hylaeus (Prosopis) meridionalis* Förster, 1871**

Hylaeus hookeri Cockerell, 1931: 534—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Cockerell (1931e)

***Hylaeus (Hylaeus) nigrinus* (Fabricius, 1798)**

Global distribution: Palearctic

Regional distribution: Oriental
References: None (Dathe, unpublished)

***Hylaeus (Dentigera) oeanthe* (Warncke, 1992)**

Prosopis brachycephala oeanthe Warncke, 1992: 773—♀ (KW), Holotype, 10 km S Goulimine (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun

References: Warncke (1992a); Dathe (2006)

***Hylaeus (Prosopis) pictus* (Smith, 1853)**

Hylaeus psilurus Cockerell, 1938: 83—♂ (NHMUK), Holotype, Fez (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Cockerell (1931a; 1938a); Benoist (1957b); Warncke (1972b); Straka & Bogusch (2011)

***Hylaeus (Dentigera) pilosulus* (Pérez, 1903)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi

References: Dathe (2006)

***Hylaeus (Prosopis) praenotatus* Förster, 1871**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Cockerell (1931a)

***Hylaeus (Koptogaster) punctulatissimus* Smith, 1842**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Warncke (1981; 1992a)

***Hylaeus (Prosopis) signatus* (Panzer, 1798)**

Prosopis berlandi Benoist, 1943: 41—♂ (MNHN), Holotype, Taroudant (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1943; 1950b); Warncke (1972b)

***Hylaeus (Dentigera) simus* (Vachal, 1895)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Dathe (2006)

***Hylaeus (Paraprosopis) soror* (Pérez, 1903)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Nadig & Nadig (1933)

***Hylaeus (Lambdopsis) subbuteus* (Warncke, 1992)**

Prosopis subbutea Warncke, 1992: 783—♀ (KW), Holotype, Imlil-Asni (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Warncke (1992a)

Hylaeus (Spatulariella) sulphuripes (Gribodo, 1894)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Cockerell (1938a)

Hylaeus (Paraprosopis) taeniolatus Förster, 1871

Prosopis luteipes Benoist, 1943: 42—♂ (MNHN), Holotype, Agadir (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Souss-Massa; Guelmim-Oued Noun; Marrakech-Safi

References: Benoist (1943; 1957b); Warncke (1972b)

Hylaeus (Prosopis) variegatus (Fabricius, 1798)

Prosopis rufithorax Alfken, 1933: 47—♂ (MFNB), Holotype, El Hajeb (Morocco)

Prosopis variegata var. *integra* Alfken, 1904: 322—♂ (MNHN), Syntypes, Tanger (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Tanger-Tetouan-Al Hoceima; Marrakech-Safi; Drâa-Tafilalet

References: Cockerell (1931a); Alfken (1904; 1933); Nadig & Nadig (1933); Benoist (1957b)

Family Halictidae Thomson, 1869

Genus *Ceylalictus* Strand, 1913

Ceylalictus (Meganomioides) desertorum (Blüthgen, 1925)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Pesenko & Pauly (2005); Pauly (2011a)

Ceylalictus (Ceylalictus) punjabensis (Cameron, 1907)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Pesenko & Pauly (2005); Pauly (2011a)

Ceylalictus (Ceylalictus) variegatus (Olivier, 1789)

Nomioides labiatarum Cockerell, 1931: 204—♀ (NHMUK), Holotype, Asni (Morocco)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Cockerell (1931d); Alfken *et al.* (1934); Pesenko (1983); Pesenko & Pauly (2005); Pauly (2011a)

Genus *Dufourea* Lepeletier, 1841

Dufourea (Afrodufourea) atlantica Ebmer, 1993

Dufourea atlantica Ebmer, 1993: 27—♂ (MSAA), Holotype, Sidi Ifni (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun

References: Ebmer (1989; 1993); Pauly & Patiny (2011a)

Dufourea (Dufourea) brachycephala (Warncke, 1979)

Dufourea brachycephala hespera Ebmer, 1993: 23—♂ (AWE), Holotype, Chichaoua (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Marrakech-Safi; Guelmim-Oued Noun
References: Ebmer (1989; 1993); Pauly & Patiny (2011a)

***Dufourea (Dufourea) chagrina* (Warncke, 1979)**

Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Ebmer (1999); Pauly & Patiny (2011a)

***Dufourea (Dufourea) dysis* Ebmer, 1993**

Dufourea dysis Ebmer, 1993: 21—♂ (AWE), Holotype, Tagmout (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Guelmim-Oued Noun; Marrakech-Safi
References: Ebmer (1993); Pauly & Patiny (2011a)

***Dufourea (Dufourea) exulans* Ebmer, 1984**

Dufourea exulans Ebmer, 1984: 352—♂ (AWE), Holotype, Oukaimeden (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa
References: Ebmer (1984; 1993; 1999); Pauly & Patiny (2011a)

***Dufourea (Dentirophites) gaullei* Vachal, 1897**

Global distribution: Near endemic (Morocco, Spain, Portugal)
Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra
References: Warncke (1979b); Pauly & Patiny (2011a)

***Dufourea (Afrodufourea) maroccana* (Warncke, 1979)**

Rophites maroccanus Warncke, 1979: 151—♂ (NHMUK), Holotype, km 6 Sidi Ifni-Goulimine Road (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun
References: Warncke (1979b); Ebmer (1989; 1993; 1999); Pauly & Patiny (2011a)

***Dufourea (Cephalictoides) paradoxa* (Morawitz, 1867)**

Global distribution: West-Palearctic
Regional distribution: Souss-Massa
References: Ebmer (1999); Pauly & Patiny (2011a); Astafurova (2014)

***Dufourea (Dufourea) petraea* Ebmer, 1999**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Drâa-Tafilalet
References: Ebmer (1999); Pauly & Patiny (2011a)

***Dufourea (Dufourea) similis* Friese, 1898**

Global distribution: Palearctic
Regional distribution: Drâa-Tafilalet; Oriental; Souss-Massa
References: Ebmer (1999); Pauly & Patiny (2011a)

***Dufourea (Dentirophites) tingitana* Ebmer, 1999**

Dufourea tingitana Ebmer, 1999: 203—♀ (OLML), Holotype, 10 km SW Akka (Morocco)
Global distribution: **Morocco. ENDEMIC**
Regional distribution: Souss-Massa
References: Ebmer (1999); Pauly & Patiny (2011a)

Genus *Halictus* Latreille, 1804

Halictus brunnescens (Eversmann, 1852)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931a); Ebmer (1976); Pauly (2011b)

Halictus consobrinus Pérez, 1895

Halictus maroccanus Blüthgen, 1933: 57—♂ (MFNB), Holotype, Ifrane (Morocco)

Halictus ifranicola Cockerell, 1937: 1—♀ (AMNH), Holotype, Ifrane (Morocco)

Halictus rejectus Cockerell, 1937: 3—♂ (AMNH), Holotype, Ifrane (Morocco)

Global distribution: Near endemic (Morocco, Portugal, Spain)

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1933); Cockerell (1937); Ebmer (1976); Ebmer (1985); Pauly (2011b)

Halictus constantinensis Strand, 1910

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1924a); Benoist (1943; 1950b); Ebmer (1976; 1985); Pauly (2011b)

Halictus fulvipes (Klug, 1817)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923); Schulthess (1924); Cockerell (1931a); Mairl (1933); Benoist (1950b); Ebmer (1976); Ebmer (1985); Pauly (2011b)

Halictus ifranensis Cockerell, 1931

Halictus ifranensis Cockerell, 1931: 532—♀ (NHMUK), Type unknown, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Cockerell (1931e); Pauly (2011b)

Halictus nadigi Blüthgen, 1934

Halictus nadigi Blüthgen, 1934: 54—♂ (MFNB), Holotype, El Hajeb (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra

References: Blüthgen (1933); Ebmer (1976); Pauly (2011b)

Halictus patellatus Morawitz, 1873

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Ebmer (1976; 1985); Pauly (2011b)

Halictus quadricinctus (Fabricius, 1776)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1924a); Mairl (1933); Pesenko (2005); Ebmer (2014); Pauly (2011b)

***Halictus rubicundus* (Christ, 1791)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Drâa-Tafilalet

References: Pasteels (1981); Ebmer (1988; 2011); Pauly (2011b)

***Halictus rufipes* (Fabricius, 1793)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet

References: Blüthgen (1923; 1924a); Maidl (1933); Ebmer (1976); Pauly (2011b)

***Halictus scabiosae* (Rossi, 1790)**

Halictus scabiosae powelli Cockerell, 1931: 531—♂ (NHMUK), Type unknown, Aroumd (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Strand (1909); Blüthgen (1924a); Cockerell (1931e); Maidl (1933); Ebmer (1976); Pauly (2011b)

***Halictus senilis* (Eversmann, 1852)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Oriental; Souss-Massa

References: Pauly (2011b)

Genus *Lasioglossum* Curtis, 1833

***Lasioglossum (Evyllaesus) aeratum* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Pauly (2016a)

***Lasioglossum (Lasioglossum) albocinctum* (Lucas, 1849)**

Halictus phanerodontus Cockerell, 1931: 532—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi

References: Cockerell (1931e); Ebmer (1976); Pasteels (1981); Pauly (2011c)

***Lasioglossum (Evyllaesus) albovirens* (Pérez, 1895)**

Global distribution: Near endemic (Morocco, Spain, Canary Islands, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Blüthgen (1923; 1924a; 1925); Lindbergh (1934); Ebmer (1976); Pauly (2016a); Schmid-Egger (unpublished)

***Lasioglossum (Evyllaesus) algericolellum* (Strand, 1909)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat

References: Pauly (2016b)

***Lasioglossum (Evyllaesus) algerum* (Blüthgen, 1923)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Ebmer (1976; 1978; 1985); Pauly (2016a)

***Lasioglossum (Evyllaesus) angusticeps* (Perkins, 1895)**

Halictus exetinus Cockerell, 1938: 4—♂ (AMNH), Holotype, Asni (Morocco)

Halictus indecisus Cockerell, 1938: 5—♀ (AMNH), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Cockerell (1938b); Pauly (2011d)

***Lasioglossum (Evyllaesus) articulare* (Pérez, 1895)**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950a); Ebmer (1976); Pauly (2011d)

***Lasioglossum (Evyllaesus) aureolum* (Pérez, 1903)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1924a); Ebmer (1976); Pauly (2016a)

***Lasioglossum (Evyllaesus) berberum* (Benoist, 1941)**

Halictus berberus Benoist, 1941: 81—♂ (MNHN), Holotype, Jbel M'Goun (Morocco)

Global distribution: North AfricaNear endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet; Marrakech-Safi

References: Benoist (1941); Ebmer (1976); Pauly (2016b); Pauly *et al.* (2019)

***Lasioglossum (Lasioglossum) bimaculatum* (Dours, 1872)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Schulthess (1924); Ebmer (1976; 1985; 2014)

***Lasioglossum (Evyllaesus) brevicorne* (Schenck, 1868)**

Halictus optimellus Cockerell, 1938: 6—♀ (AMNH), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Oriental; Souss-Massa

References: Cockerell (1938b); Ebmer (1976); Pauly (2011d)

***Lasioglossum (Lasioglossum) callizonium* (Pérez, 1895)**

Halictus mogadoricus Cockerell, 1937: 9—♀ (AMNH), Holotype, Essaouira (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1924a); Cockerell (1937); Benoist (1950b); Pauly (2011c)

***Lasioglossum (Evyllaesus) capitale* (Pérez, 1903)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Blüthgen (1923; 1924a); Ebmer (1976; 1985); Pauly (2011d)

***Lasioglossum (Lasioglossum) clavipes* (Dours, 1872)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Marrakech-Safi

References: Strand (1909); Schulthess (1924); Blüthgen (1933); Ebmer (1976)

***Lasioglossum (Evyllaesus) cleome* Pauly, Ebmer & Grabener, 2017**

Lasioglossum cleome Pauly, Ebmer & Grabener, 2017: 4—♀ (IRSNB), Holotype, Trab Labied (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Pauly (2016b); Pauly *et al.* (2017)

***Lasioglossum (Evyllaesus) clypeare* (Schenck, 1853)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Oriental

References: Pauly (2011d)

***Lasioglossum (Evyllaesus) collopiense* (Pérez, 1903)**

Global distribution: Near endemic (Morocco, Spain, Portugal, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Ebmer (1976; 1985); Pauly (2016a)

***Lasioglossum (Evyllaesus) corvinum* (Morawitz, 1877)**

Global distribution: Palearctic

Regional distribution: Tanger-Tétouan-Al Hoceima

References: Ebmer (1976); Pauly (2011d)

***Lasioglossum (Lasioglossum) costulatum* (Kriechbaumer, 1873)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Cockerell (1937); Ebmer (1976; 1985)

***Lasioglossum (Evyllaesus) crepusculum* Ebmer, 2008**

Lasioglossum crepusculum Ebmer, 2008: 565—♀ (AWE), Holotype, Tata (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Ebmer (2008)

***Lasioglossum (Lasioglossum) cristula* (Pérez, 1898)**

Halictus mesoleus Cockerell, 1938: 4—♀ (AMNH), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra

References: Cockerell (1938b); Ebmer (2014); Pauly (2011c)

***Lasioglossum (Lasioglossum) discus* (Smith, 1853)**

Global distribution: Palearctic

Global distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

Note : Although usually spelled as *L. discum*, the epithet “discus” is a noun in both Latin and Greek, so ICZN Art. 31.2.1 applies.

References: Ebmer (1988); Pesenko (2006); Pauly (2011c)

***Lasioglossum (Lasioglossum) euxinicum* Ebmer, 1972**

Lasioglossum euxinicum atlas Ebmer, 1981: 115—♀ (AWE), Holotype, Oukaimeden (Morocco)

Halictus eurasicus canorus Warncke, 1982: 99—♀ (NHMUK), Holotype, Aguelmame Sidi Ali (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi

References: Ebmer (1976; 1981); Warncke (1982b); Pauly (2011c)

Lasioglossum (Lasioglossum) femorale (Saunders, 1908)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet

References: Ebmer (1985)

Lasioglossum (Ctenonomia) gibber (Vachal, 1892)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Guelmim-Oued Noun; Souss-Massa

References: Ebmer (2008)

Lasioglossum (Evyllaesus) glabriusculum (Morawitz, 1872)

Halictus ultraparvus Cockerell, 1938: 79—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Cockerell (1938a); Ebmer (1985)

Lasioglossum (Evyllaesus) grisellinum (Blüthgen, 1931)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Ebmer (1976; 1985); Pauly (2016b)

Lasioglossum (Evyllaesus) griseolum (Morawitz, 1872)

Halictus asnicus Cockerell, 1937: 7—♂ (AMNH), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Cockerell (1937); Blüthgen (1925); Ebmer (1976; 1985)

Lasioglossum (Evyllaesus) immunitum (Vachal, 1895)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Blüthgen (1923; 1924a); Ebmer (1976); Pauly (2011d)

Lasioglossum (Evyllaesus) interruptum (Panzer, 1798)

Halictus interruptus atlanticus Cockerell, 1938: 3—♀ (AMNH), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1933); Cockerell (1938b); Benoist (1943); Ebmer (1976; 1985); Pauly (2011d)

Lasioglossum (Lasioglossum) leucozonium (Schrank, 1781)

Lasioglossum leucozonium cedri Ebmer, 1976: 235—♀ (AWE), Holotype, Azrou (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Blüthgen (1924a); Cockerell (1937); Ebmer (1976); Pauly (2011c)

Lasioglossum (Evyllaesus) limbellus (Morawitz, 1876)

Halictus rufulocinctus Cockerell, 1937: 7—♂ (AMNH), Holotype, Ifrane (Morocco)

Halictus frigescens Cockerell, 1938: 3—♀ (AMNH), Holotype, Essaouira (Morocco)

Global distribution: Palearctic

Regional distribution: Oriental; Rabat-Salé-Kénitra; Drâa-Tafilalet

References: Cockerell (1937; 1938b); Pauly (2011d)

Note : Although usually spelled *L. limbellum*, the diminutive form of a Latin noun (“limbus” in this case) is still a noun, so ICZN Art. 31.2.1 applies.

***Lasioglossum (Evyllaesus) littorale* (Blüthgen, 1923)**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra

References: Pauly (2016a)

***Lasioglossum (Evyllaesus) lucidulum* (Schenck, 1861)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1924a); Cockerell (1931a); Ebmer (1976)

***Lasioglossum (Evyllaesus) malachurum* (Kirby, 1802)**

Halictus malachurus sharificus Cockerell, 1937: 6—♂ (AMNH), Holotype, Tanger (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Souss-Massa

References: Schulthess (1924); Alfken (1930); Lindbergh (1934); Maidl (1933); Cockerell (1937); Ebmer (1976; 1985); Pauly (2011d)

***Lasioglossum (Evyllaesus) masculum* (Pérez, 1895)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Ebmer (1976; 1995); Pauly (2016b)

***Lasioglossum (Evyllaesus) maurusium* (Blüthgen, 1935)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Oriental

References: Ebmer (1976); Pasteels (1981); Pauly (2011d)

***Lasioglossum (Evyllaesus) mediterraneum* (Blüthgen, 1925)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Ebmer (1976; 1985); Pauly (2011d)

***Lasioglossum (Evyllaesus) mesosclerum* (Pérez, 1903)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Pauly (2011d); Schmid-Egger (unpublished)

***Lasioglossum (Evyllaesus) minutissimum* (Kirby, 1802)**

Halictus lucidellus Cockerell, 1937: 3—♀ (AMNH), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1924a); Cockerell (1931a; 1937); Benoist (1943); Pauly (2011d)

***Lasioglossum (Evyllaesus) morio* (Fabricius, 1793)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Drâa-Tafilalet; Souss-Massa
References: Ebmer (1976); Pauly (2016a)

***Lasioglossum (Evyllaesus) musculoides* Ebmer, 1974**

Lasioglossum musculoides Ebmer, 1974: 55—♀ (MFNB), Holotype, Amizmiz (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Spain, Portugal)

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Souss-Massa

References: Ebmer (1974); Pauly (2016a)

***Lasioglossum (Evyllaesus) nitidiusculum* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Ebmer (1976; 1985); Ebmer & Sakagami (1985); Pauly (2011d)

***Lasioglossum (Evyllaesus) oraniense* (Blüthgen, 1930)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Marrakech-Safi

References: Ebmer (1976); Pauly (2016b)

***Lasioglossum (Lasioglossum) pallens* (Brullé, 1832)**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès

References: Schulthess (1924); Blüthgen (1924a); Ebmer (1976)

***Lasioglossum (Evyllaesus) pauliani* (Benoist, 1941)**

Halictus Pauliani Benoist, 1941: 79—♂ (MNHN), Holotype, Jbel Ayachi (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Benoist (1941); Ebmer (1976)

***Lasioglossum (Evyllaesus) pauperatum* (Brullé, 1832)**

Halictus pauxillinus Cockerell, 1938: 6—♀ (AMNH), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1938b); Ebmer (1976; 1985; 2000); Pauly (2011d)

***Lasioglossum (Evyllaesus) pauxillum* (Schenck, 1853)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat

References: Blüthgen (1923; 1924a); Schulthess (1924); Cockerell (1938b); Ebmer (1976; 1985)

***Lasioglossum (Lasioglossum) perclavipes* (Blüthgen, 1934)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Oriental; Tanger-Tétouan-Al Hoceima

References: Ebmer (1972); Pauly (2011c)

***Lasioglossum (Evyllaesus) phoenicurum* (Warncke, 1975)**

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Souss-Massa; Laâyoune-Sakia El Hamra

References: Pauly (2016b)

***Lasioglossum (Lasioglossum) prasinum* (Smith, 1848)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra

References: Ebmer (1976)

***Lasioglossum (Evyllaesus) pseudoleptocephalum* (Blüthgen, 1923)**

Halictus pseudoleptocephalus Blüthgen, 1923: 132—♀♂ (MFNB), Syntypes, Amizmiz, Essaouira, Marrakesh (Morocco)

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi

References: Blüthgen (1923); Pauly (2016a)

***Lasioglossum (Evyllaesus) pseudoplanulum* (Blüthgen, 1924)**

Halictus perminutus Cockerell, 1938: 80—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: West-Palearctic; Sub-Saharan Africa

Regional distribution: Oriental; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1938a); Ebmer (1976; 2000); Pauly (2011d)

***Lasioglossum (Evyllaesus) punctatissimum* (Schenck, 1853)**

Halictus tinitinensis Cockerell, 1938: 81—♀ (NHMUK), Holotype, Tinitine (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Drâa-Tafilalet; Souss-Massa

References: Blüthgen (1923; 1924a); Cockerell (1938a); Ebmer (1976); Pauly (2016b)

***Lasioglossum (Evyllaesus) pygmaeum* (Schenck, 1853)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Ebmer (1976; 2000); Pauly (2011d)

***Lasioglossum (Evyllaesus) smeathmanellum* (Kirby, 1802)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Ebmer (1976); Pauly (2016a)

***Lasioglossum (Evyllaesus) soror* (Saunders, 1901)**

Global distribution: Palearctic

Regional distribution: Souss-Massa

References: Ebmer (1976; 1985)

***Lasioglossum (Evyllaesus) sphecodimorphum* (Vachal, 1892)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi; Souss-Massa

References: Alfken (1914); Blüthgen (1923; 1924a; 1925); Ebmer (1976); Pauly (2011d)

***Lasioglossum (Evyllaesus) strictifrons* (Vachal, 1895)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Souss-Massa

References: Ebmer (1976; 1985); Pauly (2011d)

***Lasioglossum (Evyllaesus) subhirtum* (Lepelletier, 1841)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi
References: Blüthgen (1923; 1924a); Ebmer (1976; 1985); Pauly (2011d)

***Lasioglossum (Evyllaesus) transitorium* (Schenck, 1868)**

Global distribution: West-Palearctic
Regional distribution: Oriental
References: Ebmer (2000); Pauly (2011d)

***Lasioglossum (Evyllaesus) villosulum* (Kirby, 1802)**

Halictus villosulus perlautus Cockerell, 1938: 82—♂ (NHMUK), Holotype, Asni (Morocco)
Halictus rufotegularis Cockerell, 1938: 7—♀ (AMNH), Holotype, Ifrane (Morocco)
Halictus Villiersi Benoist, 1941: 80—♀ (MNHN), Holotype, Tachdirt, Jbel Toubkal (Morocco)
Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Blüthgen (1923, 1924a; 1933); Cockerell (1938a,b); Benoist (1941); Pauly (2011d); Pauly *et al.* (2019)

***Lasioglossum (Evyllaesus) virens* (Erichson, 1835)**

Global distribution: West-Palearctic
Regional distribution: Casablanca-Settat; Marrakech-Safi
References: Blüthgen (1924a; 1925); Ebmer (1976); Pauly (2016a)

***Lasioglossum (Lasioglossum) xanthopus* (Kirby, 1802)**

Global distribution: Palearctic
Regional distribution: Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima
References: Ebmer (1976; 1985); Pauly (2011c)

***Lasioglossum (Evyllaesus) yakourense* (Saunders, 1908)**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi
References: Ebmer (1976; 1985); Pauly (2016b)

Genus *Nomiapis* Cockerell, 1919

***Nomiapis bispinosa* (Brullé, 1832)**

Global distribution: Palearctic
Regional distribution: Souss-Massa
References: Cockerell (1931a); Pauly (2011e); Astafurova (2014)

Genus *Nomioides* Schenck, 1866

***Nomioides (Nomioides) bluethgeni* Pesenko, 1979**

Global distribution: Palearctic; Sub-Saharan Africa
Regional distribution: Fès-Meknès
References: Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) deceptor* Saunders, 1908**

Global distribution: Palearctic; Sub-Saharan Africa
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Benoist (1943); Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) facilis* (Smith, 1853)**

Nomioides cruciferarum Cockerell, 1931: 205—♀ (NHMUK), Holotype, Rabat (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931d); Blüthgen (1933); Pesenko (1983); Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) fortunatus* Blüthgen, 1937**

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Marrakech-Safi; Souss-Massa

References: Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) minutissimus* (Rossi, 1790)**

Nomioides campanulae Cockerell, 1931: 206—♀ (NHMUK), Holotype, Ifrane (Morocco)

Nomioides senecionis Cockerell, 1931: 208—♀ (USNM), Holotype, Essaouira (Essaouira)

Nomioides maura Blüthgen, 1925: 14—♀ (MFNB), Lectotype, Amizmiz (Morocco)

Nomioides maura var. *tingitana* Blüthgen, 1933: 63—♀ (MHNG), Holotype, Tanger (Morocco)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet

References: Blüthgen (1925; 1933); Cockerell (1931d); Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) rotundiceps* Handlirsch, 1888**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Alfken *et al.* (1934); Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) squamiger* Saunders, 1908**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Pesenko & Pauly (2005); Pauly (2011f)

***Nomioides (Nomioides) turanicus* Morawitz, 1876**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra; Dakhla-Oued Ed-Dahab

References: Pesenko & Pauly (2005); Pauly (2011f)

Genus *Pseudapis* Kirby, 1900

***Pseudapis dixica* (Warncke, 1976)**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Laâyoune-Sakia El Hamra; Dakhla-Oued Ed-Dahab

References: Warncke (1976); Grabener (2017)

***Pseudapis nilotica* (Smith, 1875)**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Oriental; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Dakhla-Oued Ed-Dahab

References: Benoist (1950a); Pauly (1990); Zanden (1997a); Grabener (2017)

Genus *Rophites* Spinola, 1808

Rophites (Rophitoides) algirus Pérez, 1895

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Warncke (1980a); Pauly & Patiny (2011b); Astafurova (2014)

Rophites (Rophitoides) theryi Benoist, 1930

Rhophites Theryi Benoist, 1930: 120—♂ (MNHN), Type unknown, Kenitra, Maamora forest (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Rabat-Salé-Kénitra; Souss-Massa

References: Benoist (1930); Schwammberger (1975); Pauly & Patiny (2011b); Schmid-Egger (unpublished)

Genus *Seladonia* Robertson, 1918

Seladonia caelestis (Ebmer, 1976)

Halictus caelestis Ebmer, 1976: 222—♀ (AWE), Holotype, Oukaimeden (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Ebmer (1976); Pauly (2016d)

Seladonia gemma (Dours, 1872)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Blüthgen (1923; 1924a); Ebmer (1976; 1985; 1988); Pauly (2016d)

Seladonia gemmella (Pauly, 2015)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Pauly (2016d); Schmid-Egger (unpublished)

Seladonia lucidipennis (Smith, 1853)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Souss-Massa

References: Pauly (2016d)

Seladonia smaragdula (Vachal, 1895)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950a); Ebmer (1976; 1985; 1988); Dawut & Tadauchi (2002); Pauly (2016d)

Seladonia subaurata (Rossi, 1792)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Drâa-Tafilalet

References: Ebmer (1976; 1988); Pauly (2016d)

Genus *Sphecodes* Latreille, 1804

Sphecodes albilabris (Fabricius, 1793)

Sphecodes atrescens Cockerell, 1931: 350—♂ (USNM), Holotype, Ifrane (Morocco)

Sphecodes rufipennis Cockerell, 1931: 348—♂ (USNM), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra

References: Cockerell (1931a); Bogusch & Straka (2012); Schwarz (unpublished); Straka (unpublished)

Sphecodes alternatus Smith, 1853

Sphecodes gibbus var. *similis* subvar. *scariosus* Sichel, 1865: 444—♂ (MNHN), Syntypes, locality unknown (Morocco).

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Sichel (1865); Meyer (1920); Bogusch & Straka (2012); Schwarz (unpublished, MSAA)

Notes: The subspecies occurring in Morocco, *S. alternatus algeriensis*, might be considered as a separate species.

Sphecodes atlassa Warncke, 1992

Sphecodes geoffrellus atlassa Warncke, 1992: 36—♀ (KW), Holotype, Oukaimeden (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Marrakech-Safi

References: Warncke (1992b)

Sphecodes crassanus Warncke, 1992

Global distribution: West-Palearctic

Regional distribution: Unknown

References: None (Schwarz, unpublished, MSAA)

Sphecodes crassus Thomson, 1870

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Oriental

References: Warncke (1992b); Bogusch & Straka (2012); Schmid-Egger (unpublished)

Sphecodes croaticus Meyer, 1922

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Fès-Meknès

References: Blüthgen (1924b; 1944); Warncke (1992b); Bogusch & Straka (2012)

Sphecodes dusmeti Blüthgen, 1924

Sphecodes dusmeti maroccanus Warncke, 1992: 17—♂ (KW), Holotype, Tizi n'Test (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Blüthgen (1924b); Warncke (1992b); Bogusch & Straka (2012); Schwarz (unpublished, MSAA)

Sphecodes ephippius (Linnaeus, 1767)

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Fès-Meknès

References: Warncke (1992b); Bogusch & Straka (2012)

Sphecodes geoffrellus (Kirby, 1802)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi
References: Warncke (1992b); Bogusch & Straka (2012)

***Sphecodes gibbus* (Linnaeus, 1758)**

Sphecodes lustrans Cockerell, 1931: 411—♂ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931c); Warncke (1992b); Bogusch & Straka (2012); Schwarz (unpublished, MSA)

***Sphecodes hirtellus* Blüthgen, 1923**

Global distribution: West-Palearctic

Regional distribution: Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Nadig & Nadig (1933); Warncke (1992b)

***Sphecodes intermedius* Blüthgen, 1923**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi

References: Warncke (1992b)

***Sphecodes longuloides* Blüthgen, 1923**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Warncke (1992b)

***Sphecodes marginatus* Hagens, 1882**

Global distribution: Palearctic

Regional distribution: Oriental; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Nadig & Nadig (1933); Warncke (1992b); Bogusch & Straka (2012); Schwarz (unpublished, MSA)

***Sphecodes monilicornis* (Kirby, 1802)**

Sphecodes monilicornis berberis Warncke, 1992: 22—♀ (KW), Holotype, Ait Saoun (Morocco)

Global distribution: Palearctic

Regional distribution: Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1992b)

***Sphecodes niger* Hagens, 1874**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Warncke (1992b); Bogusch & Straka (2012)

***Sphecodes olivieri* Lepelletier, 1825**

Sphecodes hispanicus subvar. *subpunctulatus* Sichel, 1865: 445—♂ (MNHN), Syntypes, locality unknown (Morocco).

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Sichel (1865); Meyer (1920); Cockerell (1931a); Nadig & Nadig (1933); Warncke (1992); Bogusch & Straka (2012)

***Sphecodes pellucidus* Smith, 1845**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Marrakech-Safi

References: Warncke (1992b)

***Sphecodes pseudofasciatus* Blüthgen, 1925**

Global distribution: Palearctic

Regional distribution: Unknown

References: Blüthgen (1924b; 1944); Bogusch & Straka (2012)

***Sphecodes puncticeps* Thomson, 1870**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Nadig & Nadig (1933); Warncke (1992b); Bogusch & Straka (2012)

***Sphecodes rubicundus* Hagens, 1875**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Bogusch & Straka (2012); Schwarz (unpublished, MSAA)

***Sphecodes rubripes* Spinola, 1838**

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra; Oriental

References: Cockerell (1931c); Warncke (1992b); Astafurova *et al.* (2019); Straka (unpublished)

***Sphecodes ruficrus* (Erichson, 1835)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Rabat-Salé-Kénitra

References: Warncke (1992b); Bogusch & Straka (2012); Schwarz (unpublished, MSAA)

***Sphecodes spinulosus* Hagens, 1875**

Global distribution: Palearctic

Regional distribution: Unknown

References: Bogusch & Straka (2012); Scheuchl & Willner (2016); Schwarz (unpublished, MSAA)

***Sphecodes zangherii* Noskiewicz, 1931**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Warncke (1992b); Bogusch & Straka (2012)

Genus *Systropha* Illiger, 1806

***Systropha (Systropha) maroccana* Warncke, 1977**

Systropha maroccana Warncke, 1977: 97—♂ (NHMUK), Holotype, km 6 Sidi Ifni-Goulimine Road (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Guelmim-Oued Noun; Souss-Massa

References: Warncke (1977a); Baker (1996); Patiny & Michez (2006)

***Systropha (Systropha) pici* Pérez, 1895**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Fès-Meknès

References: Baker (1996); Patiny & Michez (2006)

Genus *Vestitohalictus* Blüthgen, 1961

***Vestitohalictus cupidus* (Vachal, 1902)**

Global distribution: Palearctic

Regional distribution: Oriental; Drâa-Tafilalet; Souss-Massa
References: Ebmer (1976); Pauly (2016d)

***Vestitohalictus nasica* (Morawitz, 1876)**

Global distribution: Palearctic
Regional distribution: Drâa-Tafilalet
References: Pauly (2016d)

***Vestitohalictus ochropus* Blüthgen, 1923**

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Drâa-Tafilalet; Fès-Meknès; Oriental; Souss-Massa
References: Pauly (2016d)

***Vestitohalictus persephone* (Ebmer, 1976)**

Halictus persephone Ebmer, 1976: 225—♂ (AWE), Holotype, Midelt (Morocco)
Global distribution: Near endemic (Morocco, Tunisia)
Regional distribution: Oriental; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa
References: Ebmer (1976); Pauly (2016d)

***Vestitohalictus pici* Pérez, 1895**

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Benoist (1950a); Ebmer (1976; 1985); Pauly (2016d)

***Vestitohalictus pollinosus* Sichel, 1860**

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Blüthgen (1923); Benoist (1950b); Ebmer (1975; 1976; 1985); Pauly (2016d)

***Vestitohalictus radoszkowskii* (Vachal, 1902)**

Global distribution: Palearctic
Regional distribution: Marrakech-Safi; Oriental; Souss-Massa
References: Pauly (2016d)

Family Megachilidae Latreille, 1802

Genus *Afranthidium* Michener, 1948

***Afranthidium* (*Mesanthidium*) *alternans* (Klug, 1832)**

Anthidium doederleini var. *dusmeti* Mavromoustakis, 1947: 362—♂ (MNCN), Holotype, Marrakech (Morocco)
Anthidium lividum Benoist, 1950: —(MNHN), (Morocco)
Global distribution: Palearctic
Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun
References: Mavromoustakis (1947); Benoist (1950b); Litman *et al.* (2016)

***Afranthidium* (*Mesanthidium*) *carduele* (Morawitz, 1876)**

Global distribution: Palearctic
Regional distribution: Fès-Meknès
References: Warncke (1980b); Halada (unpublished, SEMC)

***Afranthidium (Mesanthidium) malacopygum* (Gribodo, 1894)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915)

***Afranthidium (Mesanthidium) schulthessii* (Friese, 1897)**

Anthidium naefi Benoist, 1950: 193—♂ (MNHN), Holotype, Tafraoute (Morocco)

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Marrakech-Safi; Souss-Massa

References: Benoist (1950a); Warncke (1980b); Zanden (1989)

Genus *Allodioxys* Popov, 1947

***Allodioxys limbiferus* (Pérez, 1895)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: None (Schwarz, unpublished, MSAA; Guichard, unpublished, SEMC)

Genus *Anthidiellum* Cockerell, 1904

***Anthidiellum (Anthidiellum) strigatum* (Panzer, 1805)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Warncke (1980b)

Genus *Anthidium* Fabricius, 1804

***Anthidium (Anthidium) auritum* Klug, 1832**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1915); Schulthess (1924); Le Goff (unpublished)

***Anthidium (Anthidium) berbericum* Pasteels, 1981**

Anthidium berbericum Pasteels, 1981: 29—♂ (INRA), Holotype, Tizi n'Test (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa; Guelmim-Oued Noun

References: Pasteels (1981)

***Anthidium (Anthidium) cingulatum* Latreille, 1809**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Alfken (1930); Cockerell (1931a); Benoist (1943; 1950b); Pagliano (1994);

Le Goff (unpublished)

***Anthidium (Anthidium) diadema* Latreille, 1809**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Nadig & Nadig (1933); Benoist (1950b)

***Anthidium (Gulanthidium) eremicum* Alfken, 1938**

Global distribution: Palearctic

Regional distribution: Oriental; Souss-Massa

References: None (Halada, unpublished)

***Anthidium (Anthidium) florentinum* (Fabricius, 1775)**

Global distribution: Palearctic

Regional distribution: Unknown

References: Warncke (1980b)

***Anthidium (Anthidium) luctuosum* Gribodo, 1894**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Rabat-Salé-Kénitra

References: Warncke (1980b)

***Anthidium (Anthidium) manicatum* (Linnaeus, 1758)**

Global distribution: Palearctic; Nearctic; Neo-Tropical

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi

References: Nadig & Nadig (1933); Benoist (1950b)

***Anthidium (Proanthidium) oblongatum* (Illiger, 1806)**

Anthidium oblongatum berberum Warncke, 1980: 189—♂♀ (MNCN), Syntypes, Amizmiz, Tizgui (Morocco)

Anthidium oblongatum var. luteum Dusmet y Alonso, 1915: 296—♂♀ (MNCN), Syntypes, Amizmiz, Tizgui (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b); Warncke (1980b)

***Anthidium (Proanthidium) pulchellum* Klug, 1832**

Anthidium asniense Cockerell, 1931: 210—♂ (USNM), Type unknown, Asni (Morocco)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Cockerell (1931d); Benoist (1950a;b)

***Anthidium (Anthidium) pullatum* Morice, 1916**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Pasteels (1981); Warncke (1980b); Zanden (1996a)

***Anthidium (Anthidium) punctatum* Latreille, 1809**

Global distribution: Palearctic

Regional distribution: Oriental; Marrakech-Safi

References: Dusmet y Alonso (1915); Nadig & Nadig (1933); Benoist (1943; 1950b)

***Anthidium (Anthidium) taeniatum* Latreille, 1809**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Béni Mellal-Khénifra; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b)

***Anthidium (Anthidium) tessellatum* Klug, 1832**

Anthidium tessellatum var. Zebra Benoist, 1950: 47—♀ (MNHN), Type unknown, Alnif (Morocco)

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet
References: Benoist (1950a)

Genus *Chelostoma* Latreille, 1809

Chelostoma (Chelostoma) carinulum Pérez, 1895

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi
References: Cockerell (1931c); Müller (2019)

Chelostoma (Chelostoma) edentulum Pérez, 1895

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Souss-Massa
References: Müller (2019)

Chelostoma (Gyrodromella) rapunculi (Lepelletier, 1841)

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa
References: Cockerell (1931c); Benoist (1950a,b); Müller (2015b, 2019)

Genus *Coelioxys* Latreille, 1809

Coelioxys (Allocoelioxys) acanthura (Illiger, 1806)

Global distribution: Palearctic
Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet
References: Cockerell (1931a), Warncke (1992a)

Coelioxys (Allocoelioxys) afer Lepelletier, 1841

Global distribution: Palearctic
Regional distribution: Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa; Marrakech-Safi; Oriental
References: Dusmet y Alonso (1915); Warncke (1992c); Schmid-Egger (unpublished)

Coelioxys (Mesocoelioxys) argenteus Lepelletier, 1841

Global distribution: Palearctic
Regional distribution: Fès-Meknès; Marrakech-Safi
References: Cockerell (1931a); Warncke (1992c)

Coelioxys (Coelioxys) aurolimbatus Förster, 1853

Coelioxys ogivalis Pérez, 1895: 25—♀ (MNHN), Type unknown, Tanger (Morocco)
Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi
References: Warncke (1992c)

Coelioxys (Allocoelioxys) brevis Eversmann, 1852

Coelioxys inflatus Alfken, 1933: 135—♀ (MHNG), Holotype, El Hajeb (Morocco)
Global distribution: Palearctic
Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Dusmet y Alonso (1915); Alfken (1933); Warncke (1992c); Schmid-Egger (unpublished)

***Coelioxys (Allocoelioxys) caudatus* Spinola, 1838**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Warncke (1992c)

***Coelioxys (Coelioxys) conoideus* (Illiger, 1806)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra

References: Cockerell (1931a); Warncke (1992c)

***Coelioxys (Allocoelioxys) coturnix* Pérez, 1884**

Global distribution: Palearctic

Regional distribution: Souss-Massa; Oriental; Marrakech-Safi

References: Dusmet y Alonso (1915); Schwarz (unpublished, MSAA)

***Coelioxys (Liothyrapis) decipiens* Spinola, 1838**

Coelioxys sinuata Stansk, 1968: 371—♂ (FSAG), Holotype, Taza (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Stanek (1968); Warncke (1992c); Schmid-Egger (unpublished)

***Coelioxys (Allocoelioxys) echinatus* Förster, 1853**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Casablanca-Settat; Marrakech-Safi

References: Dusmet y Alonso (1915)

***Coelioxys (Allocoelioxys) elegantulus* Alfken, 1934**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: Pasteels (1982); Schmid-Egger (unpublished)

***Coelioxys (Coelioxys) elongatus* Lepeletier, 1841**

Global distribution: Palearctic

Regional distribution: Rabat-Salé-Kénitra; Marrakech-Safi

References: Dusmet y Alonso (1915); Warncke (1992c)

***Coelioxys (Allocoelioxys) emarginatellus* Pasteels, 1982**

Global distribution: Palearctic

Regional distribution: Casablanca-Settat

References: Pasteels (1982); Warncke (1992c)

***Coelioxys (Allocoelioxys) emarginatus* Förster, 1853**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Pasteels (1982); Warncke (1992c)

***Coelioxys (Allocoelioxys) haemorrhoea* Förster, 1853**

Coelioxys rhodacantha Cockerell, 1931: 347—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Cockerell (1931a); Pasteels (1982); Warncke (1992c); Schmid-Egger (unpublished)

***Coelioxys (Boreocoelioxys) inermis* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi

References: Dusmet y Alonso (1915); Warncke (1992c)

***Coelioxys (Allocoelioxys) obtusa* Pérez, 1884**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Casablanca-Settat; Marrakech-Safi

References: Dusmet y Alonso (1915); Pasteels (1982); Warncke (1992c)

***Coelioxys (Boreocoelioxys) rufescens* Lepeletier & Audinet-Serville, 1825**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Warncke (1992c)

Genus *Dioxys* Lepeletier & Serville, 1825

***Dioxys ardens* Gerstäcker, 1869**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1977b)

***Dioxys cinctus* (Jurine, 1807)**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Warncke (1977b)

***Dioxys heinrichi* Warncke, 1977**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Warncke (1977b); Edwards (unpublished, SEMC)

***Dioxys moestus* Costa, 1883**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Warncke (1977b)

***Dioxys pumilus* Gerstäcker, 1869**

Dioxys maroccana Popov, 1936: 17—♂ (ZISP), Holotype, River Rdat (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra

References: Popov (1936); Warncke (1977b)

Genus *Eudioxys* Mavromoustakis, 1963

***Eudioxys quadrispinosus* (Friese, 1899)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet

References: None (Schwarz, unpublished, MSAA)

Genus *Fidelia* Friese, 1899

Fidelia ulrikeae Warncke, 1980

Fidelia ulrikei Warncke, 1980: 89—♀ (KW), Holotype, Tansikht (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1980a); Schmid-Egger (2016); Patiny & Michez (2007a)

Genus *Haetosmia* Popov, 1952

Haetosmia circumventa (Peters, 1974)

Global distribution: West-Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Zanden (1989); Müller & Griswold (2017); Müller (2019)

Genus *Heriades* Spinola, 1808

Heriades (Heriades) crenulata Nylander, 1856

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931c); Nadig & Nadig (1933); Lindbergh (1934); Benoist (1950b); Müller (2019)

Heriades (Michenerella) discrepans Benoist, 1938

Global distribution: North Africa

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Müller (2019)

Heriades (Heriades) rubicola Pérez, 1890

Heriades crenulatus aurantifer Cockerell, 1931: 159—♀ (NHMUK), Lectotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Cockerell (1931f); Nadig & Nadig (1933); Lindbergh (1934); Benoist (1950b); Zanden (1994a); Müller (2019)

Heriades (Heriades) truncorum (Linnaeus, 1758)

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Müller (2019)

Heriades (Heriades) wilmattae Cockerell, 1931

Heriades wilmattae Cockerell, 1931: 159—♀ (NHMUK), Lectotype, Aroumd (Morocco)

Heriades politulus Cockerell, 1931: 160—♀ (NHMUK), Lectotype, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Cockerell (1931f); Müller (2019)

Genus *Hofferia* Tkalců, 1984

Hofferia mauritanica (Lucas, 1849)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet

References: Cockerell (1931c); Nadig & Nadig (1933); Benoist (1950b); Müller & Trunz (2014); Müller (2019)

Genus *Hoplitis* Klug, 1807

Hoplitis (Hoplitis) adunca (Panzer, 1798)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Nadig & Nadig (1933); Benoist (1950b); Warncke (1992d); Müller (2019)

Hoplitis (Platosmia) africana (Warncke, 1990)

Osmia africana Warncke, 1990: 486—♀ (OLML), Holotype, 30 km N Foug Zguid (Morocco)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1990); Zanden (1991a); Grabener (2017); Müller (2015a; 2019)

Hoplitis (Anthocopa) alba (van der Zanden, 1994)

Anthocopa alba van der Zanden, 1994: 1117—♂ (MSAA), Holotype, 60 km N Foug Zguid (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Zanden (1994); Müller (2019)

Hoplitis (Anthocopa) albiscopa (Friese, 1899)

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Benoist (1950b); Müller (2019); Schmid-Egger (unpublished)

Hoplitis (Hoplitis) annulata (Latreille, 1811)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa

References: Lindbergh (1934); Mavromoustakis (1947); Benoist (1950b); Warncke (1991c); Müller (2019)

Hoplitis (Hoplitis) anthocopoides (Schenck, 1853)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Schulthess (1924); Nadig & Nadig (1933); Warncke (1992d); Müller (2019)

Hoplitis (Anthocopa) antigae (Pérez, 1895)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Zanden (1988); Müller (2019)

Hoplitis (Platosmia) aristotelis (Warncke, 1990)

Osmia aristotelis Warncke, 1990: 485—♂ (OLML), Holotype, Agadir (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Warncke (1990); Müller (2015a; 2019)

***Hoplitis (Anthocopa) ayardi* (Benoist, 1928)**

Osmia Ayardi Benoist, 1928: 213—♂ (MNHN), Lectotype, Ain Leuh (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Benoist (1928); Zanden (1985); Müller (2019)

***Hoplitis (Anthocopa) barbiger* (Benoist, 1950)**

Osmia barbiger Benoist, 1950: 187—♀ (MZLS), Holotype, Tafraoute (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Benoist (1950b); Zanden (1985); Müller (2019)

***Hoplitis (Hoplitis) bassana* (Warncke, 1991)**

Osmia bassana Warncke, 1991: 313—♀ (OLML), Holotype, 70 km O Tata (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991c); Müller (2019)

***Hoplitis (Anthocopa) batyamae* (van der Zanden, 1986)**

Anthocopa maroccana van der Zanden, 1998: 526—♂ (RMNH), Holotype, Erfoud (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Drâa-Tafilalet

References: Zanden (1998); Müller (2019); Le Goff (unpublished)

***Hoplitis (Hoplitis) benoisti* (Alfken, 1935)**

Osmia benoisti gregaria Warncke, 1992: 116—♂ (OLML), Holotype, 30 km N Errachidia (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Lindbergh (1934); Warncke (1992d); Müller *et al.* (2017); Müller (2019)

***Hoplitis (Hoplitis) brevispora* (Warncke, 1992)**

Osmia brevispora Warncke, 1992: 110—♂ (OLML), Holotype, Igherm (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1992d); Grabener (2017); Müller (2019); Le Goff (unpublished)

***Hoplitis (Stenosmia) brunnescens* (Benoist, 1950)**

Osmia brunnescens Benoist, 1950: 188—♀ (MZLS), Holotype, Marrakech (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Benoist (1950b); Warncke (1992d); Müller (2019)

***Hoplitis (Anthocopa) bubulca* (van der Zanden, 1994)**

Anthocopa bubulca van der Zanden, 1994: 1119—♀ (MSAA), Holotype, 60 km N Foug Zguid (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Zanden (1994); Müller (2019)

***Hoplitis (Pentadentoscia) cadiza* (Warncke, 1991)**

Global distribution: Near endemic (Morocco, Tunisia, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa

References: Nadig & Nadig (1933); Benoist (1950b); Warncke (1991d); Müller (2019)

***Hoplitis (Alcidamea) camelina* (Benoist, 1934)**

Osmia camelina Benoist, 1934: 106—♀ (MNHN), Holotype, Ain Leuh (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1934a); Zanden (1985; 1996b); Warncke (1991a); Zanden (1996b); Müller (2019)

***Hoplitis (Alcidamea) campanularis* (Morawitz, 1877)**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Warncke (1991a); Zanden (1984); Müller (2019)

***Hoplitis (Anthocopa) conosimilis* van der Zanden, 1992**

Hoplitis conosimilis van der Zanden, 1992: 68—♂ (RMNH), Holotype, Chichaoua (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Marrakech-Safi; Souss-Massa

References: Zanden (1992a); Müller (2019)

***Hoplitis (Anthocopa) cristatula* (van der Zanden, 1990)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi

References: Müller (2019); Schmid-Egger (unpublished)

***Hoplitis (Hoplitis) ctenophora* (Benoist, 1934)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1950a); Warncke (1992d); Müller (2019); Schmid-Egger (unpublished)

***Hoplitis (Alcidamea) curtula* (Pérez, 1895)**

Global distribution: West-Palearctic

Regional distribution: Oriental

References: Warncke (1991a); Müller (2019)

***Hoplitis (Alcidamea) epeoliformis* (Ducke, 1899)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991a); Müller (2019)

***Hoplitis (Hoplitis) erythrogastra* (Mavromoustakis, 1954)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Warncke (1991b); Zanden (1996a); Müller (2019)

***Hoplitis (Hoplitis) fertoni* (Pérez, 1891)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Warncke (1992d); Zanden (1992b); Müller *et al.* (2018); Müller (2019)

***Hoplitis (Hoplitis) fortispina* (Pérez, 1895)**

Osmia oreades Benoist, 1934: 107—♀ (MNHN), Holotype, Tizi n'Test (Morocco)

Osmia pectinifera Benoist, 1934: 159—♀ (MNHN), Holotype, Asni (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1934a;b; 1950a;b); Zanden (1985; 1989); Warncke (1992d); Müller (2019)

***Hoplitis (Alcidamea) freygessneri* (Friese, 1899)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Drâa-Tafilalet; Guelmim-Oued Noun

References: Warncke (1991a); Grabener (2017); Müller (2019)

***Hoplitis (Pentadentosmia) goulemina* (Warncke, 1991)**

Osmia goulemina Warncke, 1991: 18—♀ (OLML), Holotype, 10 km W Goulemine (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun

References: Warncke (1991d); Müller (2019)

***Hoplitis (Anthocopa) grumi* (Morawitz, 1894)**

Global distribution: Palearctic

Regional distribution: Oriental

References: Müller (2019)

***Hoplitis (Hoplitis) gusenleitneri* (Warncke, 1991)**

Osmia gusenleitneri Warncke, 1991: 323—♀ (OLML), Holotype, Oukaimeden (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Warncke (1991c); Müller (2019)

***Hoplitis (Stenosmia) hartliebi* (Friese, 1899)**

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991e); Müller (2014b); Müller (2019)

***Hoplitis (Hoplitis) hierichonica* (Mavromoustakis, 1949)**

Hoplitis lefeberi van der Zanden, 1991: 169—♂ (RMNH), Holotype, Sidi Ifni (Morocco)

Osmia hierichonica wolffi Warncke, 1991: 316—♂ (OLML), Holotype, 30 km W Ouarzazate (Morocco)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991c); Zanden (1991c); Müller (2019)

***Hoplitis (Hoplitis) hoggara* (Warncke, 1992)**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1992d); Müller (2019)

***Hoplitis (Anthocopa) ilamana* (van der Zanden, 1994)**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Souss-Massa

References: Zanden (1994); Müller (2019)

Hoplitis (Hoplitis) insularis (Schmiedeknecht, 1886)

Hoplitis latuspilosa van der Zanden, 1992: 69—♂ (MNHN), Holotype, M'riert (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Codina (1923); Benoist (1950b); Warncke (1992d); Zanden (1992b); Müller (2019)

Hoplitis (Hoplitis) israelica (Warncke, 1991)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991c); Müller (2019); Le Goff (unpublished); Schmid-Egger (unpublished)

Hoplitis (Hoplitis) jheringii (Ducke, 1898)

Osmia jheringii hirundo Warncke, 1992: 107—♂ (OLML), Holotype, 50 km SO Taroudant/ Irherm (Morocco)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Warncke (1992d); Müller (2019)

Hoplitis (Stenosmia) jordanica (Warncke, 1991)

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991e); Müller (2014b; 2019); Schmid-Egger (unpublished)

Hoplitis (Anthocopa) lamina (Pérez, 1895)

Osmia triloba Benoist, 1928: 214—♂ (MNHN), Type unknown, Asni (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Oriental; Marrakech-Safi; Souss-Massa

References: Benoist (1928); Müller (2019)

Hoplitis (Alcidamea) lecerfi (Benoist, 1928)

Osmia lecerfi Benoist, 1928: 213—♂ (MNHN), Lectotype, Tizi n'Test and Jbel Imdress (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Oriental; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1928); Zanden (1985; 1989); Warncke (1991a); Müller (2019)

Hoplitis (Anthocopa) longispina (Pérez, 1895)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès

References: Müller (2019)

Hoplitis (Chlidoplitis) loreicornis (Benoist, 1934)

Osmia loreicornis Benoist, 1934: 159—♂ (MNHN), Holotype, Ain Leuh (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Benoist (1934b); Zanden (1985); Müller (2014a; 2019)

Hoplitis (Platosmia) lucidula (Benoist, 1934)

Osmia lucidula Benoist, 1934: 107—♀ (MNHN), Holotype, Ras el Ma (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Oriental; Fès-Meknès; Souss-Massa

References: Benoist (1934a); Zanden (1985); Warncke (1990); Müller (2015a; 2019)

***Hoplitis (Platosmia) maghrebensis* (van der Zanden, 1992)**

Anthocopa maghrebensis van der Zanden, 1992: 68—♂ (RMNH), Holotype, Ouarzazate (Morocco)

Hoplitis incognita van der Zanden, 1996: 887—♀ (OLML), Holotype, 50 km N Foug Zguid (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1990); Zanden (1983; 1992a; 1996b); Müller (2015a; 2019)

***Hoplitis (Hoplitis) marchali* (Pérez, 1902)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat;

Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Warncke (1992d); Müller (2019)

***Hoplitis (Pentadentoscopia) meyeri* (Benoist, 1934)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1950b); Zanden (1985); Warncke (1991d); Müller (2019)

***Hoplitis (Stenosmia) minima* (Schulthess, 1924)**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Warncke (1991e); Müller (2014b); Müller (2019); Le Goff (unpublished)

***Hoplitis (Pentadentoscopia) moricei* (Friese, 1899)**

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun;

Laâyoune-Sakia El Hamra

References: Lindbergh (1934); Benoist (1943; 1950a;b); Warncke (1991d); Müller (2019)

***Hoplitis (Hoplitis) mucida* (Dours, 1873)**

Osmia maroccana Benoist, 1929: 250—♀ (MNHN), Holotype, Ras el Ma, Azrou (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Benoist (1929); Lindbergh (1934); Mavromoustakis (1947); Zanden (1985); Warncke (1992d); Müller *et al.* (2017); Müller (2019)

***Hoplitis (Hoplitis) nisa* (Warncke, 1991)**

Osmia nisa Warncke, 1991: 329—♀ (OLML), Holotype, 10 km SW Akka (Morocco)

Hoplitis speculumoides van der Zanden, 1991: 350—♂ (RMNH), Holotype, Erfoud (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991c); Zanden (1991a); Müller (2019)

***Hoplitis (Alcidamea) occidentalis* Müller, 2012**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi

References: Müller (2012; 2019)

***Hoplitis (Hoplitis) ochruros* (Warncke, 1991)**

Osmia ochruros Warncke, 1991: 322—♀ (OLML), Holotype, 20 km SO Erfoud (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun
References: Warncke (1991c); Müller (2019); Le Goff (unpublished)

***Hoplitis (Anthocopa) oxypyga* (Benoist, 1927)**

Osmia oxypyga Benoist, 1927: 169—♂ (MNHN), Holotype, Meknès (Morocco)
Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Drâa-Tafilalet
References: Benoist (1927); Zanden (1985); Müller (2019)

***Hoplitis (Tkalcula) paralias* (Mavromoustakis, 1954)**

Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Müller & Mauss (2016); Müller (2019)

***Hoplitis (Anthocopa) perezii* (Ferton, 1895)**

Global distribution: Palearctic
Regional distribution: Fès-Meknès
References: Benoist (1950b); Müller (2019)

***Hoplitis (Platosmia) platalea* (Warncke, 1990)**

Anthocopa quarzazati van der Zanden, 1998: 526—♂ (RMNH), Holotype, Amerzgane, 30 km N Ouarzazate (Morocco)
Global distribution: Near endemic (Morocco, Tunisia)
Regional distribution: Drâa-Tafilalet; Souss-Massa
References: Warncke (1990); Zanden (1998); Müller (2015a; 2019)

***Hoplitis (Alcidamea) praestans* (Morawitz, 1893)**

Global distribution: Palearctic
Regional distribution: Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa
References: Benoist (1950b); Warncke (1991a); Müller (2019)

***Hoplitis (Anthocopa) pulchella* (Pérez, 1895)**

Global distribution: West-Palearctic
Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Souss-Massa
References: Mavromoustakis (1947); Zanden (1989); Müller (2019); Le Goff (unpublished)

***Hoplitis (Micreriades) pungens* (Benoist, 1928)**

Osmia pungens Benoist, 1928: 214—♂ (MNHN), Lectotype, Zaers forest, Aïn Sferguila, Tizi n'Test and Jbel Imdress (Morocco)
Global distribution: Near endemic (Morocco, Tunisia)
Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Souss-Massa
References: Benoist (1928); Tkalčů (1977a); Zanden (1985); Müller (2019)

***Hoplitis (Anthocopa) quadrispina* (Tkalčů, 1992)**

Global distribution: North Africa
Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet
References: Müller (2019)

***Hoplitis (Pentadentoscia) quinquespinosa* (Friese, 1899)**

Global distribution: West-Palearctic
Regional distribution: Oriental; Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun
References: Benoist (1950a;b); Zanden (1983; 1992a); Warncke (1991d); Müller (2019)

Hoplitis (Anthocopa) rugidorsis (Pérez, 1895)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Zanden (1986); Müller (2019)

Hoplitis (Anthocopa) saundersi (Vachal, 1891)

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Benoist (1950b); Müller (2019); Le Goff (unpublished)

Hoplitis (Anthocopa) simula (Gribodo, 1894)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Zanden (1988); Müller (2019)

Hoplitis (Anthocopa) sinuata (Pérez, 1895)

Osmia brevifurca Benoist, 1934: 159—♂ (MNHN), Holotype, Sous valley (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1934b; 1950b); Zanden (1985; 1988); Müller (2019)

Hoplitis (Hoplitis) speculum (Benoist, 1934)

Osmia pseudo-speculum Benoist, 1934: 107—♀ (MNHN), Holotype, between Essaouira and Agadir (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1934a; 1950b); Zanden (1985; 1991a); Warncke (1991c); Müller (2019)

Hoplitis (Chlidoplitis) taenioceras (Benoist, 1927)

Osmia taenioceras Benoist, 1927: 173—♂ (MNHN), Holotype, M'riert, 80 km S. Meknès (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1927); Zanden (1985); Müller (2014a; 2019)

Hoplitis (Stenosmia) tagmouta (Warncke, 1991)

Osmia tagmouta Warncke, 1991: 405—♂ (OLML), Holotype, Tagmout N (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1991e); Müller (2014b; 2019); Le Goff (unpublished)

Hoplitis (Hoplitis) tenuiserrata (Benoist, 1950)

Osmia tenuiserrata Benoist, 1950: 45—♂ (MNHN), Holotype, Goulimine (Morocco)

Osmia gibbifera Benoist, 1950: 46—♀ (MNHN), Holotype, Goulimine (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Benoist (1950a); Zanden (1985); Warncke (1992d); Le Goff (2017); Müller (2019)

Hoplitis (Chlidoplitis) teucarii (Benoist, 1927)

Osmia teucarii Benoist, 1927: 171—♂ (MNHN), Lectotype, Meknès (Morocco)

Global distribution: Near endemic (Morocco, Spain)

Regional distribution: Fès-Meknès
References: Benoist (1927); Zanden (1985); Müller (2014a; 2019)

Hoplitis (Megahoplitis) tigrina (Morawitz, 1871)

Global distribution: West-Palearctic
Regional distribution: Fès-Meknès
References: Benoist (1950b); Müller (2014a; 2019)

Hoplitis (Alcidamea) tricolor (Saunders, 1908)

Global distribution: West-Palearctic
Regional distribution: Drâa-Tafilalet
References: Warncke (1991a); Müller (2019)

Hoplitis (Alcidamea) tridentata (Dufour & Perris, 1840)

Global distribution: Palearctic
Regional distribution: Tanger-Tetouan-Al Hoceima; Souss-Massa
References: Warncke (1991a); Müller (2019)

Hoplitis (Alcidamea) ursina (Friese, 1920)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)
Regional distribution: Fès-Meknès
References: Blüthgen (1924a); Müller (2019)

Hoplitis (Pentadentostmia) villiersi (Benoist, 1950)

Osmia strepera Warncke, 1991: 17—♀ (OLML), Holotype, 50 km SW Akka (Morocco)
Global distribution: Near endemic (Morocco, Algeria, Tunisia, Mauritania)
Regional distribution: Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra
References: Benoist (1950a); Warncke (1991d); Müller (2019); Le Goff (unpublished)

Hoplitis (Anthocopa) zaianorum (Benoist, 1927)

Osmia zaianorum Benoist, 1927: 170—♀ (MNHN), Lectotype, M'ritt, 80 km S. Meknès (Morocco)
Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)
Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Souss-Massa
References: Benoist (1927); Zanden (1985); Le Goff (2017); Müller (2019)

Hoplitis (Hoplitis) zonalis (Pérez, 1895)

Global distribution: West-Palearctic
Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun
References: Dusmet y Alonso (1924); Nadig & Nadig (1933); Benoist (1943); Warncke (1991c); Müller (2019)

Genus *Icteranthidium* Michener, 1948

Icteranthidium afrum (Lepeletier, 1841)

Global distribution: Near endemic (Morocco, Algeria)
Regional distribution: Oriental; Fès-Meknès; Souss-Massa
References: Mavromoustakis (1947); Benoist (1950b); Le Goff (unpublished)

Icteranthidium ferrugineum (Fabricius, 1787)

Global distribution: Palearctic; Sub-Saharan Africa
Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Dusmet y Alonso (1915); Benoist (1950a;b); Grabener (2017); Le Goff (unpublished)

***Icteranthidium grohmanni* (Spinola, 1838)**

Global distribution: Palearctic

Regional distribution: Unknown

References: Dusmet y Alonso (1915); Cockerell (1931a); Benoist (1950b)

***Icteranthidium laterale* (Latreille, 1809)**

Anthidium ifranicum Cockerell, 1931: 209—♂ (NHML), Holotype, Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Cockerell (1931d); Mavromoustakis (1947)

Genus *Lithurgus* Latreille, 1825

***Lithurgus cephalotes* van der Zanden, 1977**

Lithurge cephalotes van der Zanden, 1977: 358—♀ (FSAG), Holotype, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Zanden (1977; 1986)

***Lithurgus chrysurus* Fonscolombe, 1834**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Cockerell (1931a); Benoist (1950b); Nadig & Nadig (1933)

***Lithurgus cornutus* (Fabricius, 1787)**

Lithurgus cornutus var. *obscurus* Cockerell, 1931: 203—♀ (AMNH), Ifrane (Morocco)

Global distribution: Palearctic

Regional distribution: Casablanca-Settat; Marrakech-Safi

References: Cockerell (1931d); Nadig & Nadig (1933)

Genus *Megachile* Latreille, 1802

***Megachile (Eutricharaea) albipila* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Nadig & Nadig (1933); Benoist (1950b); Praz (unpublished)

***Megachile (Creightonella) albisecta* (Klug, 1817)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Cockerell (1931b); Nadig & Nadig (1933); Benoist (1950a;b); Praz (unpublished)

***Megachile (Anodonteutricharaea) albohirta* (Brullé, 1840)**

Megachile lanigera Alfken, 1933: 133—♀ (ETHZ), Holotype, Agadir (Morocco)

Global distribution: Near endemic (Morocco, Canary Islands)

Regional distribution: Drâa-Tafilalet; Souss-Massa; Casablanca-Settat; Rabat-Salé-Kénitra

References: Cockerell (1931b); Alfken (1933); Le Goff (unpublished); Praz (unpublished)

***Megachile (Eutricharaea) apicalis* Spinola, 1808**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet

References: Cockerell (1931b); Nadig & Nadig (1933); Benoist (1950b); Praz (unpublished)

***Megachile (Creightonella) arabica* Friese, 1901**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Souss-Massa

References: Zanden (1989)

***Megachile (Eutricharaea) atlantica* Benoist, 1934**

Megachile atlantica Benoist, 1934: 108—♀ (MNHN), Holotype, Ras El Ma (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Oriental; Marrakech-Safi

References: Benoist (1934b; 1940); Zanden (1989); Praz (unpublished)

Note: Taxonomic status unclear, possibly conspecific with *Megachile giraudi* Gerstäcker, 1869

***Megachile (Eutricharaea) callensis* Ferton, 1914**

Megachile callensis var. *regularis* Benoist, 1934: 109—♀ (MNHN), Holotype, Rabat (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Rabat-Salé-Kénitra

References: Benoist (1934b)

Note: Taxonomic status unclear, known only from the type specimen.

***Megachile (Megachile) calloleuca* Cockerell, 1931**

Megachile calloleuca Cockerell, 1931: 273—♀ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Cockerell (1931b); Alfken (1933)

***Megachile (Megachile) centuncularis* (Linnaeus, 1758)**

Global distribution: Palearctic

Regional distribution: Rabat-Salé-Kénitra

References: Cockerell (1931b)

***Megachile (Pseudomegachile) cinnamomea* Alfken, 1926**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Nadig & Nadig (1933); Benoist (1950b); Dorchin & Praz (2018)

***Megachile (Eutricharaea) crassula* Pérez, 1895**

Megachile crassula Pérez, 1895: 65—♀ (MNHN), Barbarie (Morocco)

Megachile beaumonti Benoist, 1951: 189—(MZLS), Safi-Essaouira (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Nadig & Nadig (1933); Benoist (1950b); Zanden (1990)

Notes: Taxonomic status unclear, probably not a valid species (the type is in bad condition).

***Megachile (Eutricharaea) deceptoria* Pérez, 1890**

Megachile mogadorensis Benoist, 1934: 109—♀ (MNHN), Holotype, Essaouira (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa; Casablanca-Settat

References: Benoist (1934b); Praz (unpublished)

***Megachile (Pseudomegachile) ericetorum* Lepeletier, 1841**

Chalicodoma ericetorum melaleuca van der Zanden, 1989: 72—♀ (ETHZ), Holotype, Tizi n'Tichka (Morocco)

Chalicodoma ericetorum oraniensis van der Zanden, 1989: 72—♀ (ETHZ), Holotype, Tizi n'Tichka (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Zanden (1989); Dorchin & Praz (2018)

***Megachile (Eutricharaea) fertoni* (Pérez, 1891)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi

References: Nadig & Nadig (1933); Le Goff (unpublished); Praz (unpublished)

***Megachile (Chalicodoma) incerta* Radoszkowski, 1876**

Global distribution: West-Palearctic

Regional distribution: Laâyoune-Sakia El Hamra

References: None (Praz, unpublished)

***Megachile (Eutricharaea) inexpectata* Rebmann, 1968**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: None (Praz, unpublished; Roberts, unpublished, SEMC)

***Megachile (Eutricharaea) leachella* Curtis, 1828**

Global distribution: Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Benoist (1941)

***Megachile (Chalicodoma) lefebvrei* (Lepeletier, 1841)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Benoist (1950b); Praz (unpublished)

***Megachile (Eutricharaea) levistriga* Alfken, 1934**

Global distribution: West-Palearctic

Regional distribution: Souss-Massa

References: None (Le Goff, unpublished; Praz, unpublished)

***Megachile (Eutricharaea) marginata* Smith, 1853**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Nadig & Nadig (1933); Praz (unpublished)

***Megachile (Xanthosarus) maritima* (Kirby, 1802)**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Cockerell (1931b); Nadig & Nadig (1933); Benoist (1950b); Praz (unpublished)

***Megachile (Chalicodoma) mauritaniae* (Tkalčů, 1992)**

Chalicodoma mauritaniae Tkalčů, 1992: 50—♀ (UMBB), Holotype, Tizi n'Tiniffit (Morocco)

Global distribution: North Africa

Regional distribution: Drâa-Tafilalet

References: Tkalčů (1992); Praz (unpublished)

***Megachile (Eutricharaea) melanogaster* Eversmann, 1852**

Megachile pilicrus flavidus van der Zanden, 1998: 523—♀ (RMNH), Holotype, S Boulemane (Morocco)

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Fès-Meknès

References: Zanden (1998)

***Megachile (Megachile) melanota* Pérez, 1895**

Megachile centuncularis theryi Cockerell, 1931: 274—♀ (NHMUK), Rabat (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Rabat-Salé-Kénitra; Fès-Meknès

References: Cockerell (1931b); Nadig & Nadig (1933)

***Megachile (Xanthosarus) mguildensis* Benoist, 1940**

Megachile mguildensis Benoist, 1940: 50—♀ (MNHN), Holotype, Ain Leuh (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Fès-Meknès

References: Benoist (1940)

Notes: Taxonomic status unclear, species known only from the type specimen.

***Megachile (Eutricharaea) micrargyrea* Cockerell, 1931**

Megachile micrargyrea Cockerell, 1931: 277—♂ (NHMUK), Holotype, Asni (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Cockerell (1931b)

Notes: Taxonomic status unclear, species known only from the type.

***Megachile (Eutricharaea) minutissima* Radoszkowski, 1876**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Praz (unpublished)

***Megachile (Chalicodoma) nasidens* Friese, 1898**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1950b); Le Goff (unpublished); Praz (unpublished)

***Megachile (Pseudomegachile) nigripes* Spinola, 1838**

Global distribution: West-Palearctic

Regional distribution: Guelmim-Oued Noun

References: Benoist (1950b); Dorchin & Praz (2018)

***Megachile (Eutricharaea) opacifrons* Pérez, 1897**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Souss-Massa

References: None (Praz, unpublished)

***Megachile (Chalicodoma) parietina* (Geoffroy, 1785)**

Megachile transitoria Benoist, 1934: 108—♀ (MNHN), Holotype, Azrou forest (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi

References: Schulthess (1924); Benoist (1934b; 1950b)

***Megachile (Eutricharaea) patellimana* Spinola, 1838**

Global distribution: Palearctic; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet

References: None (Praz, unpublished)

***Megachile (Eutricharaea) pilidens* Alfken, 1924**

Megachile argyrea Cockerell, 1931: 275—♀ (NHMUK), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Cockerell (1931b); Alfken (1933); Nadig & Nadig (1933); Praz (unpublished)

***Megachile (Eutricharaea) pusilla* Pérez, 1888**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Cockerell (1931a); Soltani *et al.* (2017); Le Goff (unpublished)

***Megachile (Eutricharaea) rotundata* (Fabricius, 1787)**

Global distribution: Palearctic; Nearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Casablanca-Settat

References: Nadig & Nadig (1933); Benoist (1950b); Hartmann (unpublished)

***Megachile (Chalicodoma) rufitarsis* (Lepelletier, 1841)**

Megachile maurusia Vachal, 1910: 177—♀♂ (MNCN), Syntypes, Essaouira (Morocco)

Chalicodoma muraria var. *tingitana* Friese, 1913: 88—♀ (MFNB), Tanger (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Marrakech-Safi; Tanger-Tétouan-Al Hoceima

References: Vachal (1910); Friese (1913)

***Megachile (Chalicodoma) sicula* (Rossi, 1794)**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Guelmim-Oued Noun; Tanger-Tétouan-Al Hoceima; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Cockerell (1931c); Nadig & Nadig (1933); Benoist (1950a;b); Praz (unpublished)

Genus *Metadioxys* Popov, 1947

***Metadioxys formosa* (Morawitz, 1875)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Warncke (1977)

Genus *Osmia* Panzer, 1806

***Osmia (Helicosmia) alfkenii* Ducke, 1899**

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Souss-Massa

References: Warncke (1988b); Grabener (2017); Müller (2019)

Osmia (Hoplosmia) anceyi Pérez, 1879

Hoplosmia anceyi biarmica van der Zanden, 1994: 1114—♀ (MSAA), Holotype, Tizi n'Tichka (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Tkalčú (1974); Zanden (1994); Müller (2018; 2019)

Osmia (Hemiosmia) argyropyga Pérez, 1879

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Drâa-Tafilalet

References: Benoist (1950b); Tkalčú (1975a); Müller (2020)

Osmia (Osmia) bicornis (Linnaeus, 1758)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Casablanca-Settat

References: Peters (1978); Müller (2019)

Osmia (Metallinella) brevicornis (Fabricius, 1798)

Osmia atrocaerulea var. *subcyanea* Alfken, 1936: 316—♀ (FMNH), Holotype, Azrou (Morocco)

Global distribution: Palearctic

References: Alfken (1931; 1936); Lindbergh (1934); Zanden (1987); Warncke (1991f); Müller (2019)

Osmia (Helicosmia) caerulescens (Linnaeus, 1758)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Benoist (1950b); Warncke (1988b); Müller (2019); Schmid-Egger (unpublished)

Osmia (Pyrosmia) cephalotes Morawitz, 1870

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Souss-Massa

References: Zanden (1991b); Warncke (1992e); Müller (2019)

Osmia (Neosmia) cinnabarina Pérez, 1895

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Nadig & Nadig (1933); Tkalčú (1977b); Müller (2019)

Osmia (Nasutosmia) corniculata (van der Zanden, 1989)

Hoplitis corniculata van der Zanden, 1989: 81—♀ (RMNH), Holotype, Tizi n'Test (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Spain)

Regional distribution: Marrakech-Safi; Souss-Massa

References: Zanden (1989); Müller (2019)

Osmia (Pyrosmia) cyanoxantha Pérez, 1879

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Zanden (1991b); Warncke (1992e); Müller (2019)

Osmia (Pyrosmia) derasa Pérez, 1895

Osmia pseudoderasa Benoist, 1950: 184—♀ (MZLS), Holotype, Midelt (Morocco)

Global distribution: North Africa

Regional distribution: Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Nadig & Nadig (1933); Benoist (1950b); Zanden (1985; 1991b); Warncke (1992e); Müller (2019)

***Osmia (Hoplosmia) dido* Gribodo, 1894**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Souss-Massa

References: Tkalčú (1974); Müller (2018; 2019); Schmid-Egger (unpublished)

***Osmia (Helicosmia) dimidiata* Morawitz, 1870**

Global distribution: Palearctic

Regional distribution: Souss-Massa

References: Tkalčú (1975b); Warncke (1988b); Müller (2019)

***Osmia (Osmia) emarginata* Lepeletier, 1841**

Osmia emarginata infusca Peters, 1978: 310—(MNHN), Syntypes, Tizi n’Bouftène, Ighzrane (Morocco)

Osmia emarginata var. *fusca* Benoist, 1928: 215—(MNHN), Syntypes, Tizi n’Bouftène, Ighzrane (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Benoist (1928); Mavromoustakis (1947); Peters (1978); Müller (2019)

***Osmia (Hoplosmia) fallax* Pérez, 1895**

Global distribution: Near endemic (Morocco, Tunisia, Spain)

Regional distribution: Fès-Meknès

References: Tkalčú (1974); Müller (2018; 2019)

***Osmia (Pyrosmia) ferruginea* Latreille, 1811**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Lindbergh (1934); Mavromoustakis (1947); Benoist (1950b); Warncke (1992e); Müller (2019)

***Osmia (Helicosmia) frieseana* Ducke, 1899**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Mavromoustakis (1947); Benoist (1950b); Warncke (1988b); Müller (2019); Schmid-Egger (unpublished)

***Osmia (Pyrosmia) gallarum* Spinola, 1808**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Lindbergh (1934); Zanden (1984; 1991b); Warncke (1992e); Benoist (1950b); Müller (2019)

***Osmia (Pyrosmia) gemma* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Zanden (1991b); Warncke (1992e); Müller (2019)

***Osmia (Neosmia) gracilicornis* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Souss-Massa

References: Mavromoustakis (1947); Tkalčú (1977b); Zanden (1997b); Müller (2019)

***Osmia (Helicosmia) heteracantha* Pérez, 1895**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Warncke (1988b); Müller (2019)

***Osmia (Helicosmia) labialis* Pérez, 1879**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Müller (2019)

***Osmia (Helicosmia) latreillei* (Spinola, 1806)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Nadig & Nadig (1933); Lindbergh (1934); Mavromoustakis (1947); Benoist (1950b); Warncke (1988b); Müller (2019)

***Osmia (Helicosmia) lazulina* Benoist, 1928**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Drâa-Tafilalet

References: Warncke (1988b); Grabener (2017); Müller (2019)

***Osmia (Helicosmia) leiana* (Kirby, 1802)**

Osmia ventralis schachtii Warncke, 1988: 31—♀ (OLML), Holotype, Oukaimeden (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Tkalčů (1975b); Warncke (1988b); Müller (2019)

***Osmia (Allosmia) lhotelleriei* Pérez, 1887**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet

References: Benoist (1950b); Müller (2019); Le Goff (unpublished)

***Osmia (Hoplosmia) ligurica* Morawitz, 1868**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès

References: Nadig & Nadig (1933); Tkalčů (1974); Müller (2018; 2019)

***Osmia (Pyrosmia) lobata* Friese, 1899**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Zanden (1989; 1991b); Warncke (1992e); Müller (2019)

***Osmia (Tergosmia) lunata* Benoist, 1928**

Osmia lunata Benoist, 1928: 213—♂ (MNHN), Lectotype, Rabat (Morocco)

Global distribution: West-Palearctic

Regional distribution: Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Benoist (1928); Zanden (1985); Warncke (1988c); Müller (2020)

***Osmia (Helicosmia) melanogaster* Spinola, 1808**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Drâa-Tafilalet
References: Tkalců (1975b); Warncke (1988b); Müller (2019)

***Osmia (Helicosmia) nasoproducta* Ferton, 1909**

Osmia proboscidea Benoist, 1950: 101—♀ (MNHN), Holotype, Ifrane (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Benoist (1950c); Warncke (1988b); Müller (2019)

***Osmia (Nasutosmia) nasuta* Friese, 1899**

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Zanden (1989); Müller (2019)

***Osmia (Helicosmia) niveata* (Fabricius, 1804)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Lindbergh (1934); Benoist (1950c); Warncke (1988b); Müller (2019)

***Osmia (Helicosmia) niveocincta* Pérez, 1879**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Müller (2019)

***Osmia (Helicosmia) notata* (Fabricius, 1804)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Nadig & Nadig (1933); Lindbergh (1934); Benoist (1950b); Tkalců (1970); Warncke (1988b); Müller (2019)

***Osmia (Hoplosmia) pinguis* Pérez, 1895**

Osmia indivisa Benoist, 1928: 214—♂ (MNHN), Holotype, Marrakech (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain)

Regional distribution: Oriental; Fès-Meknès; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1928); Tkalců (1974); Zanden (1985); Müller (2018; 2019); Müller *et al.* (2018)

***Osmia (Pyrosmia) punica* Pérez, 1895**

Osmia punica irherma Warncke, 1992: 905—♀ (OLML), Holotype, 50 km OSO Marrakech (Morocco)

Global distribution: North Africa

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Zanden (1991b); Warncke (1992e); Müller (2019)

***Osmia (Neosmia) rufigastra* Lepelletier, 1841**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental

References: Mavromoustakis (1947); Tkalců (1977b); Müller (2019)

***Osmia (Allosmia) rufohirta* Latreille, 1811**

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Casablanca-Settat

References: Schulthess (1924); Benoist (1950b); Müller (2019)

***Osmia (Allosmia) rutila* Erichson, 1835**

Osmia xanthognatha Pérez, 1895: 12—♀ (MNHN), Lectotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Spain)

Regional distribution: Tanger-Tetouan-Al Hoceima; Casablanca-Settat; Souss-Massa

References: Pérez (1895); Codina (1923); Lindbergh (1934); Benoist (1950b); Zanden (1987; 1988); Haeseler (1997); Müller (2019)

***Osmia (Hoplosmia) scutellaris* Morawitz, 1868**

Heriades integra Benoist, 1934: 159—♂ (MNHN), Holotype, Tanger (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Souss-Massa

References: Benoist (1934b); Tkalců (1974); Müller (2018; 2019)

***Osmia (Helicosmia) signata* Erichson, 1835**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Schulthess (1924); Lindbergh (1934); Nadig & Nadig (1933); Benoist (1950b); Warncke (1988b); Müller (2019)

***Osmia (Erythrosmia) sparsipuncta* Alfken, 1914**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Schulthess (1924); Müller (2020)

***Osmia (Hemiosmia) spinicoxa* Müller, 2020**

Osmia spinicoxa Müller, 2020: 208—♀ (ETHZ), Holotype, Tajgalt (Morocco)

Osmia spinicoxa Müller, 2020: 208—♀♂ (ETHZ), Paratypes, Tajgalt, Assafid (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Müller (2020)

***Osmia (Pyrosmia) submicans* Morawitz, 1870**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Codina (1923); Lindbergh (1934); Zanden (1991b); Warncke (1992e); Benoist (1950b); Grabener (2017); Müller (2019)

***Osmia (Tergosmia) tergestensis* Ducke, 1897**

Osmia atlantica Benoist, 1934: 107—♀ (MNHN), Holotype, Asni (Morocco)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1934a; 1950b); Zanden (1985); Warncke (1988c); Ebmer (1997); Müller (2020)

***Osmia (Neosmia) tingitana* Benoist, 1969**

Osmia tingitana Benoist, 1969: 243—♂ (MNHN), Lectotype, Tanger (Morocco)

Global distribution: North Africa

Regional distribution: Tanger-Tetouan-Al Hoceima; Souss-Massa

References: Benoist (1969); Tkalců (1977b); Zanden (1983; 1986); Müller (2019)

***Osmia (Osmia) tricornis* Latreille, 1811**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Béni Mellal-Khénifra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Schulthess (1924); Moidl (1933); Nadig & Nadig (1933); Mavromoustakis (1947); Benoist (1950b); Peters (1978); Müller (2019)

***Osmia (Helicosmia) tunensis* (Fabricius, 1787)**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet

References: Schulthess (1924); Nadig & Nadig (1933); Lindbergh (1934); Mavromoustakis (1947); Tkalčů (1970); Warncke (1988b); Müller (2019)

***Osmia (Hemiosmia) unicoloris* Pérez, 1895**

Osmia unicoloris Pérez, 1895: 10—♂ (MNHN), Holotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Spain, Portugal)

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Pérez (1895); Lindbergh (1934); Benoist (1950a;b); Tkalčů (1975a); Haeseler (2005); Müller (2020)

***Osmia (Pyrosmia) versicolor* Latreille, 1811**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Fès-Meknès; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa

References: Lindbergh (1934); Zanden (1984; 1991b); Warncke (1992e); Müller (2019)

Genus *Pararhophites* Friese, 1898

***Pararhophites quadratus* (Friese, 1898)**

Global distribution: North africa

Regional distribution: Dakhla-Oued Ed-Dahab

References: Warncke (1979b); Schmid-Egger (2017)

Genus *Prodiroys* Friese, 1914

***Prodiroys carnea* (Gribodo, 1894)**

Megachile pyrsea Vachal, 1910: 177—♂ (MNCN), Holotype, Essaouira (Morocco)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Vachal (1910); Warncke (1977)

***Prodiroys longiventris* (Pérez, 1895)**

Global distribution: West-Palearctic

Regional distribution: Unknown

References: Warncke (1977)

***Prodiroys rufiventris* (Lepelletier, 1841)**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Unknown

References: Warncke (1977)

Genus *Protosmia* Ducke, 1900

Protosmia (Chelostomopsis) capitata (Schletterer, 1889)

Global distribution: Near endemic (Morocco, Algeria, Tunisia, Spain, Portugal)

Regional distribution: Oriental; Fès-Meknès; Rabat-Salé-Kénitra; Drâa-Tafilalet; Souss-Massa

References: Cockerell (1931c); Benoist (1950b); Müller (2017; 2019)

Protosmia (Nanosmia) decipiens (Benoist, 1935)

Heriades decipiens Benoist, 1935: 278—♀ (MNHN), Holotype, Tafingoult (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Benoist (1935); Müller (2019)

Protosmia (Protosmia) exenterata (Pérez, 1895)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Müller (2019)

Protosmia (Protosmia) glutinosa (Giraud, 1871)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Souss-Massa

References: Müller (2019); Schmid-Egger (unpublished)

Protosmia (Protosmia) luctuosa (Lucas, 1849)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Benoist (1950b); Müller (2019)

Protosmia (Nanosmia) schwarzi Griswold, 2013

Protosmia schwarzi Griswold, 2013: 5—♂ (MSAA), Holotype, Tizi n'Tiniffit (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Drâa-Tafilalet

References: Griswold (2013); Müller (2019)

Protosmia (Protosmia) stigmatica (Pérez, 1895)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Lindbergh (1934); Müller (2019)

Genus *Pseudoanthidium* Friese, 1898

Pseudoanthidium (Pseudoanthidium) beaumonti (Benoist, 1950)

Anthidium beaumonti Benoist, 1950: 191—♂♀ (MZLS), Syntypes, Agadir (Morocco)

Anthidium beaumonti var. *obscuratum* Benoist, 1950: 192—♂ (MZLS), Holotype, Agadir (Morocco)

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Souss-Massa

References: Benoist (1950b); Le Goff (unpublished)

Pseudoanthidium (Royanthidium) bicoloripenne (Pasteels, 1981)

Royanthidium bicoloripenne Pasteels, 1981: 34—♀ (NHMUK), Holotype, Agadir (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Souss-Massa

References: Pasteels (1981)

Pseudoanthidium (Royanthidium) melanurum (Klug, 1832)

Anthidium royoï Dusmet y Alonso, 1915: 299—♀♂ (MNCN), Syntypes, Essaouira (Morocco)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1915); Warncke (1980b); Pagliano (1994)

Pseudoanthidium (Pseudoanthidium) nanum (Mocsáry, 1881)

Global distribution: Palearctic; Nearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1943; 1950b)

Pseudoanthidium (Neanthidium) octodentatum (Pérez, 1895)

Anthidium Capapei Dusmet y Alonso, 1915: 309—♂ (MNCN), Holotype, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Warncke (1975)

Pseudoanthidium (Royanthidium) reticulatum (Mocsáry, 1884)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima

References: Mavromoustakis (1954a)

Pseudoanthidium (Pseudoanthidium) scapulare (Latreille, 1809)

Global distribution: West-Palearctic

Regional distribution: Unknown

References: Benoist (1950b)

Pseudoanthidium (Pseudoanthidium) stigmaticorne (Dours, 1873)

Anthidium astilleroi Dusmet y Alonso, 1915: 301—♀ (MNCN), Syntypes, Essaouira, Marrakech, Tizgui (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Dusmet y Alonso (1915); Benoist (1950b)

Genus *Pseudoheriades* Peters, 1970

***Pseudoheriades moricei* (Friese, 1897)**

Global distribution: West-Palearctic; Sub-Saharan Africa

Regional distribution: Souss-Massa

References: Benoist (1943; 1950b); Schmid-Egger (unpublished)

Genus *Rhodanthidium* Isensee, 1927

Rhodanthidium (Rhodanthidium) acuminatum (Mocsáry, 1884)

Global distribution: West-Palearctic

Regional distribution: Souss-Massa; Marrakech-Safi

References: Zanden (1996a)

***Rhodanthidium (Rhodanthidium) infuscatum* (Erichson, 1835)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès; Marrakech-Safi

References: Dusmet y Alonso (1915); Benoist (1950b); Mavromoustakis (1954b)

***Rhodanthidium (Rhodanthidium) ordonezi* (Dusmet y Alonso, 1915)**

Anthidium ordonezi Dusmet y Alonso, 1915: 303—♀♂ (MNCN), Syntypes, Essaouira, Tiznit (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès; Rabat-Salé-Kénitra; Béni Mellal-Khénifra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Dusmet y Alonso (1915); Alfken (1930); Maidl (1933); Benoist (1950b); Kasperek & Lhomme (2019)

Note: This species has until recently been treated as a subspecies, i.e. as *Rhodanthidium (Rhodanthidium) sticticum ordonezi* (Dusmet y Alonso, 1915).

***Rhodanthidium (Rhodanthidium) siculum* (Spinola, 1838)**

Global distribution: West-Palearctic

Regional distribution: Oriental; Marrakech-Safi; Souss-Massa; Rabat-Salé-Kénitra

References: Dusmet y Alonso (1915); Benoist (1950b); Le Goff (unpublished)

***Rhodanthidium (Rhodanthidium) sticticum* (Fabricius, 1787)**

Anthidium sticticum var. *Amismiziana* Dusmet y Alonso, 1915: 299—♀ (MNCN), Holotype, Amizmiz (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès

References: Dusmet y Alonso (1915); Codina (1923); Maidl (1933); Benoist (1950b); Kasperek & Lhomme (2019)

Genus *Stelis* Panzer, 1806

***Stelis (Stelidomorpha) aegyptiaca* (Radoszkowski, 1876)**

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Grabener (2017)

***Stelis (Stelis) breviscula* (Nylander, 1848)**

Global distribution: Palearctic

Regional distribution: Unknown

References: Kasperek (2015)

***Stelis (Stelis) maroccana* Warncke, 1992**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet

References: Warncke (1992f); Kasperek (2015)

***Stelis (Pseudostelis) minuta* Lepeletier & Audinet-Serville, 1825**

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Warncke (1992f)

***Stelis (Stelis) murina* Pérez, 1883**

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1992f); Kasperek (2015)

Stelis (Stelidomorpha) nasuta (Latreille, 1809)

Global distribution: Palearctic

Regional distribution: Fès-Meknès; Marrakech-Safi; Souss-Massa

References: Warncke (1992f)

Stelis (Stelis) ornatula (Klug, 1808)

Global distribution: Palearctic

Regional distribution: Marrakech-Safi

References: Warncke (1992f); Kasperek (2015)

Stelis (Stelis) phaeoptera (Kirby, 1802)

Global distribution: Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Oriental; Rabat-Salé-Kénitra; Marrakech-Safi; Souss-Massa; Guelmim-Oued Noun

References: Warncke (1992f); Kasperek (2015); Schwarz (unpublished)

Stelis (Stelis) punctulatissima (Kirby, 1802)

Global distribution: Palearctic

Regional distribution: Oriental; Fès-Meknès

References: Nadig & Nadig (1933); Warncke (1992f); Kasperek (2015)

Stelis (Stelis) saxicola Warncke, 1992

Global distribution: Near endemic (Morocco, Tunisia)

Regional distribution: Oriental

References: Warncke (1992f); Kasperek (2015)

Stelis (Protostelis) signata (Latreille, 1809)

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet

References: Warncke (1992f)

Stelis (Stelis) simillima Morawitz, 1876

Global distribution: Palearctic

Regional distribution: Fès-Meknès

References: Warncke (1992f); Kasperek (2015)

Genus *Stenoheriades* Tkalčú, 1984

***Stenoheriades maroccana* (Benoist, 1928)**

Heriades maroccana Benoist, 1928: 212—♀♂ (MNHN), Syntypes, Ain Leuh (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès

References: Benoist (1928); Cockerell (1931c); Müller & Trunz (2014); Müller (2019); Le Goff (unpublished)

Genus *Trachusa* Panzer, 1804

***Trachusa (Archianthidium) laeviventris* (Dours, 1873)**

Anthidium atlanticum Benoist, 1934: 160—♀ (MNHN), Type unknown, Ain Leuh (Morocco)

Global distribution: West-Palearctic

Regional distribution: Oriental; Fès-Meknès

References: Benoist (1934b); Warncke (1980b); Kasperek (2017); Le Goff (unpublished)

***Trachusa (Paraanthidium) maghrebensis* Kasperek, 2020**

Trachusa maghrebensis Kasperek, 2020: 32—♀ (MSAA), Holotype, Chefchaouen (Morocco)

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Béni Mellal-Khénifra; Tanger-Tétouan-Al Hoceima

Reference: Kasperek (2020)

***Trachusa (Paraanthidium) varia* (Olivier, 1789)**

Global distribution: North Africa

Global distribution: Near endemic (Morocco, Algeria)

Reference: Kasperek (2020)

Note : The record cited is from Melilla (Spanish enclave in Morocco).

Genus *Wainia* Tkalčů, 1980

***Wainia (Cposmia) sexsignata* (Benoist, 1950)**

Osmia sexsignata Benoist, 1950: 44—♀ (MNHN), Holotype, Goulimine (Morocco)

Anthocopa (Eremoplosmia) guichardi Zanden, 1991: 166—♂ (NHMUK), Holotype, Laayoune (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Benoist (1950a); Zanden (1985; 1991c); Müller *et al.* (2018); Müller (2019)

Family Melittidae Schenck, 1860

Genus *Dasypoda* Latreille, 1802

***Dasypoda (Heterodasypoda) albimana* Pérez, 1905**

Global distribution: West-Palearctic

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Oriental; Souss-Massa

References: Michez *et al.* (2003; 2004); Michez (2012a); Radchenko (2017)

***Dasypoda (Microdasypoda) cingulata* Erichson, 1835**

Dasypoda cingulata mamorensis Warncke, 1973: 120—♂ (KW), Holotype, Maamora forest (Morocco)

Global distribution: West-Palearctic

Regional distribution: Fès-Meknès; Guelmim-Oued Noun; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1973); Michez *et al.* (2004); Michez (2012a)

***Dasypoda (Microdasypoda) crassicornis* Friese, 1896**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Tanger-Tétouan-Al Hoceima

References: Warncke (1973); Michez *et al.* (2004); Michez (2012a)

***Dasypoda (Dasypoda) dusmeti* Quilis, 1928**

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi; Rabat-Salé-Kénitra; Tanger-Tétouan-Al Hoceima

References: Warncke (1973); Michez *et al.* (2004); Michez (2012a)

Dasyпода (Dasyпода) hirtipes (Fabricius, 1793)

Global distribution: Palearctic

Regional distribution: Drâa-Tafilalet; Oriental; Rabat-Salé-Kénitra

References: Warncke (1973); Michez *et al.* (2004); Michez (2012a); Radchenko (2016)

Dasyпода (Dasyпода) maura Pérez, 1895

Dasyпода maura Pérez, 1895: 60—♀ (MNHN), Lectotype, Tanger (Morocco)

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Casablanca-Settat; Drâa-Tafilalet; Fès-Meknès; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Pérez (1895); Alfken (1931); Maidl (1933); Warncke (1973); Michez *et al.* (2004); Michez (2012a)

Dasyпода (Dasyпода) oraniensis Pérez, 1895

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Drâa-Tafilalet; Marrakech-Safi; Oriental; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Michez *et al.* (2004); Patiny & Michez (2007a); Michez (2012a)

Dasyпода (Dasyпода) sinuata Pérez, 1895

Global distribution: West-Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Cockerell (1931a); Warncke (1973); Michez *et al.* (2004); Michez (2012a)

Dasyпода (Megadasypoda) visnaga (Rossi, 1790)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra

References: Warncke (1973); Michez *et al.* (2004); Michez (2012a)

Genus *Melitta* Kirby, 1802

Melitta (Melitta) aegyptiaca (Radoszkowski, 1891)

Melitta aegyptiaca maroccana Warncke, 1973: 105—♂ (KW), Holotype, Marrakech (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa; Guelmim-Oued Noun; Laâyoune-Sakia El Hamra

References: Warncke (1973); Michez & Eardley (2007); Michez (2012b)

Melitta (Melitta) maura (Pérez, 1896)

Cilissa Atlantis Vachal, 1910: 179—♀ (MNCN), Holotype, Essaouira (Morocco)

Melitta eryngii Cockerell, 1931: 344—♂ (AMNH), Ifrane (Morocco)

Global distribution: West-Palearctic

Regional distribution: Tanger-Tetouan-Al Hoceima; Rabat-Salé-Kénitra; Casablanca-Settat; Marrakech-Safi; Drâa-Tafilalet; Souss-Massa

References: Vachal (1910); Alfken (1931); Cockerell (1931a); Maidl (1933); Warncke (1973); Michez & Eardley (2007); Michez *et al.* (2012b)

Melitta (Melitta) nigricans Alfken, 1905

Global distribution: West-Palearctic

Regional distribution: Marrakech-Safi

References: Michez & Eardley (2007); Michez (2012b)

***Melitta (Melitta) schmiedeknechtii* Friese, 1898**

Global distribution: Palearctic

Regional distribution: Béni Mellal-Khénifra; Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Marrakech-Safi; Oriental; Rabat-Salé-Kénitra; Souss-Massa; Tanger-Tétouan-Al Hoceima

References: Warncke (1973); Michez & Eardley (2007); Michez (2012b)

Genus *Promelitta* Warncke, 1977

***Promelitta alboclypeata* (Friese, 1900)**

Global distribution: North Africa; Sub-Saharan Africa

Regional distribution: Drâa-Tafilalet; Fès-Meknès; Guelmim-Oued Noun; Oriental; Souss-Massa

References: Patiny & Michez (2007a); Litman *et al.* (2016); Michez *et al.* (2007)

Unverified and excluded records (endemic or near endemic species)

The following taxa are nominally valid and known from type material from Morocco, but their taxonomic status and global distribution could not be verified. These species are not listed in Tables 1 and 2.

***Anthophora (Uncertain) nurrana* Cockerell, 1931**

Anthophora nurrana Cockerell, 1931: 278—♀ (NHMUK), Holotype, Aroumd (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Cockerell (1931b)

Notes: Taxonomic status unclear, type not revised.

***Eucera (Tetralonia) amismiziana* Dusmet y Alonso, 1928**

Tetralonia amismiziana Dusmet y Alonso, 1928: 282—♂ (MNCN), Holotype, Amizmiz (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1928)

Notes: Taxonomic status unclear.

***Eucera (Tetralonia) bottandieri* Alfken, 1914**

Global distribution: Near endemic (Morocco, Algeria)

Regional distribution: Unknown

References: None (species reported from Morocco that we could not confirm)

Notes: Taxonomic status unclear, it could be a subspecies of *Eucera (Tetraloniella) graja* Eversmann 1852

***Eucera (Eucera) escalerae* Dusmet y Alonso, 1928**

Eucera escalerae Dusmet y Alonso, 1928: 265—♀ (MNCN), Holotype, Marrakesh (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1928)

Notes: Taxonomic status unclear.

***Eucera (Tetralonia) gili* Dusmet y Alonso, 1928**

Tetralonia gili Dusmet y Alonso, 1928: 276—♀ (MNCN), Holotype, Ouled Mesbah (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1928)

Notes: Taxonomic status unclear, it could be a synonym *Eucera (Tetralonia) cinctella* (Saunders, 1908)

***Eucera (Tetralonia) holli* Alfken, 1914**

Global distribution: Near endemic (Morocco, Algeria, Tunisia)

Regional distribution: Unknown

References: None (species reported from Morocco that we could not confirm)

Notes: Taxonomic status unclear, it could be a subspecies of *Eucera (Tetraloniella) graja* Eversmann 1852

***Eucera (Tetralonia) quilisi* Dusmet, 1928**

Tetralonia quilisi Dusmet y Alonso, 1928: 279—♂ (MNCN), Type unknown, Marrakesh (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Marrakech-Safi

References: Dusmet y Alonso (1928)

Notes: Taxonomic status unclear, the species seem to be restricted to South Spain.

***Hylaeus (Prosopis) denisonae* Cockerell, 1931**

Hylaeus denisonae Cockerell, 1931: 534—♂ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Cockerell (1931e)

Notes: Taxonomic status unclear, it could be a synonym of *H. praenotatus* Förster, 1871.

***Hylaeus (Prosopis) ifranensis* Cockerell, 1931**

Hylaeus denisonae ifranensis Cockerell, 1931: 535—♀ (NHMUK), Holotype, Fez (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Cockerell (1931e)

Notes: Taxonomic status unclear, it could be a synonym of *H. praenotatus* Förster, 1871.

***Hylaeus (Prosopis) multistictus* Cockerell, 1931**

Hylaeus stigmorhinus multistictus Cockerell, 1931: 535—♀ (NHMUK), Holotype, Ifrane (Morocco)

Global distribution: **Morocco. ENDEMIC**

Regional distribution: Fès-Meknès

References: Cockerell (1931e)

Notes: Taxonomic status unclear, it could be a synonym of *H. praenotatus* Förster, 1871.

Concluding comments and perspectives

The present bee species checklist and its associated distributional data are the first step towards developing an evidence-based bee conservation strategy in Morocco. A better knowledge of the Moroccan bee fauna will, for example, help in selecting and providing suitable foraging and nesting resources for bees to better create or protect pollinator habitats. It will also contribute to the current effort to develop sustainable farming practices in Morocco including protection of wild pollinators to enhance pollination services (Christmann *et al.* 2017).

Additional studies are needed to improve the taxonomy of complicated group like the genus *Andrena* (Pisanty *et al.*, in press). These taxonomic studies should consider a large geographical framework (e.g. West-palaeartic region) to define accurately the species status of potential cryptic groups. Moreover molecular data should be considered to assess the taxonomic status as local variation of the morphology is very common in geographically isolated areas like Morocco and variation is not always associated to speciation (e.g. *Bombus terrestris africanus*; Lecocq *et al.* 2016).

Knowledge on the distribution of the Moroccan bees is still very basic. New expeditions need to be organized in remote areas like Laâyoune-Sakia El Hamra region. Additional endemic species are expected to be described.

TABLE 1. Checklist of the wild bees of Morocco with regional and global distributions (Abbreviations, TC: Tanger-Tetouan-Al Hoceima region; OF: Oriental region; FK: Fès-Meknès region; RK: Rabat-Salé-Kénitra region; BK: Béni Mellal-Khénifra region; CS: Casablanca-Settat region; MS: Marrakesh-Safi region; DT: Drâa-Tafilalet region; SS: Souss-Massa region; GN: Guelmim-Oued Noun region; LS: Laâyoune-Sakia El Hamra region; OL: Dakhla-Oued Ed-Dahab region; EN: Endemic; NE: Near endemic; NA: North Africa; SE: West-Paleartic; PA: Palearctic; SA: Sub-Saharan Africa).

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
Andrenidae Latreille, 1802																		
<i>Andrena</i> Fabricius, 1775																		
<i>A. abjectab</i> Pérez, 1895			X		X		X	X	X	X						X		
<i>A. abrupta</i> Warncke, 1967	X			X		X	X							X				
<i>A. acutidentis</i> Wood, 2020									X				X					
<i>A. aegyptiaca</i> Friese, 1899							X	X	X	X							X	
<i>A. aeneiventris</i> Morawitz, 1872	X		X			X											X	
<i>A. aerinifrons</i> Dours, 1873		X	X	X	X		X		X	X							X	
<i>A. aetherea</i> Warncke, 1974					X		X		X				X					
<i>A. agilissima</i> (Scopoli, 1770)	X	X	X	X	X	X	X	X	X	X						X		
<i>A. agnata</i> Warncke, 1967	X															X		
<i>A. albifacies</i> Alfken, 1927		X	X	X	X			X									X	
<i>A. albopunctata</i> (Rossi, 1792)	X	X	X	X	X			X	X								X	
<i>A. alchata</i> Warncke, 1974		X	X	X			X		X					X				
<i>A. alfkenella</i> Perkins, 1914								X								X		
<i>A. alluaudi</i> Benoist, 1961	X			X	X	X	X		X					X				
<i>A. ampla</i> Warncke, 1967		X	X	X	X	X										X		
<i>A. angustior</i> (Kirby, 1802)	X		X	X					X	X						X		
<i>A. antigana</i> Pérez, 1895	X		X	X		X			X	X						X		
<i>A. argyreofasciata</i> Schmiedeknecht, 1900								X								X		
<i>A. asperrima</i> Pérez, 1895	X	X	X	X	X	X	X	X	X							X		
<i>A. assimilis</i> Radoszkowski, 1876			X	X	X		X	X									X	
<i>A. avara</i> Warncke, 1967	X			X	X		X		X	X						X		
<i>A. bellidis</i> Pérez, 1895	X		X	X	X	X										X		
<i>A. bicolor</i> Fabricius, 1775	X		X	X			X	X									X	
<i>A. bicolorata</i> (Rossi, 1790)	X		X	X			X									X		
<i>A. bimaculata</i> (Kirby, 1802)	X	X	X	X	X	X	X	X	X	X							X	
<i>A. binominata</i> Smith, 1853							X		X							X		
<i>A. biskrensis</i> Pérez, 1895							X	X	X						X			
<i>A. blanda</i> Pérez, 1895			X		X			X	X					X				
<i>A. boyerella</i> Dours, 1872			X		X		X	X	X					X				
<i>A. breviceps</i> Wood, 2020								X					X					
<i>A. breviscopa</i> Pérez, 1895				X	X	X	X		X					X				
<i>A. byrsicola</i> Schmiedeknecht, 1900			X											X				
<i>A. caesia</i> Warncke, 1974		X				X	X	X	X					X				
<i>A. caroli</i> Pérez, 1895	X								X								X	
<i>A. cinerea</i> Brullé, 1832	X			X	X	X	X		X	X						X		
<i>A. colletiformis</i> Morawitz, 1874	X																X	
<i>A. compta</i> Lepeletier, 1841		X					X	X								X		
<i>A. curtivalvis</i> Morice, 1899	X		X	X	X											X		
<i>A. cyanomicans</i> Pérez, 1895							X	X	X							X		
<i>A. decipiens</i> Schenck, 1861	X		X	X			X										X	

.....continued on the next page

TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>A. discors</i> Erichson, 1841			X	X				X								X		
<i>A. djelfensis</i> Pérez, 1895	X	X	X		X											X		
<i>A. doursana</i> Dufour, 1853			X	X			X		X							X		
<i>A. eddaensis</i> Gusenleitner, 1998									X					X				
<i>A. euzona</i> Pérez, 1895							X		X								X	
<i>A. exigua</i> Erichson, 1835	X													X				
<i>A. fabrella</i> Pérez, 1903	X															X		
<i>A. farinosoides</i> Wood, 2020		X						X					X					
<i>A. ferrugineicrus</i> Dours, 1872	X		X	X	X		X									X		
<i>A. flavipes</i> Panzer, 1799	X	X	X	X	X	X	X	X	X								X	
<i>A. florea</i> Fabricius, 1793				X		X	X		X	X						X		
<i>A. florentina</i> Magretti, 1883	X		X	X												X		
<i>A. fulica</i> Warncke, 1974		X	X					X						X				
<i>A. fuliginata</i> Pérez, 1895				X										X				
<i>A. fulvicornis</i> Schenck, 1853	X		X	X	X	X	X	X									X	
<i>A. fumida</i> Pérez, 1895	X	X	X	X		X										X		
<i>A. fuscata</i> Erichson, 1835	X	X	X	X	X	X	X	X	X	X							X	
<i>A. granulosa</i> Pérez, 1902	X	X	X	X												X		
<i>A. gregaria</i> Warncke, 1974						X	X						X					
<i>A. guichardi</i> Warncke, 1980									X	X			X					
<i>A. guttata</i> Warncke, 1969								X								X		
<i>A. hebescens</i> Wood, 2020									X	X			X					
<i>A. hedikae</i> Jaeger, 1934	X	X	X	X	X	X	X										X	
<i>A. hesperia</i> Smith, 1853	X		X	X	X		X										X	
<i>A. hirticornis</i> Pérez, 1895				X					X					X				
<i>A. hispania</i> Warncke, 1967	X															X		
<i>A. humilis</i> Imhoff, 1832	X		X	X	X		X										X	
<i>A. hystrix</i> Schmiedeknecht, 1883			X		X												X	
<i>A. icterina</i> Warncke, 1974			X											X				
<i>A. impunctata</i> Pérez, 1895		X														X		
<i>A. innesi</i> Gribodo, 1894			X														X	
<i>A. insignis</i> Warncke, 1974			X	X	X	X	X						X					
<i>A. isis</i> Schmiedeknecht, 1900		X						X	X							X		
<i>A. kamarti</i> Schmiedeknecht, 1900	X		X	X												X		
<i>A. labialis</i> (Kirby, 1802)	X	X	X	X	X		X	X									X	
<i>A. lagopus</i> Latreille, 1809		X	X	X	X	X	X									X		
<i>A. langadensis</i> Warncke, 1965	X	X					X									X		
<i>A. laurivora</i> Warncke, 1974					X		X						X					
<i>A. lepida</i> Schenck, 1861		X					X										X	
<i>A. leptopyga</i> Pérez, 1895				X	X	X			X	X						X		
<i>A. lepurana</i> Warncke, 1974				X					X						X			
<i>A. leucocyanea</i> Pérez, 1895							X		X	X					X			
<i>A. leucophaea</i> Lepeletier, 1841			X													X		
<i>A. leucura</i> Warncke, 1974							X								X			
<i>A. limata</i> Smith, 1853			X	X			X	X									X	
<i>A. livens</i> Pérez, 1895	X		X	X	X		X	X								X		

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>A. longibarbis</i> Pérez, 1895	X		X			X	X		X							X		
<i>A. macroptera</i> Warncke, 1974			X	X				X	X					X				
<i>A. mara</i> Warncke, 1974	X		X	X		X	X	X	X					X				
<i>A. mariana</i> Warncke, 1968	X	X					X									X		
<i>A. marsae</i> Schmiedeknecht, 1900			X	X		X	X		X						X			
<i>A. medeninensis</i> Pérez, 1895			X	X				X								X		
<i>A. mediovittata</i> Pérez, 1895										X				X				
<i>A. melacana</i> Warncke, 1967			X												X			
<i>A. melaleuca</i> Warncke, 1967			X												X			
<i>A. menahemella</i> Scheuchl & Pisanty, 2016			X													X		
<i>A. merimna</i> Saunders, 1908			X					X						X				
<i>A. microcardia</i> Pérez, 1895							X		X							X		
<i>A. miegiella</i> Dours, 1873	X	X	X	X	X		X	X								X		
<i>A. minapalumboi</i> Gribodo, 1894	X		X	X	X	X	X									X		
<i>A. minutula</i> (Kirby, 1802)			X	X	X			X										X
<i>A. minutuloides</i> Perkins, 1914					X		X											X
<i>A. monilia</i> Warncke, 1967			X						X							X		
<i>A. montarca</i> Warncke, 1975					X	X	X							X				
<i>A. morio</i> Brullé, 1832	X	X	X	X	X	X	X	X	X	X								X
<i>A. mucida</i> Kriechbaumer, 1873	X	X	X	X			X									X		
<i>A. nana</i> (Kirby, 1802)	X		X	X	X	X	X									X		
<i>A. nigroaenea</i> (Kirby, 1802)	X	X	X	X	X	X	X	X	X	X								X
<i>A. nigroolivacea</i> Dours, 1873			X	X		X	X	X								X		
<i>A. nigroviridula</i> Dours, 1873				X			X									X		
<i>A. niveofacies</i> Wood, 2020							X						X					
<i>A. numida</i> Lepeletier, 1841				X	X	X	X	X	X									X
<i>A. obsoleta</i> Pérez, 1895	X		X	X			X								X			
<i>A. orana</i> Warncke, 1975	X		X	X										X				
<i>A. orbitalis</i> Morawitz, 1871	X		X	X	X	X	X	X	X							X		
<i>A. ounifa</i> Warncke, 1974								X						X				
<i>A. ovatula</i> (Kirby, 1802)	X	X	X	X	X	X	X	X	X									X
<i>A. oviventris</i> Pérez, 1895			X	X	X									X				
<i>A. palumba</i> Warncke, 1974								X								X		
<i>A. pandellei</i> Pérez, 1895	X	X														X		
<i>A. pandosa</i> Warncke, 1968								X								X		
<i>A. panurgina</i> De Stefani, 1889	X		X	X	X											X		
<i>A. pela</i> Warncke, 1974						X	X		X	X			X					
<i>A. petrosa</i> Warncke, 1974	X		X	X										X				
<i>A. pilipes</i> Fabricius, 1781	X	X	X	X	X		X	X	X	X								X
<i>A. planiventris</i> Dours, 1872							X		X						X			
<i>A. pratincola</i> Warncke, 1974								X		X					X			
<i>A. propinqua</i> Schenck, 1853	X		X	X			X	X										X
<i>A. pruinosa</i> Erichson, 1835	X		X	X	X		X		X	X								X
<i>A. purpurascens</i> Pérez, 1895			X												X			
<i>A. ranunculi</i> Schmiedeknecht, 1883	X		X	X												X		
<i>A. relata</i> Warncke, 1967		X	X											X				

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>A. rhenana</i> Stoeckhert, 1930	X																	X
<i>A. rhypara</i> Pérez, 1903		X			X		X	X	X	X				X				
<i>A. rhyssonota</i> Pérez, 1895	X	X	X	X	X	X												X
<i>A. rotundata</i> Pérez, 1895			X															X
<i>A. rufescens</i> Pérez, 1895	X			X			X		X	X				X				
<i>A. rufiventris</i> Lepeletier, 1841				X	X	X	X	X						X				
<i>A. russula</i> Lepeletier, 1841							X		X									X
<i>A. sardoa</i> Lepeletier, 1841	X		X	X	X			X							X			
<i>A. saxonica</i> Stoeckhert, 1935	X		X															X
<i>A. savignyi</i> Spinola, 1838		X						X	X									X
<i>A. schmiedeknechti</i> Magretti, 1883				X														X
<i>A. selenia</i> Gusenleitner, 1994								X	X						X			
<i>A. semiadesus</i> Wood, 2020			X					X					X					
<i>A. senecionis</i> Pérez, 1895	X	X	X	X	X		X	X	X	X								X
<i>A. simontornyella</i> Noskiewicz, 1939	X		X	X	X													X
<i>A. sinuata</i> Pérez, 1895							X		X									X
<i>A. soror</i> Dours, 1872			X		X			X										X
<i>A. sparsipunctata</i> Wood, 2020		X						X					X					
<i>A. speciosa</i> Friese, 1899			X															X
<i>A. spolata</i> Warncke, 1968								X										X
<i>A. spreta</i> Pérez, 1895	X	X	X	X			X	X	X									X
<i>A. synadelpha</i> Perkins, 1914			X															X
<i>A. tadorna</i> Warncke, 1974		X							X						X			
<i>A. tebessana</i> Scheuchl, Benarfa & Louadi 2011										X				X				
<i>A. tenebricorpus</i> Wood, 2020										X			X					
<i>A. tenuistriata</i> Pérez, 1895	X		X	X		X	X	X	X									X
<i>A. testaceipes</i> Saunders, 1908							X		X						X			
<i>A. thoracica</i> (Fabricius, 1775)	X	X	X	X	X	X	X											X
<i>A. tiaretta</i> Warncke, 1974	X		X	X	X		X	X										X
<i>A. totana</i> Warncke, 1974	X		X	X			X							X				
<i>A. triangulivalvis</i> Wood, 2020								X					X					
<i>A. trimmerana</i> (Kirby, 1802)			X	X	X		X		X									X
<i>A. truncatilabris</i> Morawitz, 1877		X		X	X													X
<i>A. tuberculifera</i> Pérez, 1895			X	X		X	X		X	X								X
<i>A. tunetana</i> Schmiedeknecht, 1900							X		X	X								X
<i>A. urdula</i> Warncke, 1965						X	X											X
<i>A. vachali</i> Pérez, 1895	X	X	X				X		X	X					X			
<i>A. varia</i> Pérez, 1895	X		X	X		X								X				X
<i>A. variabilis</i> Smith, 1853			X	X			X											X
<i>A. varicornis</i> Pérez, 1895		X																X
<i>A. vaulogeri</i> Pérez, 1895			X	X										X				
<i>A. ventricosa</i> Dours, 1873	X																	X
<i>A. verticalis</i> Pérez, 1895	X		X	X	X	X	X	X	X									X
<i>A. vetula</i> Lepeletier, 1841	X			X	X		X		X	X								X
<i>A. villipes</i> Pérez 1895			X															X
<i>A. vulcana</i> Dours, 1873														X				

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>A. vulpecula</i> Kriechbaumer, 1873	X		X	X					X							X		
<i>A. wilkella</i> (Kirby, 1802)			X		X												X	
Borgatomelissa Patiny, 2000																		
<i>B. flavimaura</i> Ortiz-Sánchez & Patiny 2019			X										X					
Camptopoeum Spinola, 1843																		
<i>C. nadigi</i> (Warncke, 1972)			X	X			X		X				X					
<i>C. pseudoruber</i> (Warncke, 1987)							X						X					
<i>C. simile</i> (Pérez, 1895)	X	X	X	X	X	X	X	X	X							X		
<i>C. variegatum</i> (Morawitz, 1876)	X																X	
Clavipanurgus Warncke, 1972																		
<i>C. desertus</i> (Warncke, 1987)								X	X				X					
Melitturga Latreille, 1809																		
<i>M. albescens</i> Pérez, 1895								X	X					X				
<i>M. caudata</i> Pérez, 1879	X					X	X										X	
<i>M. oraniensis</i> Lepeletier, 1841	X	X		X			X	X	X						X			
Panurginus Nylander, 1848																		
<i>P. albopilosus</i> (Lucas, 1849)			X	X			X	X	X					X				
<i>P. tunensis</i> (Warncke, 1972)								X	X						X			
Panurgus Panzer, 1806																		
<i>P. acutus</i> Patiny, 2002							X		X				X					
<i>P. avarus</i> Warncke, 1972							X	X	X					X				
<i>P. banksianus</i> (Kirby, 1802)	X			X		X											X	
<i>P. buteus</i> Warncke, 1972		X	X					X									X	
<i>P. calcaratus</i> (Scopoli, 1763)	X	X	X			X	X	X	X									X
<i>P. calceatus</i> Pérez, 1895	X	X	X	X	X	X	X	X	X					X				
<i>P. canarius</i> Warncke, 1972								X						X				
<i>P. canescens</i> Latreille, 1811	X																X	
<i>P. catulus</i> Warncke, 1972							X							X				
<i>P. cephalotes</i> Latreille, 1811	X	X		X		X	X	X	X								X	
<i>P. convergens</i> Pérez, 1895			X		X		X	X	X					X				
<i>P. dargius</i> Warncke, 1972	X		X											X				
<i>P. dentatus</i> Friese, 1901							X	X	X		X						X	
<i>P. farinosus</i> Warncke, 1972			X	X	X	X	X	X	X					X				
<i>P. intermedius</i> Rozen, 1971	X	X		X			X		X	X			X					
<i>P. maroccanus</i> Pérez, 1895	X	X	X	X	X	X	X	X	X	X				X				
<i>P. minor</i> Warncke, 1972									X				X					
<i>P. nigriscopus</i> Pérez, 1895							X	X	X	X								X
<i>P. niloticus</i> Warncke, 1972								X	X						X			
<i>P. ovatulus</i> Warncke, 1972	X	X	X	X	X	X	X	X					X					
<i>P. perezi</i> Saunders, 1881			X				X							X				
<i>P. pici</i> Pérez, 1895		X							X					X				
<i>P. pyropygus</i> Friese, 1901							X	X		X								X
<i>P. rungsii</i> Benoist, 1937		X	X		X	X	X	X	X				X					
<i>P. vachali</i> Pérez, 1895							X		X						X			

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>Plesiopanurgus</i> Cameron, 1907																		
<i>P. zizus</i> (Warncke, 1987)			X					X					X					
Apidae Linnaeus, 1758																		
<i>Amegilla</i> Friese, 1897																		
<i>A. albigena</i> (Lepeletier, 1841)	X	X	X		X		X	X	X								X	
<i>A. andresi</i> (Friese, 1914)	X	X	X				X	X								X		
<i>A. byssina</i> (Klug, 1845)								X		X							X	X
<i>A. fasciata</i> (Fabricius, 1775)							X	X	X	X						X		
<i>A. magnilabris</i> (Fedtschenko, 1875)		X	X				X		X							X		
<i>A. ochroleuca</i> (Pérez, 1879)									X							X		
<i>A. quadrifasciata</i> (de Villers, 1789)	X	X	X	X		X	X	X	X								X	X
<i>Ammobates</i> Latreille, 1809																		
<i>A. arsinoe</i> Engel, 2009									X						X			
<i>A. assimilis</i> (Warncke, 1983)							X								X			
<i>A. buteus</i> (Warncke, 1983)													X					
<i>A. dubius</i> Benoist, 1961								X									X	X
<i>A. handlirschi</i> Friese, 1895				X										X				
<i>A. minor</i> (Pérez, 1902)														X				
<i>A. muticus</i> Spinola, 1843				X	X		X	X	X							X		
<i>A. oraniensis</i> (Lepeletier, 1841)			X	X					X								X	
<i>A. punctatus</i> (Fabricius 1804)								X									X	
<i>A. syriacus</i> Friese, 1899									X								X	
<i>A. verhoeffi</i> Mavromoustakis, 1959							X		X	X							X	
<i>Ammobatoides</i> Radoszkowski, 1867																		
<i>A. schachtii</i> Schwarz, 1988	X													X				
<i>A. scriptus</i> (Gerstäcker, 1869)																X		
<i>Ancyla</i> Lepeletier, 1841																		
<i>A. brevis</i> Dours, 1873	X													X				
<i>A. oraniensis</i> Lepeletier, 1841	X					X										X		
<i>Anthophora</i> Latreille, 1803																		
<i>A. aestivalis</i> (Panzer, 1801)	X						X											X
<i>A. affinis</i> Brullé, 1832		X							X									X
<i>A. agama</i> Radoszkowski, 1869			X				X											X
<i>A. albicilla</i> Pérez, 1895														X				
<i>A. albosignata</i> (Friese, 1896)							X		X								X	
<i>A. alternans</i> (Klug, 1845)								X							X			
<i>A. atriceps</i> Pérez, 1879		X			X			X										X
<i>A. atroalba</i> Lepeletier, 1841	X	X	X	X		X	X	X										X
<i>A. balneorum</i> Lepeletier, 1841				X		X	X									X		
<i>A. bimaculata</i> (Panzer, 1798)	X	X		X		X	X	X	X									X
<i>A. calcarata</i> Lepeletier, 1841	X	X	X		X	X	X	X	X									X
<i>A. canescens</i> Brullé, 1832	X	X	X			X												X
<i>A. crassipes</i> Lepeletier, 1841							X											X
<i>A. crinipes</i> Smith, 1854								X										X
<i>A. dispar</i> Lepeletier, 1841	X	X	X	X	X		X	X										X
<i>A. femorata</i> (Olivier, 1789)	X	X					X											X

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>A. ferruginea</i> Lepeletier, 1841	X	X					X	X	X							X		
<i>A. flabellata</i> Priesner, 1957		X						X								X		
<i>A. fulvitaris</i> Brullé, 1832	X	X	X	X		X	X	X	X	X							X	
<i>A. fulvodimidiata</i> Dours, 1869			X				X	X								X		
<i>A. hermanni</i> Schwarz & Gusenleitner 2003								X							X			
<i>A. hispanica</i> (Fabricius, 1787)	X	X	X	X												X		
<i>A. holoxantha</i> Pérez, 1895				X		X	X							X				
<i>A. inclyta</i> Walker, 1871								X	X						X			X
<i>A. kapnoptera</i> Alfken, 1936															X			
<i>A. libyphaenica</i> Gribodo, 1893								X	X							X		
<i>A. mucida</i> Gribodo, 1873							X	X								X		
<i>A. plumipes</i> (Pallas, 1772)	X	X	X	X		X	X										X	
<i>A. podagra</i> Lepeletier, 1841			X					X									X	
<i>A. priesneri</i> Alfken, 1932								X									X	
<i>A. pubescens</i> (Fabricius, 1781)		X	X			X	X	X	X								X	
<i>A. quadricolor</i> (Erichson, 1840)	X	X	X					X	X								X	
<i>A. retusa</i> (Linnaeus, 1758)			X			X											X	
<i>A. rivolleti</i> Pérez, 1895								X									X	
<i>A. robusta</i> (Klug, 1845)	X	X	X			X	X	X									X	
<i>A. romandii</i> Dours, 1869	X	X						X									X	
<i>A. scopipes</i> Spinola, 1838						X											X	
<i>A. semirufa</i> (Friese, 1898)								X									X	
<i>A. senescens</i> Lepeletier, 1841	X	X	X			X		X	X								X	
<i>A. tarsalis</i> Priesner, 1957								X									X	
<i>A. ventrilabris</i> Lepeletier, 1841					X			X									X	
<i>A. vidua</i> (Klug, 1845)				X				X	X								X	
<i>A. wegelini</i> Friese, 1914								X									X	
Bombus Latreille, 1802																		
<i>B. lapidarius</i> (Linnaeus, 1758)			X		X		X	X	X								X	
<i>B. mocsaryi</i> Kriechbaumer, 1877			X		X		X	X	X								X	
<i>B. ruderatus</i> (Fabricius, 1775)	X		X				X										X	
<i>B. terrestris</i> (Linnaeus, 1758)	X	X	X	X	X	X	X		X								X	
<i>B. vestalis</i> (Geoffroy, 1785)	X	X															X	
Ceratina Latreille, 1802																		
<i>C. albosticta</i> Cockerell, 1931	X	X	X	X	X	X	X	X	X	X				X				
<i>C. callosa</i> (Fabricius, 1794)	X	X	X	X	X	X	X	X	X								X	
<i>C. chalybea</i> Chevrier, 1872	X	X	X		X				X								X	
<i>C. citriphila</i> Cockerell, 1935									X								X	X
<i>C. cucurbitina</i> (Rossi, 1792)	X	X	X	X	X	X	X	X	X								X	
<i>C. dallatorreana</i> Friese, 1896		X	X	X			X		X								X	
<i>C. dentiventris</i> Gerstäcker, 1869			X				X										X	
<i>C. maghrebensis</i> Daly, 1983				X	X	X	X	X	X					X				
<i>C. mocsaryi</i> Friese, 1896					X		X	X	X								X	
<i>C. parvula</i> Smith, 1854	X	X	X					X	X								X	
<i>C. saundersi</i> Daly, 1983	X	X	X		X		X	X	X								X	
<i>C. tarsata</i> Morawitz, 1872								X	X								X	X

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>C. verhoeffi</i> Terzo & Rasmont, 1997							X	X	X				X					
<i>Epeolus</i> Latreille, 1802																		
<i>E. aureovestitus</i> Pérez, 1894							X									X		
<i>E. collaris</i> Pérez, 1895			X		X			X	X					X				
<i>E. fallax</i> Morawitz, 1872			X				X									X		
<i>E. flavociliatus</i> Friese, 1899		X	X				X	X	X								X	
<i>E. laevifrons</i> Bischoff, 1930							X									X		
<i>E. transitorius</i> Eversmann, 1852							X	X									X	
<i>E. variegatus</i> (Linnaeus, 1758)							X										X	
<i>Eucera</i> Scopoli, 1770																		
<i>E. agadirensis</i> (Benoist, 1943)									X				X					
<i>E. algeriensis</i> Dalla Torre, 1896			X				X									X		
<i>E. algira</i> Brullé, 1840							X		X	X						X		
<i>E. alternans</i> (Brullé, 1832)				X			X										X	
<i>E. andresi</i> (Alfken, 1926)			X											X				
<i>E. atrata</i> Klug, 1845		X						X							X			
<i>E. atricornis</i> Fabricius, 1793															X			
<i>E. battandieri</i> (Alfken, 1914)															X			
<i>E. bequaerti</i> Alfken, 1914			X											X				
<i>E. biscrensis</i> (Alfken, 1933)							X									X		
<i>E. brachycera</i> (Gribodo, 1893)										X				X				
<i>E. clypeata</i> Erichson, 1835	X		X	X			X	X	X								X	X
<i>E. collaris</i> Dours, 1873				X												X		
<i>E. commixta</i> Dalla Torre & Friese, 1895							X	X								X		
<i>E. cuniculina</i> Klug, 1845								X								X		
<i>E. dalmatica</i> Lepeletier, 1841	X																X	
<i>E. decolorata</i> Gribodo, 1924			X													X		
<i>E. dentata</i> (Germar, 1839)	X		X	X			X	X	X								X	
<i>E. dimidiata</i> Brullé, 1832								X		X							X	
<i>E. elongatula</i> Vachal, 1907			X	X			X		X							X		
<i>E. eucnemidea</i> Dours, 1873	X		X	X			X										X	
<i>E. ferruginea</i> Lepeletier, 1841			X					X	X						X			
<i>E. fulvescens</i> (Giraud, 1863)							X			X							X	
<i>E. genofevae</i> Vachal, 1907								X	X	X				X				
<i>E. hispaliensis</i> Pérez, 1902			X													X		
<i>E. holli</i> (Alfken, 1914)															X			
<i>E. iberica</i> (Dusmet Y Alonso 1926)							X		X	X						X		
<i>E. lanuginosa</i> Klug, 1845								X								X		
<i>E. lucasi</i> (Gribodo, 1893)			X				X	X								X		
<i>E. maroccana</i> (Dusmet y Alonso, 1928)	X						X							X				
<i>E. mauritaniae</i> Tkalcù, 1984													X					
<i>E. metallescens</i> (Morawitz, 1888)									X	X						X		
<i>E. nadigi</i> (Schulthess, 1924)				X									X					
<i>E. nigriceps</i> (Morawitz, 1895)								X									X	
<i>E. nigrifacies</i> Lepeletier, 1841			X	X	X		X										X	
<i>E. nigrilabris</i> Lepeletier, 1841		X	X				X										X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>E. notata</i> Lepeletier, 1841			X	X			X		X									X
<i>E. numida</i> Lepeletier, 1841			X	X														X
<i>E. obliterated</i> Pérez, 1896			X						X					X				
<i>E. occidentalis</i> Risch, 1999		X	X										X					
<i>E. oraniensis</i> Lepeletier, 1841							X											X
<i>E. polita</i> Pérez, 1895			X							X					X			
<i>E. pumila</i> Klug, 1845								X										X
<i>E. punctatissima</i> Pérez, 1895			X						X	X				X				
<i>E. rufa</i> (Lepeletier, 1841)							X		X									X
<i>E. ruficornis</i> (Fabricius, 1804)	X	X					X											X
<i>E. saundersi</i> Friese, 1899															X			
<i>E. spatulata</i> Gribodo, 1893		X	X				X		X					X				
<i>E. squamosa</i> Lepeletier, 1841							X											X
<i>E. strigata</i> (Lepeletier, 1841)	X	X	X				X											X
<i>E. tricincta</i> Erichson, 1835			X				X	X										X
<i>E. vachali</i> Pérez, 1895								X						X				
<i>E. vidua</i> Lepeletier, 1841									X					X				
<i>E. warncke</i> Risch, 1999								X	X	X				X				
Melecta Latreille, 1802																		
<i>M. aegyptiaca</i> Radoszkowski, 1876	X							X										X
<i>M. albifrons</i> (Forster, 1771)			X	X	X	X	X	X										X
<i>M. duodecimmaculata</i> (Rossi, 1790)																		X
<i>M. grandis</i> Lepeletier, 1841			X			X		X	X									X
<i>M. guilochei</i> Dusmet y Alonso, 1915		X				X	X	X										X
<i>M. italica</i> Radoszkowski, 1876	X		X	X	X		X	X										X
<i>M. leucorhyncha</i> Gribodo, 1893		X	X		X	X	X	X										X
<i>M. luctuosa</i> (Scopoli, 1770)							X	X										X
<i>M. prophanta</i> Lieftinck, 1980							X											X
Nomada Scopoli, 1770																		
<i>N. accentifera</i> Pérez, 1895	X													X				
<i>N. agrestis</i> Fabricius, 1787	X		X	X			X											X
<i>N. algira</i> Mocsáry, 1883		X	X				X	X						X				
<i>N. ariasi</i> Dusmet y Alonso 1913									X									X
<i>N. barbilabris</i> Pérez, 1895	X		X				X							X				
<i>N. basalis</i> Herrich-Schäffer, 1839	X		X				X	X	X									X
<i>N. beaumonti</i> Schwarz, 1967					X													X
<i>N. biblica</i> Schwarz, Smit & Ockermüller, 2019									X									X
<i>N. bifasciata</i> Olivier, 1811	X	X	X	X		X	X	X										X
<i>N. bispinosa</i> Mocsary, 1839							X											X
<i>N. blepharipes</i> Schmiedeknecht, 1882								X										X
<i>N. brevis</i> Saunders, 1908			X				X		X	X				X				
<i>N. cadiza</i> Schwarz & Gusenleitner, 2013		X												X				
<i>N. carnifex</i> Mocsáry, 1883			X		X		X		X	X								X
<i>N. cleopatra</i> Schwarz, 1989								X							X			
<i>N. concolor</i> Schmiedeknecht, 1882							X											X

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>N. coronata</i> Pérez, 1895	X		X	X			X		X									X
<i>N. cristata</i> Pérez, 1896			X				X		X					X				
<i>N. dira</i> Schmiedeknecht, 1882	X	X	X	X	X		X		X	X								X
<i>N. discedens</i> Pérez, 1884			X				X											X
<i>N. discrepans</i> Schmiedeknecht, 1882		X	X	X			X		X	X								X
<i>N. distinguenda</i> Morawitz, 1874	X	X					X	X	X									X
<i>N. dolosa</i> Mocsáry, 1883			X				X		X					X				
<i>N. duplex</i> Smith, 1854	X						X											X
<i>N. fallax</i> Pérez, 1913	X	X	X	X		X	X											X
<i>N. femoralis</i> Morawitz, 1869	X		X	X		X	X		X									X
<i>N. fenestrata</i> Lepeletier, 1841			X	X			X		X									X
<i>N. flavoguttata</i> (Kirby, 1802)	X	X	X		X		X											X
<i>N. flavoscutellata</i> Schwarz & Smit, 2018							X	X	X				X					
<i>N. fucata</i> Panzer, 1798			X															X
<i>N. fulvicornis</i> Fabricius, 1793	X						X	X	X									X
<i>N. furva</i> Panzer, 1798							X		X									X
<i>N. fuscipennis</i> Lepeletier, 1841			X				X		X					X				
<i>N. glaucopsis</i> Pérez, 1890	X		X		X		X		X									X
<i>N. hispanica</i> Dusmet y Alonso 1913	X				X		X		X									X
<i>N. ibanezi</i> Dusmet y Alonso 1915							X		X					X				
<i>N. insignipes</i> Pérez, 1884	X		X															X
<i>N. integra</i> Brullé, 1832	X		X	X			X		X									X
<i>N. italica</i> Dalla Torre & Friese, 1894			X															X
<i>N. keroanensis</i> Pérez, 1895										X				X				
<i>N. kohli</i> Schmiedeknecht, 1882		X																X
<i>N. linsenmaieri</i> Schwarz, 1974	X		X	X			X											X
<i>N. maculicornis</i> Pérez, 1884	X		X				X											X
<i>N. marrakechi</i> Schwarz & Smit, 2020							X						X					
<i>N. mauritanica</i> Lepeletier, 1841	X	X	X				X		X									X
<i>N. melanura</i> Mocsáry, 1883			X				X		X					X				
<i>N. merceti</i> Alfken, 1909	X						X											X
<i>N. mideltiaca</i> Schwarz, Smit & Ockermüller, 2019								X						X				
<i>N. minuscula</i> Noskiewicz, 1930				X			X											X
<i>N. mutabilis</i> Morawitz, 1870	X		X															X
<i>N. nigrovaria</i> Pérez, 1895									X									X
<i>N. nitida</i> Schwarz, 1977	X	X	X	X		X	X		X	X				X				
<i>N. nobilis</i> Herrich-Schäffer, 1839			X															X
<i>N. numida</i> Lepeletier, 1841	X		X				X											X
<i>N. ortegai</i> Dusmet y Alonso, 1915							X						X					
<i>N. panurgina</i> Morawitz, 1869							X											X
<i>N. panurginoides</i> Saunders, 1908	X	X	X			X	X	X						X				
<i>N. pectoralis</i> Morawitz, 1877			X															X
<i>N. pruinosa</i> Pérez, 1895	X			X				X		X								X
<i>N. regli</i> Schwarz, Smit & Ockermüller, 2020			X				X	X	X				X					

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>N. rhenana</i> Morawitz, 1872	X						X									X		
<i>N. rubiginosa</i> Pérez, 1884					X											X		
<i>N. sabulosa</i> Radoszkowski, 1876	X		X				X	X	X							X		
<i>N. sanguinea</i> Smith, 1854	X	X	X	X		X	X		X							X		
<i>N. serricornis</i> Pérez, 1884	X		X				X									X		
<i>N. sexfasciata</i> Panzer, 1799	X	X	X														X	
<i>N. sheppardana</i> (Kirby, 1802)	X		X	X			X	X	X							X		
<i>N. striata</i> Fabricius, 1793							X										X	
<i>N. succincta</i> Panzer, 1798	X	X					X	X	X								X	
<i>N. tridentirostris</i> Dours, 1873			X				X									X		
<i>N. zonata</i> Panzer, 1798					X		X										X	
Parammobatodes Popov, 1932																		
<i>P. maroccanus</i> (Warncke, 1983)									X					X				
Pasites Jurine, 1807																		
<i>P. maculatus</i> Jurine, 1807	X		X				X										X	
Thyreus Panzer, 1806																		
<i>T. affinis</i> (Morawitz, 1874)			X				X	X									X	
<i>T. elegans</i> (Morawitz, 1877)							X	X									X	X
<i>T. hellenicus</i> Liefstinck, 1968								X									X	
<i>T. hirtus</i> (de Beaumont, 1940)							X									X		
<i>T. histrionicus</i> (Illiger, 1806)	X		X	X	X		X	X									X	
<i>T. orbatus</i> (Lepeletier, 1841)							X	X	X	X						X		
<i>T. ramosus</i> (Lepeletier, 1841)	X	X	X				X	X	X								X	
<i>T. tricuspis</i> (Pérez, 1883)	X		X				X									X		
<i>T. truncatus</i> (Pérez, 1883)			X	X													X	
Xylocopa Latreille, 1802																		
<i>X. amedaei</i> Lepeletier, 1841			X		X									X				
<i>X. cantabrita</i> Lepeletier, 1841			X		X			X								X		
<i>X. iris</i> (Christ, 1791)	X	X	X	X	X		X										X	
<i>X. pubescens</i> Spinola, 1838	X	X	X	X		X	X	X	X								X	X
<i>X. valga</i> Gerstäcker, 1872	X	X	X	X	X	X	X		X								X	
<i>X. violacea</i> (Linnaeus, 1758)	X	X	X	X	X	X	X										X	
Colletidae Lepeletier, 1841																		
Colletes Latreille, 1802																		
<i>C. abeillei</i> Pérez, 1903			X				X	X	X							X		
<i>C. acutiformis</i> Noskiewicz, 1936								X	X							X		
<i>C. acutus</i> Pérez, 1903	X			X		X	X	X								X		
<i>C. albomaculatus</i> (Lucas, 1849)	X	X	X		X		X	X	X								X	
<i>C. atlassus</i> Kuhlmann, 2002							X	X					X					
<i>C. biskrensis</i> Noskiewicz, 1936	X	X	X		X		X	X	X	X				X				
<i>C. canescens</i> Smith, 1853			X				X									X		
<i>C. coriandri</i> Pérez, 1895								X							X			
<i>C. daourus</i> Warncke, 1978				X				X		X				X				
<i>C. diodontus</i> Benoist, 1957								X	X	X	X			X				
<i>C. dusmeti</i> Noskiewicz, 1936		X						X								X		
<i>C. eatoni</i> Morice, 1904							X	X			X			X				

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>C. elegans</i> Noskiewicz, 1936			X					X								X		
<i>C. escalerae</i> Noskiewicz, 1936				X	X		X	X	X					X				
<i>C. formosus</i> Pérez, 1902		X							X							X		
<i>C. foveolaris</i> Pérez, 1903	X	X	X				X	X								X		
<i>C. gallicus</i> Radoszkowski, 1891							X	X	X							X		
<i>C. intricans</i> Spinola, 1838	X	X														X		X
<i>C. lacunatus</i> Dours, 1872							X	X	X			X					X	
<i>C. ligatus</i> Erichson, 1835	X	X		X		X	X		X	X						X		
<i>C. maroccanus</i> Warncke, 1978								X	X								X	
<i>C. minutus</i> Kuhlmann, 2002							X	X	X				X					
<i>C. nanus</i> Friese, 1898			X					X	X	X	X	X					X	X
<i>C. nigricans</i> Gistel, 1857			X			X	X	X	X							X		
<i>C. niveatus</i> Kuhlmann, 2002								X					X					
<i>C. noskiewiczzi</i> Cockerell, 1942								X						X				
<i>C. perezi</i> Morice, 1904		X	X					X	X	X							X	
<i>C. pumilus</i> Morice, 1904	X		X				X	X	X	X							X	
<i>C. similis</i> Schenck, 1853							X	X									X	
<i>C. wahisi</i> Kuhlmann, 2002	X	X						X	X				X					
Hylaeus Fabricius, 1793																		
<i>H. absolutus</i> (Gribodo, 1894)		X	X				X									X		
<i>H. albonotatus</i> (Walker, 1871)	X							X		X							X	X
<i>H. angustatus</i> (Schenck, 1861)							X										X	
<i>H. atlassus</i> (Warncke, 1981)							X						X					
<i>H. beaumonti</i> (Benoist, 1957)								X									X	
<i>H. biarmicus</i> (Warncke, 1992)		X	X												X			
<i>H. brachycephalus</i> (Morawitz, 1868)	X															X		
<i>H. brevicornis</i> Nylander, 1852			X				X										X	
<i>H. clypearis</i> (Schenck, 1853)			X				X									X		
<i>H. communis</i> Nylander, 1852																	X	
<i>H. conformis</i> Förster, 1871	X	X	X	X		X	X	X	X							X		
<i>H. coriaceus</i> (Pérez, 1895)	X															X		
<i>H. cornutus</i> Curtis, 1831	X		X														X	
<i>H. difformis</i> (Eversmann, 1852)									X								X	
<i>H. dilatatus</i> (Kirby, 1802)																	X	
<i>H. dinkleri</i> (Friese, 1898)																X		
<i>H. euryscapus</i> Förster, 1871			X														X	
<i>H. gazagnairei</i> (Vachal, 1891)			X	X		X		X								X		
<i>H. gibbus</i> Saunders, 1850																	X	
<i>H. gredleri</i> Förster, 1871			X														X	
<i>H. hyalinatus</i> Smith, 1842																X		
<i>H. imparilis</i> Förster, 1871							X										X	
<i>H. impressiventris</i> (Benoist, 1960)			X						X				X					
<i>H. lactipennis</i> (Benoist, 1957)								X							X			
<i>H. lineolatus</i> (Schenck, 1861)									X								X	
<i>H. livius</i> (Warncke, 1992)							X						X					
<i>H. longimaculus</i> (Alfken, 1936)																	X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>H. luteobalteatus</i> (Dours, 1872)		X					X	X	X	X				X				
<i>H. mauricus</i> (Warncke, 1981)							X							X				
<i>H. melba</i> (Warncke, 1992)								X	X					X				
<i>H. meridionalis</i> Förster, 1871			X				X										X	
<i>H. nigrinus</i> (Fabricius, 1798)																	X	
<i>H. oenanthe</i> (Warncke, 1992)								X		X			X					
<i>H. pictus</i> (Smith, 1853)			X				X									X		
<i>H. pilosulus</i> (Pérez, 1903)		X	X				X									X		
<i>H. praenotatus</i> Förster, 1871			X													X		
<i>H. punctulatissimus</i> Smith, 1842							X										X	
<i>H. signatus</i> (Panzer, 1798)			X				X	X	X	X							X	
<i>H. simus</i> (Vachal, 1895)								X	X					X				
<i>H. soror</i> (Pérez, 1903)			X													X		
<i>H. subbuteus</i> (Warncke, 1992)							X						X					
<i>H. sulphuripes</i> (Gribodo, 1894)								X		X	X						X	
<i>H. taeniolatus</i> Förster, 1871			X	X		X	X		X	X							X	
<i>H. variegatus</i> (Fabricius, 1798)	X		X				X	X										
Halictidae Thomson, 1869																		
Ceylalicetus Strand, 1913																		
<i>C. desertorum</i> (Blüthgen, 1925)								X								X		
<i>C. punjabensis</i> (Cameron, 1907)							X	X	X								X	X
<i>C. variegatus</i> (Olivier, 1789)	X	X	X	X			X	X	X	X							X	X
Dufourea Lepeletier, 1841																		
<i>D. atlantica</i> Ebmer, 1993										X			X					
<i>D. brachycephala</i> (Warncke 1979)							X			X				X				
<i>D. chagrina</i> (Warncke, 1979)								X								X		
<i>D. dysis</i> Ebmer, 1993							X			X			X					
<i>D. exulans</i> Ebmer, 1984							X	X	X				X					
<i>D. gaullei</i> Vachal, 1897			X	X										X				
<i>D. maroccana</i> (Warncke, 1979)								X	X	X			X					
<i>D. paradoxa</i> (Morawitz, 1867)									X							X		
<i>D. petraea</i> Ebmer, 1999								X						X				
<i>D. similis</i> Friese, 1898		X						X	X								X	
<i>D. tingitana</i> Ebmer, 1999									X				X					
Halictus Latreille, 1804																		
<i>H. brunnescens</i> (Eversmann, 1852)					X		X	X	X								X	
<i>H. consobrinus</i> Pérez, 1895			X	X	X			X	X					X				
<i>H. constantinensis</i> Strand, 1910		X					X	X	X					X				
<i>H. fulvipes</i> (Klug, 1817)	X	X	X	X	X	X	X	X	X							X		
<i>H. ifranensis</i> Cockerell, 1931			X				X						X					
<i>H. nadigi</i> Blüthgen, 1934			X	X	X								X					
<i>H. patellatus</i> Morawitz, 1873	X		X	X	X		X	X									X	
<i>H. quadricinctus</i> (Fabricius 1776)	X	X	X	X			X	X	X								X	
<i>H. rubicundus</i> (Christ, 1791)	X							X									X	
<i>H. rufipes</i> (Fabricius, 1793)	X	X	X	X			X	X						X				
<i>H. scabiosae</i> (Rossi, 1790)	X	X	X	X		X	X		X								X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>H. senilis</i> (Eversmann, 1852)		X						X	X								X	
<i>Lasioglossum</i> Curtis, 1833																		
<i>L. aeratum</i> (Kirby, 1802)							X		X								X	
<i>L. albocinctum</i> (Lucas, 1849)	X	X	X		X		X									X		
<i>L. albovirens</i> (Pérez, 1895)	X	X		X		X	X		X					X				
<i>L. algericolellum</i> (Strand 1909)	X	X	X	X	X	X										X		
<i>L. algirum</i> (Blüthgen, 1923)							X	X	X								X	
<i>L. angusticeps</i> (Perkins, 1895)							X										X	
<i>L. articulare</i> (Pérez 1895)		X	X		X		X	X	X								X	
<i>L. aureolum</i> (Pérez, 1903)	X	X	X	X			X	X	X							X		
<i>L. berberum</i> (Benoist, 1941)							X	X						X				
<i>L. bimaculatum</i> (Dours, 1872)	X		X				X		X							X		
<i>L. brevicorne</i> (Schenck, 1868)		X					X		X								X	
<i>L. callizonium</i> (Pérez, 1896)	X	X	X	X	X	X	X	X	X								X	
<i>L. capitale</i> (Pérez 1903)	X	X		X			X		X					X				
<i>L. clavipes</i> (Dours, 1872)							X							X				
<i>L. cleome</i> Pauly, Ebmer & Grabener 2017					X		X	X	X					X				
<i>L. clypeare</i> (Schenck, 1853)		X	X														X	
<i>L. colopiense</i> (Pérez, 1903)		X	X		X		X	X	X					X				
<i>L. corvinum</i> (Morawitz, 1877)	X																X	
<i>L. costulatum</i> (Kriechbaumer, 1873)			X				X										X	
<i>L. crepusculum</i> Ebmer, 2008								X	X				X					
<i>L. cristula</i> (Pérez, 1896)			X	X													X	
<i>L. discum</i> (Smith, 1853)	X	X	X	X	X		X	X									X	
<i>L. euxinicum</i> Ebmer, 1972			X		X		X										X	
<i>L. femorale</i> (Saunders, 1908)								X						X				
<i>L. gibber</i> (Vachal, 1892)									X	X							X	X
<i>L. glabriusculum</i> (Morawitz, 1872)							X										X	
<i>L. grisellinum</i> (Blüthgen, 1931)	X			X	X		X	X	X					X				
<i>L. griseolum</i> (Morawitz, 1872)							X		X								X	
<i>L. immunitum</i> (Vachal, 1895)	X			X			X		X							X		
<i>L. interruptum</i> (Panzer, 1798)						X		X	X								X	
<i>L. leucozonium</i> (Schrank, 1781)			X				X		X								X	
<i>L. limbellum</i> (Morawitz, 1876)		X		X				X									X	
<i>L. littorale</i> (Blüthgen, 1924)				X												X		
<i>L. lucidulum</i> (Schenck, 1861)								X	X								X	
<i>L. malachurum</i> (Kirby 1802)	X		X	X					X								X	
<i>L. masculum</i> (Pérez, 1895)								X	X								X	
<i>L. maurusium</i> (Blüthgen 1935)		X					X	X								X		
<i>L. mediterraneum</i> (Blüthgen, 1926)	X	X		X	X		X	X	X							X		
<i>L. mesosclerum</i> (Pérez, 1903)							X										X	
<i>L. minutissimum</i> (Kirby, 1802)			X					X	X								X	
<i>L. morio</i> (Fabricius, 1793)	X			X				X	X								X	
<i>L. musculoides</i> Ebmer, 1974							X	X	X					X				
<i>L. nitidiusculum</i> (Kirby, 1802)							X	X	X								X	
<i>L. oraniense</i> (Blüthgen, 1930)							X							X				

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>L. pallens</i> (Brullé, 1832)			X		X													X
<i>L. pauliani</i> (Benoist, 1941)			X										X					
<i>L. pauperatum</i> (Brullé, 1832)	X	X	X				X	X	X									X
<i>L. pauxillum</i> (Schenck, 1853)	X	X	X	X	X	X												X
<i>L. perclavipes</i> (Blüthgen, 1934)	X	X	X													X		
<i>L. phoenicurum</i> (Warncke, 1975)									X		X			X				
<i>L. prasinum</i> (Smith, 1848)	X		X	X	X													X
<i>L. pseudoleptocephalum</i> (Blüthgen, 1923)	X			X		X	X							X				
<i>L. pseudoplanulum</i> (Blüthgen, 1924)		X		X		X	X	X	X							X		X
<i>L. punctatissimum</i> (Schenck, 1853)	X							X	X									X
<i>L. pygmaeum</i> (Schenck, 1853)			X				X											X
<i>L. smeathmanellum</i> (Kirby, 1802)							X		X							X		
<i>L. soror</i> (Saunders, 1901)									X									X
<i>L. sphecodimorphum</i> (Vachal, 1892)	X						X		X									X
<i>L. strictifrons</i> (Vachal, 1895)	X	X	X		X				X									X
<i>L. subhirtum</i> (Lepeletier, 1841)	X	X	X		X		X											X
<i>L. transitorium</i> (Schenck, 1868)		X																X
<i>L. villosulum</i> (Kirby, 1802)	X		X		X		X	X	X									X
<i>L. virens</i> (Erichson, 1835)						X	X											X
<i>L. xanthopus</i> (Kirby, 1802)	X			X														X
<i>L. yakourense</i> (Saunders, 1908)	X		X				X							X				
Nomiapis Cockerell, 1919																		
<i>N. bispinosa</i> (Brullé, 1832)									X									X
Nomioides Schenck, 1866																		
<i>N. bluethgeni</i> Pesenko, 1979			X															X X
<i>N. deceptor</i> Saunders, 1908	X	X	X		X		X	X	X	X	X							X X
<i>N. facilis</i> (Smith, 1853)	X	X	X		X		X	X	X									X
<i>N. fortunatus</i> Blüthgen, 1937							X		X					X				
<i>N. minutissimus</i> (Rossi, 1790)	X	X	X	X	X	X	X	X										X X
<i>N. rotundiceps</i> Handlirsch, 1888								X	X	X								X X
<i>N. squamiger</i> Saunders, 1908	X	X	X		X		X	X	X	X								X
<i>N. turanicus</i> Morawitz, 1876	X	X	X					X	X	X	X	X						X X
Pseudapis Kirby, 1900																		
<i>P. dixica</i> (Warncke, 1976)								X			X	X			X			
<i>P. nilotica</i> (Smith, 1875)		X			X	X	X	X	X	X		X						X X
Rophites Spinola, 1808																		
<i>R. algirus</i> Pérez 1895			X															X
<i>R. theryi</i> Benoist, 1930				X					X				X					
Seladonia Robertson, 1918																		
<i>S. caelestis</i> (Ebmer, 1976)							X						X					
<i>S. gemmea</i> (Dours, 1872)	X	X	X	X	X	X	X		X									X
<i>S. gemmella</i> (Pauly, 2015)	X	X	X	X	X	X	X	X	X									X
<i>S. lucidipennis</i> (Smith, 1853)									X									X X
<i>S. smaragdula</i> (Vachal, 1895)	X	X	X	X	X		X	X	X									X
<i>S. subaurata</i> (Rossi, 1792)			X	X				X										X
Sphecodes Latreille, 1804																		

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA	
<i>S. albilabris</i> (Fabricius, 1793)	X		X	X													X		
<i>S. alternatus</i> Smith 1853		X	X	X		X	X	X	X								X		
<i>S. atlassa</i> Warncke, 1992							X							X					
<i>S. crassanus</i> Warncke, 1992																X			
<i>S. crassus</i> Thomson, 1870		X						X									X		
<i>S. croaticus</i> Meyer 1992			X				X										X		
<i>S. dusmeti</i> Blüthgen, 1924			X				X										X		
<i>S. ephippius</i> (Linnaeus, 1767)			X		X												X		
<i>S. geofrellus</i> (Kirby, 1802)							X										X		
<i>S. gibbus</i> (Linnaeus, 1758)			X	X		X	X	X	X								X		
<i>S. hirtellus</i> Blüthgen, 1923	X								X							X			
<i>S. intermedius</i> Blüthgen, 1923							X	X									X		
<i>S. longuloides</i> Blüthgen, 1923							X									X			
<i>S. marginatus</i> Hagens, 1882		X			X		X	X	X								X		
<i>S. monilicornis</i> (Kirby, 1802)				X			X	X	X								X		
<i>S. niger</i> Hagens, 1874							X										X		
<i>S. olivieri</i> Lepeletier, 1825	X						X										X	X	
<i>S. pellucidus</i> Smith, 1845					X		X										X		
<i>S. pseudofasciatus</i> Blüthgen, 1925																	X		
<i>S. puncticeps</i> Thomson, 1870	X		X	X			X										X		
<i>S. rubicundus</i> Hagens, 1875	X																X		
<i>S. rubripes</i> Spinola, 1838		X		X													X		
<i>S. ruficrus</i> (Erichson, 1835)				X			X	X									X		
<i>S. spinulosus</i> Hagens, 1875																	X		
<i>S. zangherii</i> Noskiewicz, 1931							X									X			
Systropha Illiger, 1806																			
<i>S. maroccana</i> Warncke, 1977								X	X	X			X						
<i>S. pici</i> Pérez, 1895			X					X						X					
Vestitohalictus Blüthgen, 1961																			
<i>V. cupidus</i> (Vachal, 1902)		X						X	X								X		
<i>V. nasica</i> (Morawitz, 1876)								X									X		
<i>V. ochropus</i> (Blüthgen, 1923)		X	X					X	X					X					
<i>V. persephone</i> (Ebmer, 1976)		X			X			X	X					X					
<i>V. pici</i> Pérez, 1895	X			X	X		X	X	X								X		
<i>V. pollinosus</i> (Sichel, 1860)	X	X	X	X	X		X	X	X								X		
<i>V. radoszkowskii</i> (Vachal, 1902)		X					X		X								X		
Megachilidae Latreille, 1802																			
Afranthidium Michener, 1948																			
<i>A. alternans</i> (Klug, 1832)							X	X	X	X							X		
<i>A. carduele</i> (Morawitz, 1876)			X														X		
<i>A. malacopygum</i> (Gribodo, 1894)							X		X							X			
<i>A. schulthessii</i> (Friese, 1897)							X		X					X					
Allodioxys Popov, 1947																			
<i>A. limbiferus</i> (Pérez, 1895)								X						X					
Anthidiellum Cockerell, 1904																			
<i>A. strigatum</i> (Panzer, 1805)			X				X										X		

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>Anthidium</i> Fabricius, 1804																		
<i>A. auritum</i> Klug, 1832							X	X	X	X						X		
<i>A. berbericum</i> Pasteels, 1981									X	X			X					
<i>A. cingulatum</i> Latreille, 1809			X	X			X	X	X								X	
<i>A. diadema</i> Latreille, 1809	X		X				X		X								X	
<i>A. eremicum</i> Alfken, 1938		X							X								X	
<i>A. florentinum</i> (Fabricius, 1775)																	X	
<i>A. luctuosum</i> Gribodo, 1894				X										X				
<i>A. manicatum</i> (Linnaeus, 1758)	X	X	X				X										X	
<i>A. oblongatum</i> (Illiger, 1806)			X				X		X								X	
<i>A. pulchellum</i> Klug, 1832								X	X	X	X						X	
<i>A. pullatum</i> Morice, 1916								X	X					X				
<i>A. punctatum</i> Latreille, 1809		X					X										X	
<i>A. taeniatum</i> Latreille, 1809			X		X		X		X								X	
<i>A. tessellatum</i> Klug, 1832								X									X	X
<i>Chelostoma</i> Latreille, 1809																		
<i>C. carinulum</i> Pérez, 1895	X		X		X		X							X				
<i>C. edentulum</i> Pérez, 1895	X		X				X		X					X				
<i>C. rapunculi</i> (Lepeletier, 1841)	X		X	X	X			X	X								X	
<i>Coelioxys</i> Latreille, 1809																		
<i>C. acanthura</i> (Illiger, 1806)			X		X		X	X									X	
<i>C. afer</i> Lepeletier, 1841		X		X	X		X	X	X								X	
<i>C. argenteus</i> Lepeletier, 1841			X				X										X	
<i>C. aurolimbatus</i> Förster, 1853	X		X				X										X	
<i>C. brevis</i> Eversmann, 1852			X	X	X		X	X	X								X	
<i>C. caudatus</i> Spinola, 1838			X				X										X	
<i>C. conoideus</i> (Illiger, 1806)			X		X												X	
<i>C. coturnix</i> Pérez, 1884		X					X		X								X	
<i>C. decipiens</i> Spinola, 1838			X					X									X	
<i>C. echinatus</i> Förster, 1853			X			X	X										X	
<i>C. elegantulus</i> Alfken, 1934								X								X		
<i>C. elongatus</i> Lepeletier, 1841				X			X										X	
<i>C. emarginatellus</i> Pasteels, 1982						X											X	
<i>C. emarginatus</i> Förster, 1853			X														X	
<i>C. haemorrhoea</i> Förster, 1853	X	X	X	X	X		X	X	X								X	
<i>C. inermis</i> (Kirby, 1802)	X						X										X	
<i>C. obtusus</i> Pérez, 1884	X		X			X	X										X	
<i>C. rufescens</i> Lepeletier & Audinet-Serville, 1825	X																X	
<i>Dioxys</i> Lepeletier & Serville, 1825																		
<i>D. ardens</i> Gerstäcker, 1869								X	X							X		
<i>D. cinctus</i> (Jurine, 1807)							X		X								X	
<i>D. heinrichi</i> Warncke, 1977						X	X		X					X				
<i>D. moestus</i> Costa, 1883			X				X										X	
<i>D. pumilus</i> Gerstäcker, 1869			X	X													X	
<i>Eudioxys</i> Mavromoustakis, 1963																		
<i>E. quadrispinosus</i> (Friese, 1899)																	X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
Fidelia Friese, 1899																		
<i>F. ulrikei</i> Warncke, 1980								X	X				X					
Haetosmia Popov, 1952																		
<i>H. circumventa</i> (Peters, 1974)								X	X	X						X		X
Heriades Spinola, 1808																		
<i>H. crenulata</i> Nylander, 1856	X		X	X	X		X	X	X								X	
<i>H. discrepans</i> Benoist, 1938			X				X	X	X						X			
<i>H. rubicola</i> Pérez, 1890			X		X		X	X	X	X							X	
<i>H. truncorum</i> (Linnaeus, 1758)			X														X	
<i>H. wilmattae</i> Cockerell, 1931			X		X		X	X					X					
Hofferia Tkalcù, 1984																		
<i>H. mauritanica</i> (Lucas, 1846)		X	X	X			X	X						X				
Hoplitis Klug, 1807																		
<i>H. adunca</i> (Panzer, 1798)	X	X	X	X		X	X	X	X								X	
<i>H. africana</i> (Warncke, 1990)								X	X								X	
<i>H. alba</i> (van der Zanden, 1994)							X	X	X	X			X					
<i>H. albiscopa</i> (Friese, 1899)			X	X		X	X		X					X				
<i>H. annulata</i> (Latreille, 1811)			X	X		X	X		X								X	
<i>H. anthocopoides</i> (Schenck, 1853)	X	X	X	X	X		X	X									X	
<i>H. antigae</i> (Pérez, 1895)							X										X	
<i>H. aristotelis</i> (Warncke, 1990)			X				X		X				X					
<i>H. ayardi</i> (Benoist, 1929)			X										X					
<i>H. barbiger</i> a (Benoist, 1951)									X				X					
<i>H. bassana</i> (Warncke, 1991)							X	X	X	X				X				
<i>H. batyamae</i> (van der Zanden, 1986)		X						X									X	
<i>H. benoisti</i> (Alfken, 1935)	X	X	X		X	X	X	X	X	X							X	
<i>H. brevispora</i> (Warncke, 1992)		X	X				X	X	X				X					
<i>H. brunnescens</i> (Benoist, 1950)							X						X					
<i>H. bubulca</i> (van der Zanden, 1994)			X					X	X					X				
<i>H. cadiza</i> (Warncke, 1991)	X				X		X		X					X				
<i>H. camelina</i> (Benoist, 1934)			X		X	X	X	X	X					X				
<i>H. campanularis</i> (Morawitz, 1877)							X		X								X	
<i>H. conosimilis</i> van der Zanden, 1992							X		X					X				
<i>H. cristatula</i> (van der Zanden, 1990)			X	X	X		X										X	
<i>H. ctenophora</i> (Benoist, 1934)			X				X	X	X	X				X				
<i>H. curtula</i> (Pérez, 1895)		X															X	
<i>H. epeoliformis</i> (Ducke, 1899)		X	X					X	X	X							X	
<i>H. erythrogastra</i> (Mavromoustakis, 1954)								X	X								X	
<i>H. fertoni</i> (Pérez, 1891)		X	X				X	X	X								X	
<i>H. fortispina</i> (Pérez, 1895)	X	X	X		X		X	X	X	X				X				
<i>H. freygessneri</i> (Friese, 1899)		X	X					X		X				X				
<i>H. goulemina</i> (Warncke, 1991)										X			X					
<i>H. grumi</i> (Morawitz, 1894)		X															X	
<i>H. gusenleitneri</i> (Warncke, 1991)							X	X					X					
<i>H. hartliebi</i> (Friese, 1899)								X	X	X					X			

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>H. hierichonica</i> (Mavromoustakis, 1949)								X	X	X						X		
<i>H. hoggara</i> (Warncke, 1992)								X	X	X				X				
<i>H. ilamana</i> (van der Zanden, 1994)			X						X					X				
<i>H. insularis</i> (Schmiedeknecht, 1885)	X		X		X		X	X	X							X		
<i>H. israelica</i> (Warncke, 1991)		X	X	X	X		X	X	X	X						X		
<i>H. jheringii</i> (Ducke, 1898)							X	X	X							X		
<i>H. jordanica</i> (Warncke, 1991)								X	X	X						X		
<i>H. lamina</i> (Pérez, 1895)		X					X		X					X				
<i>H. lecerfi</i> (Benoist, 1929)		X					X	X	X				X					
<i>H. longispina</i> (Pérez, 1895)		X	X											X				
<i>H. loreicornis</i> (Benoist, 1934)			X				X		X				X					
<i>H. lucidula</i> (Benoist, 1934)		X	X						X				X					
<i>H. maghrebensis</i> (Zanden, 1992)							X	X	X					X				
<i>H. marchali</i> (Pérez, 1902)	X	X	X	X		X	X	X	X							X		
<i>H. meyeri</i> (Benoist, 1934)			X				X	X	X	X						X		
<i>H. minima</i> (von Schulthess, 1924)								X	X	X	X					X		
<i>H. moricei</i> (Friese, 1899)		X	X				X	X	X	X	X						X	
<i>H. mucida</i> (Dours, 1873)		X	X		X	X	X	X	X							X		
<i>H. nisa</i> (Warncke, 1991)								X	X	X				X				
<i>H. occidentalis</i> Müller, 2012		X	X				X									X		
<i>H. ochruros</i> (Warncke, 1991)		X						X	X	X				X				
<i>H. oxypyga</i> (Benoist, 1927)	X		X					X						X				
<i>H. paralias</i> (Mavromoustakis, 1954)								X								X		
<i>H. perezi</i> (Ferton, 1895)			X														X	
<i>H. platalea</i> (Warncke, 1990)								X	X					X				
<i>H. praestans</i> (Morawitz, 1893)			X			X	X	X	X								X	
<i>H. pulchella</i> (Pérez, 1895)		X	X		X		X		X							X		
<i>H. pungens</i> (Benoist, 1929)			X	X		X	X		X					X				
<i>H. quadrispina</i> (Tkalčú, 1992)			X				X	X							X			
<i>H. quinquespinosa</i> (Friese, 1899)		X	X			X	X	X	X	X						X		
<i>H. rugidorsis</i> (Pérez, 1895)			X				X							X				
<i>H. saundersi</i> (Vachal, 1891)				X				X	X							X		
<i>H. simula</i> (Gribodo, 1894)		X	X	X	X			X	X					X				
<i>H. sinuata</i> (Pérez, 1895)			X				X	X	X	X				X				
<i>H. speculum</i> (Benoist, 1934)							X	X	X	X				X				
<i>H. taenioceras</i> (Benoist, 1927)		X	X		X			X	X	X				X				
<i>H. tagmouta</i> (Warncke, 1991)								X	X	X			X					
<i>H. tenuiserrata</i> (Benoist, 1950)							X	X	X	X	X		X					
<i>H. teucarii</i> (Benoist, 1927)			X											X				
<i>H. tigrina</i> (Morawitz, 1872)			X													X		
<i>H. tricolor</i> (Saunders, 1908)								X									X	
<i>H. tridentata</i> (Dufour & Perris, 1840)	X								X						X			
<i>H. ursina</i> (Friese, 1920)			X											X				
<i>H. villiersi</i> (Benoist, 1950)		X	X					X	X	X	X			X				X
<i>H. zaianorum</i> (Benoist, 1927)		X	X		X				X					X				
<i>H. zonalis</i> (Pérez, 1895)			X					X	X	X						X		

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>Icterantheidium</i> Michener, 1948																		
<i>I. afrum</i> (Lepeletier, 1841)		X	X						X					X				
<i>I. ferrugineum</i> (Fabricius, 1787)	X	X		X			X	X	X	X							X	X
<i>I. grohmanni</i> (Spinola, 1838)		X					X		X								X	
<i>I. laterale</i> (Latreille, 1809)			X														X	
<i>Lithurgus</i> Latreille, 1825																		
<i>L. cephalotes</i> van der Zanden, 1977			X					X					X					
<i>L. chrysurus</i> Fonscolombe, 1834			X				X										X	
<i>L. cornutus</i> (Fabricius, 1787)						X	X										X	
<i>Megachile</i> Latreille, 1802																		
<i>M. albipila</i> Pérez, 1896			X				X	X	X							X		
<i>M. albisecta</i> (Klug, 1817)			X				X		X								X	
<i>M. albohirta</i> (Brullé, 1839)				X		X		X	X					X				
<i>M. apicalis</i> Spinola, 1808			X		X		X	X									X	
<i>M. arabica</i> Friese, 1901									X								X	X
<i>M. atlantica</i> Benoist, 1934		X	X				X									X		
<i>M. callensis</i> Ferton, 1914				X										X				
<i>M. calloleuca</i> Cockerell, 1931			X										X					
<i>M. centuncularis</i> (Linnaeus, 1758)				X														X
<i>M. cinnamomea</i> Alfken, 1926							X	X	X	X								X
<i>M. crassula</i> Pérez, 1895							X	X					X					
<i>M. deceptor</i> Pérez, 1890						X	X		X									X
<i>M. ericetorum</i> Lepeletier, 1841			X				X	X	X									X
<i>M. fertoni</i> Pérez 1895			X				X									X		
<i>M. incerta</i> Radoszkowski, 1876												X						X
<i>M. inexpectata</i> Rebmann, 1968								X	X	X								X
<i>M. leachella</i> Curtis, 1828							X		X									X
<i>M. lefebvrei</i> (Lepeletier, 1841)			X															X
<i>M. levistriga</i> Alfken, 1934									X							X		
<i>M. marginata</i> Smith, 1853			X				X	X	X									X
<i>M. maritima</i> (Kirby, 1802)			X					X										X
<i>M. mauritaniae</i> (Tkalcù, 1992)								X							X			
<i>M. melanogaster</i> Eversmann, 1852			X					X										X
<i>M. melanota</i> Pérez, 1895			X	X										X				
<i>M. mguildensis</i> Benoist, 1940			X											X				
<i>M. micrargyrea</i> Cockerell, 1931							X						X					
<i>M. minutissima</i> Radoszkowski, 1876								X	X									X
<i>M. nasidens</i> Friese, 1898								X	X	X						X		
<i>M. nigripes</i> Spinola, 1838										X						X		
<i>M. opacifrons</i> Pérez, 1897								X	X							X		
<i>M. parietina</i> (Geoffroy, 1785)			X	X			X											X
<i>M. patellimana</i> Spinola, 1838								X										X X
<i>M. pilidens</i> Alfken, 1924	X		X				X	X										X
<i>M. pusilla</i> Peirez, 1888	X				X			X	X	X						X		
<i>M. rotundata</i> (Fabricius, 1793)	X					X												X
<i>M. rufitarsis</i> (Lepeletier, 1841)	X						X							X				

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>M. sicula</i> (Rossi, 1792)	X		X	X				X	X	X						X		
<i>Metadioxys</i> Popov, 1947																		
<i>M. formosa</i> (Morawitz, 1875)								X									X	
<i>Osmia</i> Panzer, 1806																		
<i>O. alfkenii</i> Duce, 1899					X			X	X							X		
<i>O. anceyi</i> Pérez, 1879		X	X			X	X	X	X							X		
<i>O. argyropyga</i> Pérez, 1879		X	X					X								X		
<i>O. bicornis</i> (Linnaeus, 1758)	X	X	X			X											X	
<i>O. brevicornis</i> (Fabricius, 1798)			X														X	
<i>O. caerulea</i> (Linnaeus, 1758)	X	X	X	X	X	X	X	X	X	X							X	
<i>O. cephalotes</i> Morawitz, 1870			X	X					X								X	
<i>O. cinnabarina</i> Pérez, 1895	X	X	X					X	X							X		
<i>O. corniculata</i> (van der Zanden, 1989)							X		X				X					
<i>O. cyanoxantha</i> Pérez, 1879			X					X	X							X		
<i>O. derasa</i> Pérez, 1895			X			X	X	X	X						X			
<i>O. dido</i> Gribodo, 1894			X						X				X					
<i>O. dimidiata</i> Morawitz, 1870									X								X	
<i>O. emarginata</i> Lepeletier, 1841			X													X		
<i>O. fallax</i> Pérez, 1895			X										X					
<i>O. ferruginea</i> Latreille, 1811	X	X	X		X	X	X	X	X	X						X		
<i>O. frieseana</i> Duce, 1899		X	X		X		X	X	X							X		
<i>O. gallarum</i> Spinola, 1808	X		X				X		X							X		
<i>O. gemma</i> Pérez, 1896			X					X								X		
<i>O. gracilicornis</i> Pérez, 1895		X	X						X							X		
<i>O. heteracantha</i> Pérez, 1896	X	X	X	X			X	X	X							X		
<i>O. labialis</i> Pérez, 1879	X															X		
<i>O. latreillei</i> (Spinola, 1806)	X	X	X	X	X		X	X	X	X						X		
<i>O. lazulina</i> Benoist, 1928								X	X							X		
<i>O. leaiana</i> (Kirby, 1802)			X					X	X								X	
<i>O. lhotelleriei</i> Pérez, 1887			X					X								X		
<i>O. ligurica</i> Morawitz, 1868	X		X														X	
<i>O. lobata</i> Friese, 1899			X				X		X							X		
<i>O. lunata</i> Benoist, 1929				X			X		X							X		
<i>O. melanogaster</i> Spinola, 1808	X	X	X					X								X		
<i>O. nasoproducta</i> Fertton, 1909			X													X		
<i>O. nasuta</i> Friese, 1899			X				X	X	X							X		
<i>O. niveata</i> (Fabricius, 1804)	X	X	X				X	X	X							X		
<i>O. niveocincta</i> Pérez, 1879		X	X				X	X	X							X		
<i>O. notata</i> (Fabricius, 1804)	X	X	X	X	X	X	X	X	X	X						X		
<i>O. pinguis</i> Pérez, 1895		X	X			X	X	X	X	X			X					
<i>O. punica</i> Pérez, 1896		X	X				X	X	X						X			
<i>O. rufigastrea</i> Lepeletier, 1841		X											X					
<i>O. rufohirta</i> Latreille, 1811	X		X			X											X	
<i>O. rutila</i> Erichson, 1835	X					X			X				X					
<i>O. scutellaris</i> Morawitz, 1868	X	X	X	X					X							X		
<i>O. signata</i> Erichson, 1835			X	X				X	X	X							X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>O. sparsipuncta</i> Alfken, 1914		X	X				X		X					X				
<i>O. spinicoxa</i> Müller, 2020									X				X					
<i>O. submicans</i> Morawitz, 1870	X	X	X		X	X	X	X	X	X						X		
<i>O. tergestensis</i> Duce, 1897			X				X	X	X								X	
<i>O. tingitana</i> Benoist, 1969	X								X						X			
<i>O. tricornis</i> Latreille, 1811		X	X		X		X	X	X								X	
<i>O. tunensis</i> (Fabricius, 1787)	X	X	X				X	X									X	
<i>O. unicoloris</i> Pérez, 1895	X		X	X			X	X	X	X				X				
<i>O. versicolor</i> Latreille, 1811	X		X	X			X		X								X	
Pararhophites Friese, 1898																		
<i>P. quadratus</i> Friese, 1898												X			X			
Prodiorys Friese, 1914																		
<i>P. carnea</i> (Gribodo, 1894)							X										X	
<i>P. longiventris</i> (Pérez, 1895)																	X	
<i>P. rufiventris</i> (Lepelletier, 1841)														X				
Protosmia Duce, 1900																		
<i>P. capitata</i> (Schletterer, 1889)		X	X	X				X	X								X	
<i>P. decipiens</i> (Benoist, 1935)			X				X	X	X	X			X					
<i>P. exenterata</i> (Pérez, 1895)			X					X	X								X	
<i>P. glutinosa</i> (Giraud, 1871)			X						X								X	
<i>P. luctuosa</i> (Lucas, 1848)							X	X	X					X				
<i>P. schwarzi</i> Griswold, 2013								X						X				
<i>P. stigmatica</i> (Pérez, 1895)							X										X	
Pseudoanthidium Friese, 1898																		
<i>P. beaumonti</i> (Benoist, 1950)									X					X				
<i>P. bicoloripenne</i> (Pasteels, 1981)									X				X					
<i>P. melanurum</i> (Klug, 1832)							X										X	
<i>P. nanum</i> (Mocsáry, 1881)	X						X	X	X								X	
<i>P. octodentatum</i> (Pérez, 1895)							X		X								X	
<i>P. reticulatum</i> (Mocsáry, 1884)	X																X	
<i>P. scapulare</i> (Latreille, 1809)																	X	
<i>P. stigmaticorne</i> (Dours, 1873)			X				X		X					X				
Pseudoheriades Peters, 1970																		
<i>P. moricei</i> (Friese, 1897)									X									X
Rhodanthidium Isensee, 1927																		
<i>R. acuminatum</i> (Mocsáry, 1884)							X		X								X	
<i>R. infuscatum</i> (Erichson, 1835)		X	X				X										X	
<i>R. ordonezi</i> (Dusmet y Alonso 1915)			X	X	X	X	X	X	X				X					
<i>R. siculum</i> (Spinola, 1838)		X		X			X		X								X	
<i>R. sticticum</i> (Fabricius, 1787)		X	X														X	
Stelis Panzer, 1806																		
<i>S. aegyptiaca</i> Radoszkowski, 1876								X										X
<i>S. breviscula</i> Nylander, 1848																		X
<i>S. maroccana</i> Warncke, 1992								X						X				
<i>S. minuta</i> Lepelletier & Audinet-Serville, 1825			X				X		X								X	
<i>S. murina</i> Pérez, 1883	X	X		X				X	X	X							X	

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TABLE 1. (Continued)

Bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL	EN	NE	NA	WP	PA	SA
<i>S. nasuta</i> (Latreille, 1809)			X				X	X									X	
<i>S. ornatura</i> (Klug, 1807)							X										X	
<i>S. phaeoptera</i> (Kirby, 1802)	X	X		X			X	X	X								X	
<i>S. punctulatissima</i> (Kirby, 1802)		X	X														X	
<i>S. saxicola</i> Warncke, 1992		X												X				
<i>S. signata</i> (Latreille, 1809)								X									X	
<i>S. simillima</i> Morawitz, 1876			X														X	
Stenoheriades Tkalců, 1984																		
<i>S. maroccana</i> (Benoist, 1928)			X													X		
Trachusa Panzer, 1804																		
<i>T. laeviventris</i> (Dours, 1873)		X	X														X	
<i>T. maghrebensis</i> Kasperek, 2020		X			X									X				
<i>T. varia</i> (Olivier, 1789)		X												X				
Wainia Tkalců, 1980																		
<i>W. sexsignata</i> (Benoist, 1950)										X	X		X					
Melittidae Schenck, 1860																		
Dasygoda Latreille, 1802																		
<i>D. albimana</i> Pérez, 1905		X					X	X	X								X	
<i>D. cingulata</i> Erichson, 1835	X		X	X						X							X	
<i>D. crassicornis</i> Friese, 1896	X						X										X	
<i>D. dusmeti</i> Quilis, 1928	X			X			X										X	
<i>D. hirtipes</i> (Fabricius, 1793)		X		X				X										X
<i>D. maura</i> Pérez, 1895	X	X	X	X		X	X	X	X					X				
<i>D. oraniensis</i> Pérez, 1895	X	X					X	X	X					X				
<i>D. sinuata</i> Pérez, 1895	X	X			X		X	X	X	X						X		
<i>D. visnaga</i> (Rossi, 1790)	X			X												X		
Melitta Kirby, 1802																		
<i>M. aegyptiaca</i> (Radoszkowski, 1891)	X						X	X	X	X	X						X	
<i>M. maura</i> (Pérez, 1896)	X			X		X	X	X	X								X	
<i>M. nigricans</i> Alfken, 1905							X										X	
<i>M. schmiedeknechti</i> Friese, 1898	X	X	X	X	X		X	X	X	X								X
Promelitta Warncke, 1977																		X
<i>P. alboclypeata</i> (Friese, 1900)		X	X					X	X	X					X			X

TABLE 2. Checklist of the endemic bees of Morocco with regional distributions (Abbreviations, TC: Tanger-Tetouan-Al Hoceima region; OF: Oriental region; FK: Fès-Meknès region; RK: Rabat-Salé-Kénitra region; BK: Béni Mellal-Khénifra region; CS: Casablanca-Settat region; MS: Marrakesh-Safí region; DT: Drâa-Tafilalet region; SS: Souss-Massa region; GN: Guelmim-Oued Noun region; LS: Laâyoune-Sakia El Hamra region; OL: Dakhla-Oued Ed-Dahab region).

Endemic bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL
Andrenidae Latreille, 1802												
Andrena Fabricius, 1775												
<i>A. acutidentis</i> Wood, 2020									X			
<i>A. aetherea</i> Warncke, 1974					X		X		X			
<i>A. breviceps</i> Wood, 2020								X				

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TABLE 2. (Continued)

Endemic bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL
<i>A. farinosoides</i> Wood, 2020		X						X				
<i>A. gregaria</i> Warncke, 1974						X	X					
<i>A. guichardi</i> Warncke, 1980									X	X		
<i>A. hebescens</i> Wood, 2020									X	X		
<i>A. insignis</i> Warncke, 1974			X	X	X	X	X					
<i>A. laurivora</i> Warncke, 1974					X		X					
<i>A. niveofacies</i> Wood, 2020							X					
<i>A. pela</i> Warncke, 1974						X	X		X	X		
<i>A. semiadesus</i> Wood, 2020			X					X				
<i>A. sparsipunctata</i> Wood, 2020		X						X				
<i>A. tenebricorpus</i> Wood, 2020										X		
<i>A. triangulivalvis</i> Wood, 2020								X				
Borgatomelissa Patiny, 2000												
<i>B. flavimaura</i> Ortiz-Sánchez & Patiny 2019			X									
Camptopoeum Spinola, 1843												
<i>C. nadigi</i> (Warncke, 1972)			X	X			X		X			
<i>C. pseudoruber</i> (Warncke, 1987)							X					
Clavipanurgus Warncke, 1972												
<i>C. desertus</i> (Warncke, 1987)								X	X			
Panurgus Panzer, 1806												
<i>P. acutus</i> Patiny, 2002							X		X			
<i>P. intermedius</i> Rozen, 1971	X	X		X			X		X	X		
<i>P. minor</i> Warncke, 1972									X			
<i>P. ovatulus</i> Warncke, 1972	X	X	X	X	X	X	X	X				
<i>P. rungsii</i> Benoist, 1937		X	X		X	X	X	X	X			
Plesiopanurgus Cameron, 1907												
<i>P. zizus</i> (Warncke, 1987)			X					X				
Apidae Linnaeus, 1758												
Ammobates Latreille, 1809												
<i>A. buteus</i> (Warncke, 1983)												
Ceratina Latreille, 1802												
<i>C. verhoeffi</i> Terzo & Rasmont, 1997							X	X	X			
Eucera Scopoli, 1770												
<i>E. agadirensis</i> (Benoist, 1943)									X			
<i>E. mauritaniae</i> Tkalčů, 1984												
<i>E. nadigi</i> (Schulthess, 1924)				X								
<i>E. occidentalis</i> Risch, 1999		X	X									
Nomada Scopoli, 1770												
<i>N. flavoscutellata</i> Schwarz & Smit, 2018							X	X	X			
<i>N. marrakechi</i> Schwarz & Smit, 2020							X					
<i>N. ortegai</i> Dusmet y Alonso, 1915							X					
<i>N. regli</i> Schwarz, Smit & Ockermüller, 2020			X				X	X	X			
Colletidae Lepeletier, 1841												
Colletes Latreille, 1802												

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TABLE 2. (Continued)

Endemic bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL
<i>C. atlassus</i> Kuhlmann, 2002							X	X				
<i>C. minutus</i> Kuhlmann, 2002							X	X	X			
<i>C. niveatus</i> Kuhlmann, 2002								X				
<i>C. wahisi</i> Kuhlmann, 2002	X	X						X	X			
<i>Hylaeus</i> Fabricius, 1793												
<i>H. atlassus</i> (Warncke, 1981)							X					
<i>H. impressiventris</i> (Benoist, 1960)			X						X			
<i>H. livius</i> (Warncke, 1992)							X					
<i>H. oenanthe</i> (Warncke, 1992)								X		X		
<i>H. subbuteus</i> (Warncke, 1992)							X					
Halictidae Thomson, 1869												
<i>Dufourea</i> Lepeletier, 1841												
<i>D. atlantica</i> Ebmer, 1993											X	
<i>D. dysis</i> Ebmer, 1993							X				X	
<i>D. exulans</i> Ebmer, 1984							X	X	X			
<i>D. maroccana</i> (Warncke, 1979)								X	X	X		
<i>D. tingitana</i> Ebmer, 1999									X			
<i>Halictus</i> Latreille, 1804												
<i>H. ifranensis</i> Cockerell, 1931			X				X					
<i>H. nadigi</i> Blüthgen, 1934			X	X	X							
<i>Lasioglossum</i> Curtis, 1833												
<i>L. crepusculum</i> Ebmer, 2008								X	X			
<i>L. pauliani</i> (Benoist, 1941)			X									
<i>Rophites</i> Spinola, 1808												
<i>R. theryi</i> Benoist, 1930				X					X			
<i>Seladonia</i> Robertson, 1918												
<i>S. caelestis</i> (Ebmer, 1976)							X					
<i>Systropha</i> Illiger, 1806												
<i>S. maroccana</i> Warncke, 1977								X	X	X		
Megachilidae Latreille, 1802												
<i>Anthidium</i> Fabricius, 1804												
<i>A. berbericum</i> Pasteels, 1981									X	X		
<i>Fidelia</i> Friese, 1899												
<i>F. ulrikei</i> Warncke, 1980								X	X			
<i>Heriades</i> Spinola, 1808												
<i>H. wilmattae</i> Cockerell, 1931			X		X		X	X				
<i>Hoplitis</i> Klug, 1807												
<i>H. alba</i> (van der Zanden, 1994)							X	X	X	X		
<i>H. aristotelis</i> (Warncke, 1990)			X				X		X			
<i>H. ayardi</i> (Benoist, 1929)			X									
<i>H. barbiger</i> (Benoist, 1951)									X			
<i>H. brevispora</i> (Warncke, 1992)		X	X				X	X	X			
<i>H. brunnescens</i> (Benoist, 1950)							X					
<i>H. goulemina</i> (Warncke, 1991)										X		

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TABLE 2. (Continued)

Endemic bee species	TC	OF	FK	RK	BK	CS	MS	DT	SS	GN	LS	OL
<i>H. gusenleitneri</i> (Warncke, 1991)							X	X				
<i>H. lecerfi</i> (Benoist, 1929)		X					X	X	X			
<i>H. loreicornis</i> (Benoist, 1934)			X				X		X			
<i>H. lucidula</i> (Benoist, 1934)		X	X						X			
<i>H. tagmouta</i> (Warncke, 1991)								X	X	X		
<i>H. tenuiserrata</i> (Benoist, 1950)							X	X	X	X	X	
<i>Lithurgus</i> Latreille, 1825												
<i>L. cephalotes</i> van der Zanden, 1977			X					X				
<i>Megachile</i> Latreille, 1802												
<i>M. calloleuca</i> Cockerell, 1931			X									
<i>M. crassula</i> Pérez, 1895							X	X				
<i>M. micrargyrea</i> Cockerell, 1931							X					
<i>Osmia</i> Panzer, 1806												
<i>O. spinicoxa</i> Müller, 2020												
<i>Protosmia</i> Ducke, 1900												
<i>P. decipiens</i> (Benoist, 1935)			X				X	X	X	X		
<i>Pseudoanthidium</i> Friese, 1898												
<i>P. bicoloripenne</i> (Pasteels, 1981)									X			
<i>Rhodanthidium</i> Isensee, 1927												
<i>R. ordonezi</i> (Dusmet y Alonso 1915)			X	X	X	X	X	X	X			
<i>Wainia</i> Tkalců, 1980												
<i>W. sexsignata</i> (Benoist, 1950)										X	X	

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