

## RFLP variation in the mitochondrial AT-rich region of *Apis mellifera*

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The complete AT-rich region of the mitochondrial DNA has been amplified in Macaronesian *Apis mellifera* populations and submitted to a RFLP assay. The size of the amplified fragment was ca. 1600 bp and due to the high AT content, it was restricted with the enzyme DraI, which target sequence is TTAA. Ten haplotypes (AT1-AT10) were observed in the 31 analyzed honeybees. The haplotype AT2 was detected on every sampled island except on La Palma, and showed an overall frequency of 0.419, whereas particular haplotypes have been observed on every island although at a low frequency (< 0.065). The different haplotype diversity underlying in the AT-rich region is discussed in comparison to that depicted from the tRNA<sub>leu-cox2</sub> intergenic region.

## The nest of the bumblebee *Bombus (Mendacibombus) shaposhnikovi* Skorikov (Hymenoptera: Apidae)

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*Bombus shaposhnikovi* Skorikov is a rare species of the subgenus *Mendacibombus* Skorikov and is known from mountain meadows of Eastern Anatolia, Caucasus and Northern Iran. The subgenus *Mendacibombus* shows many plesiomorphic characters and it is considered as the sister-group of all other bumblebees subgenera. The nesting behaviour of this subgenus is highly characteristic and quite unique among bumblebees. However this behaviour is only known from *Bombus mendax* Gerstaecker. Here we describe for the first time the nest of *B. shaposhnikovi*. A nest was discovered near a spring at 2295 m in Murgul (Turkey, Artvin region) on the 12<sup>th</sup> August 2007. It was established in an abandoned rodent nest. Except the absence of canopy in the nest of *B. shaposhnikovi*, the architecture confirms the *Mendacibombus* particularities: - larvae are reared individually in hexagonal cells, - pollen and honey pots are built out of the brood, - food reserves are very abundant. The nest is in the late post-reproductive phase. It appears to suffer from a high level of parasitism: within the 11 bumblebee cocoons discovered, 2 *B. shaposhnikovi* male pupae and 9 *Mutilla saltensis* Radoszkowski were found. All adult individuals (18 workers and 6 males) had yellowish bands except one worker with grey-white bands. From the observation of this worker, *B. shaposhnikovi* seems to be dimorphic in coloration. This polymorphism in coloration gives further evidence that the yellowish *B. shaposhnikovi* and the greyish *B. handlirschianus* Vogt are conspecific. This conspecific status had already been suggested by a recent molecular study based on five genes.