

Appendix

Localities of collecting trip in Ethiopia, GTI2 (October 10-30, 2011)

By

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Landscape from Chenek camp, Simien Mountains

November 18, 2011

12.X.2011

- 1) Sebeta, $8^{\circ}54'23.8''$ N $38^{\circ}35'26.7''$ E, 2166m, on *Bidens prestinaria*, *Solanum incanum*, *Nicandra physalodes*, *Echinops hispidus*. Yellow pan traps.



Bidens prestinaria (Asteraceae)



Solanum incanum (Solanaceae)



Echinops hispidus (Asteraceae)



Nicandra physalodes (Solanaceae)

- 2) Sebeta, San Mary, (no GPS), on *Achyranthes aspera* and cabbage crops.



13.X.2011

3) Fiche, $9^{\circ}47'29.1''$ N $38^{\circ}41'02.6''$ E, 3040m, on *Trifolium ruepellianum* and *Bidens macroptera*.

4) Fiche, $9^{\circ}47'44''$ N $38^{\circ}40'48''$ E, 3073m, crops of *Guizotia abyssinica*, on *Bidens macroptera* and *Plectranthus lanuginosus*



Plectranthus lanuginosus (Lamiaceae)

Bidens macroptera (Asteraceae)



Crop of *Guizotia abyssinica*

Guizotia abyssinica (Asteraceae)

5) Goha Tsiyon, before Abay Gorge (= Blue Nile Gorge), $10^{\circ}01'31.8''$ N $38^{\circ}14'43.3''$ E, 2484m, on *Plectranthus lanuginosus*, *P. ornatus* and *Achyranthes aspera*.



Vue on Blue Nile Gorge



Plectranthus lanuginosus (Lamiaceae)

6) Abay Gorges, 1337m, 10°05'38.7" N 38°11'19.6" E, on *Flaveria trinervia* and *Tridax procumbens*



Landscape in Abay Gorge



Flaveria trinervia (Asteraceae)

7) Abay Gorges, 10°08'29.7" N 38°09'54.0" E, 2237m, on cultivated *Brassica*.



8) Before Debre Markos, $10^{\circ}16'59.9''$ N $37^{\circ}46'54.0''$ E, 2464m, *Brassica* in maize crop



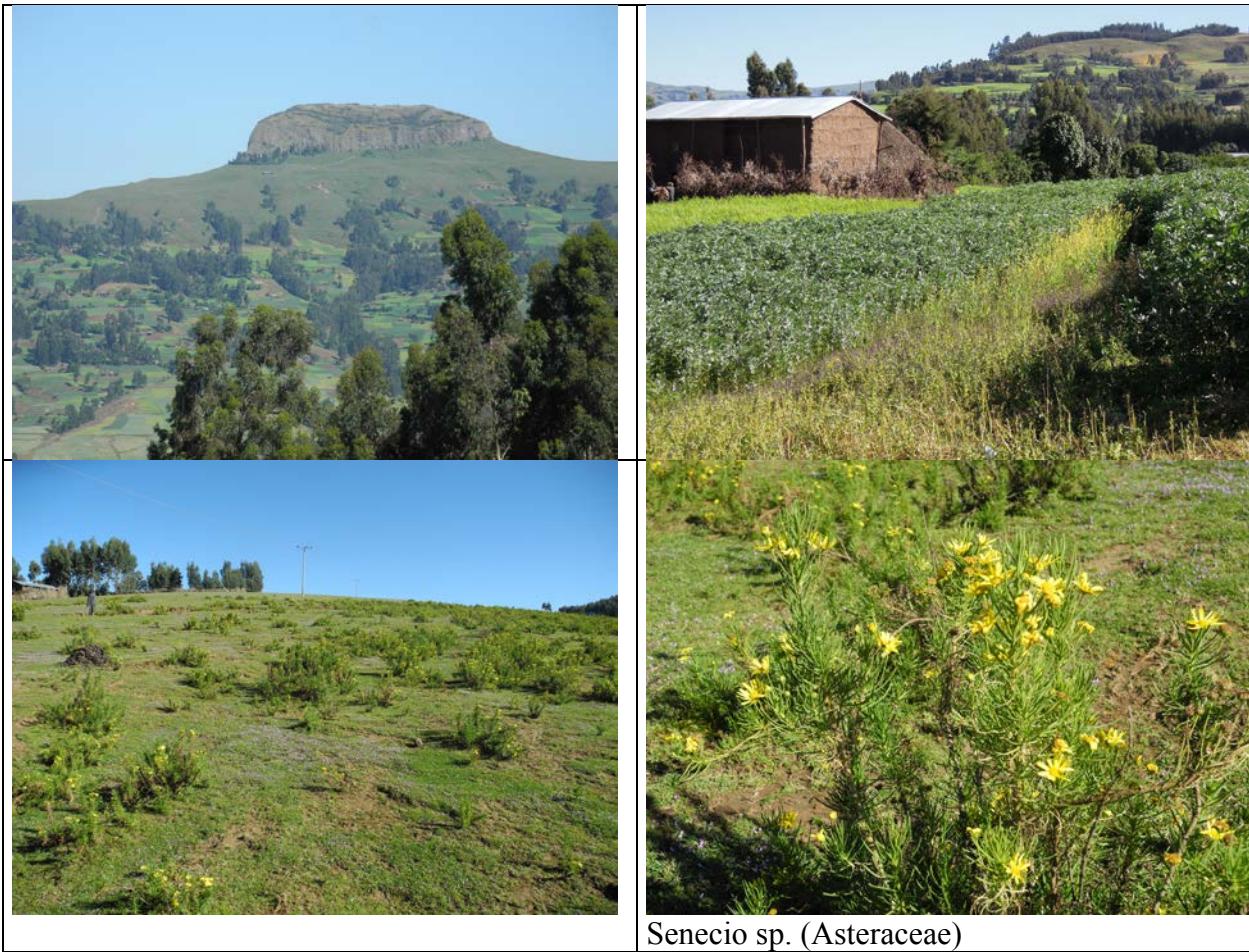
14.X.2011

9) road to Mt Choke, $10^{\circ}32'32.4''$ N $37^{\circ}45'28.8''$ E, 2918m, on *Brassica*

10) road to Mt Choke, $10^{\circ}32'50.2''$ N $37^{\circ}46'06.1''$ E, 3146m, on *Senecio* sp.



11) road to Mt Choke, $10^{\circ}34'49.2''$ N $37^{\circ}47'14.8''$ E, 3261m, on *Senecio* sp. and *Brassica*.



Senecio sp. (Asteraceae)

12) Debre Markos, $10^{\circ}22'30.8''$ N $37^{\circ}44'15.8''$ E, 2536m, crops.

13) Embuli near Dembecha, $10^{\circ}31'03.8''$ N $37^{\circ}31'39.9''$ E, 2146m, along small stream, on *Brassica*, *Trifolium rueppelianum*, *Bidens prestinaria*.

14) Bure, $10^{\circ}47'50.8''$ N $37^{\circ}03'16.1''$ E, 2559m, humid crops with Fabaceae and *Brassica*, on *Trifolium rueppelianum* and *Justicia schimperiana*.



15.X.2011

15) Blue Nile Falls (= Tis Abay Falls), 11°29'10.8" N 37°35'40.3" E, 1616m, on *Cassia alata*, *Justicia schimperana*, *Lagenaria abyssinica*, *Cordia africana*, *Ipomoea tenuirostris*.



K.A, J-L. B, Z.A. and A.P. at Blue Nile Falls



Landscape near Blue Nile Falls



Bush of *Cassia alata*



Cassia alata (Caesalpiniaceae)



Lagenaria abyssinica, fruits and flowers (Cucurbitaceae)



Cordia africana (Boraginaceae)

16) Hamusit, N. Bahir Dar, 11°42'09.8" N 37°29'39.6" E, 1890m, on *Brassica*.

17) Lake Tana, near Werota, 11°50'31.1" N 37°38'14.5" E, 1809m, on *Ipomoea* in swamps.



Ipomoea sp. (Convolvulaceae)

18) Near Emfraz Guarza, 12°09'32.7" N 37°44'06.4" E, 2112m, small forest, by sweeping.



16.X.2011

19) Amba Giyorgis, 12°46'49.3" N 37°38'23.1" E, 2855m, on *Salvia schimperi* and *Silybum marianum* (not visited by bees).



Silybum marianum (Asteraceae)

20) Godibedjei, 12°47'47.5" N 37°41'23.0" E, 2698m, on *Bidens prestinaria* and cultivated *Brassica*.

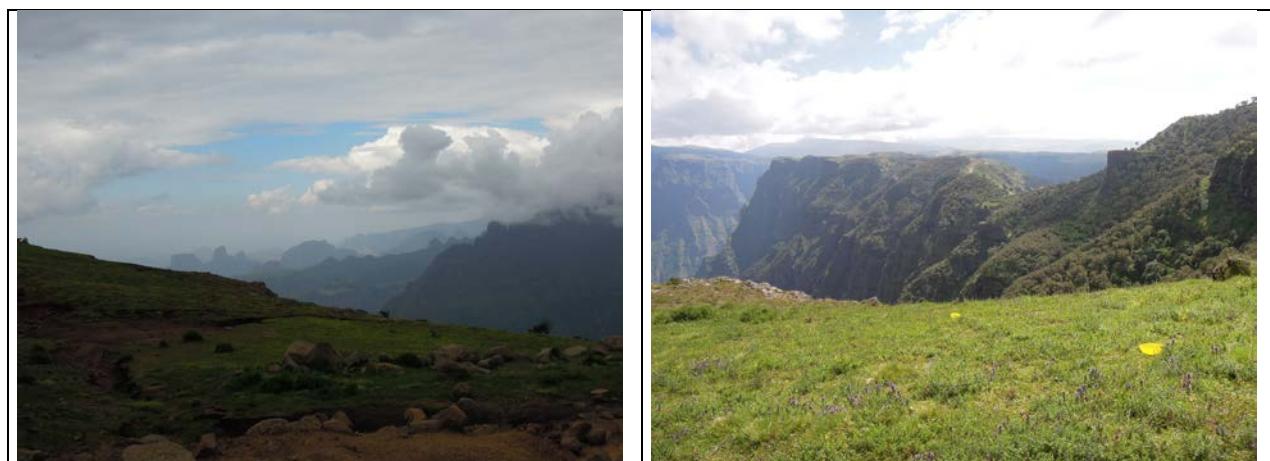


21) Dabat, 12°56'23.7" N 37°44'46.6" E, 2618m, crops, on *Guizotia scabra*.



17.X.2011

22) Simien Mountains, near Sankaber Camp, 13°13'55.0" N 38°01'23.0" E, 3252m, montane grassland with *Trifolium acaule* and Lamiaceae. Collection using yellow pan traps and net.





Erica arborea (Ericaceae)



Lamiaceae



Lamiaceae



Dense carpet of *Trifolium acaule*



Trifolium acaule (Fabaceae)



Bidens macroptera (Asteraceae)



Cyanotis sp. (Commelinaceae)

23) Simien Mountains, near Sankaber Camp, 13°13'34.1 N 38°01.47.3" E, 3191m, escarpment with *Ferula communis*.





Ferula communis (Apiaceae)

24) Simien Mountains, near Sankaber Camp, 13°13'55.7" N 38°02'28.8" E, 3203m, on red Liliaceae and *Pterocephalus frutescens*. (also on 18.X).



Grassland with *Pterocephalus frutescens* (Dipsacaceae)



Liliaceae



Hebenstretia dentata (Scrophulariaceae)



Liliaceae



Pterocephalus frutescens (Dipsacaceae)

25) Simien Mountains, near Chennek Camp, 13°14'.37.2" N 38°09'15.0" E, 3690m, on *Kniphofia foliosa*.



Kniphofia foliosa (Liliaceae)



Boraginaceae

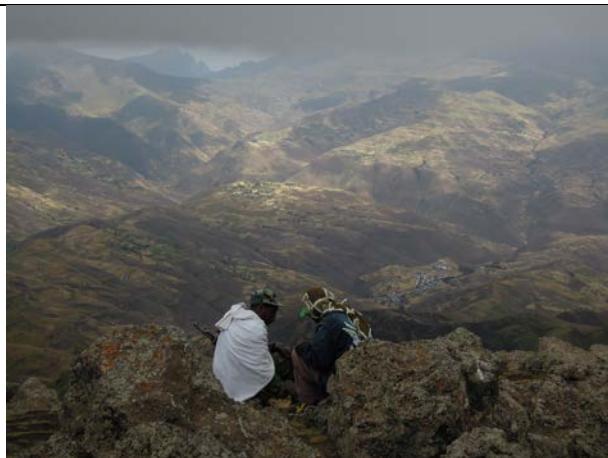


Senecio sp.



Carduus camaecephalus (Asteraceae)

25bis) Simien Mountains, Bwahit Pass, 4400m altitude.



4400m



4400m



4200m, giant *Lobelia*



4200m



4200 m, giant *Lobelia*



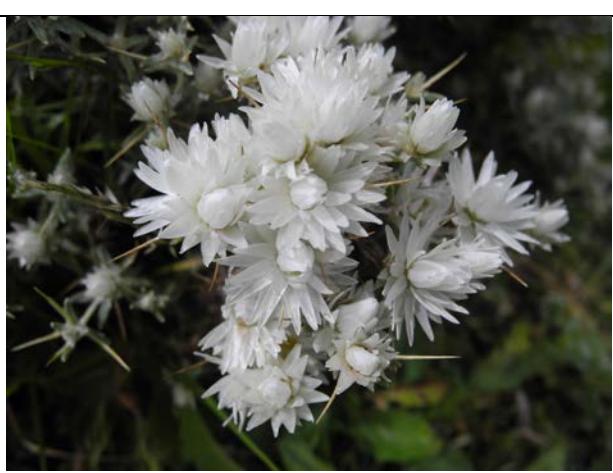
4200 m, landscape with an Abyssinian ibex
(*Walia ibexes*)



4200 m



Helichrysum sp.



Helichrysum



18.X.2011

26) Simien Mountains, near Chennek Camp, $13^{\circ}14'53.0''$ N $38^{\circ}10'07''$, 3575m, escarpment with blue Lamiaceae, *Euphorbia schimperiana*, *Kniphofia foliosa*, *Trifolium acaule*, *Cirsium* sp., *Conyzia steudelli*. Collection by yellow pan traps and nets.



Escarpment with *Kniphofia* (Liliaceae)



Kniphofia foliosa with *Afrodialictus*



Trifolium acaule (Fabaceae)





Echinops sp. (Asteraceae)



Carduus sp. (Asteraceae)



Asteraceae





Asteraceae

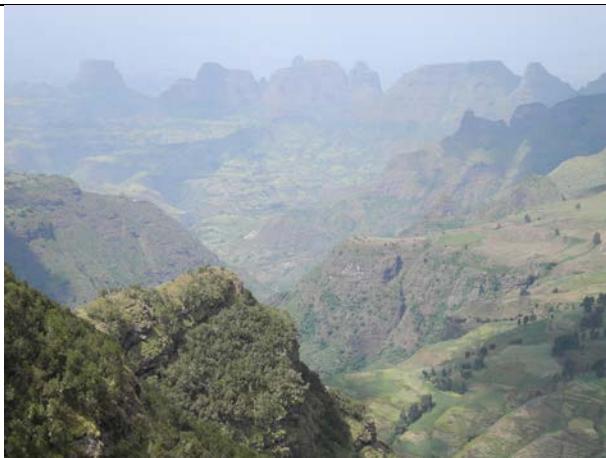


Euphorbia schimperiana (Euphorbiaceae)



Euphorbia schimperiana

27) Simien Mountains, Chenek Camp , 13°15'43.4" N 38°11'36.8" E, 3607m, on *Trifolium acaule*. *Helichrysum* sp. and *Erica arborea* (not visited by bees).





Boraginaceae



Asteraceae



Erica arborea

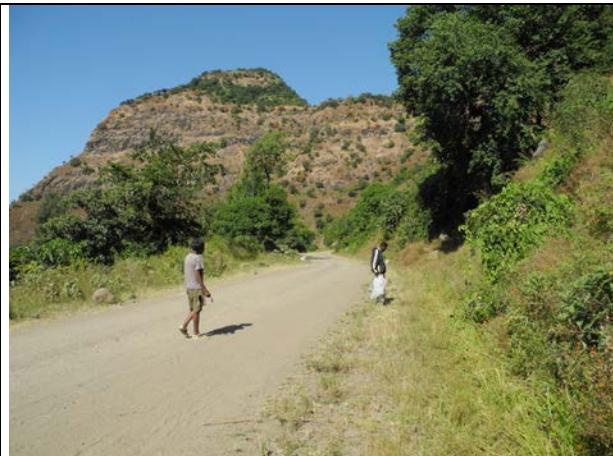


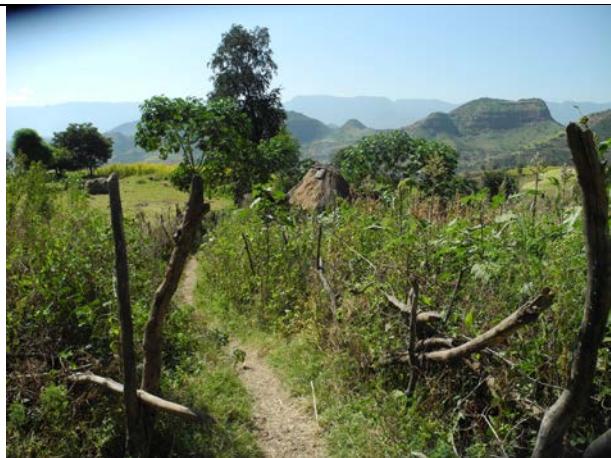
Erica arborea

(24 bis): see 17.X

19.X.2011

28) Chew Ber, SW Bermaryam, 13°22'N 37°57'E (map, not GPS), 1726m (GPS), on *Geranium* sp., *Guizotia scabra*.





Glycine wightii (Fabaceae)

Glycine wightii



Geranium sp. (Geraniaceae)



Leonotis ocymifolia (Lamiaceae)

28bis) Crops with Striga (pink flowers) between Zarima and Bermaryam



Sorghum crops with *Striga*



Sorghum

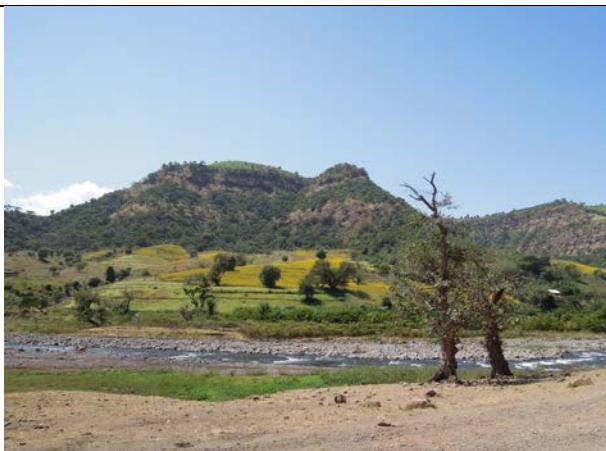


Striga sp. (Orobanchaceae)



Striga sp.

29) Zarima, 13°20'19.0" N 37°53'22.8" E, 1261m, bed of river Zarema Shet, on *Persicaria setosula*.





Persicaria setulosa (Polygonaceae)

30) N. Debark, 13°15'32.4" N 37°52'57.9" E, 1894m, spring, by sweeping.

31) Limalimo, N. Debark, 13°13'46.2" N 37°53'13.1" E, 2153m, escarpment with forest, on *Bidens prestinaria*, *Commelina bengalensis*.



20.X.2011

32) Teda, near Maksegnit, 12°29'14.0" N 37°26'50.5" E, 1924m, river bank, on *Crassocephalum sarcobasis* (Asteraceae).



33) Near Emfraz Guarza, 12°09' N 37°44'E, 2080m, on *Achyranthes aspera* and *Cassia alata*.



Cassia alata (Caesalpiniaceae)

34) Work Amba, near Waroda (= Werota), Chinese road, 11°55'58.1" N 37°49'06.7" E, 1957m, on *Corandrum sativum* and *Solanum incanum*.



Corandrum sativum (Apiaceae)

35) Debre Tabor, 11°54'44.8" N 37°57'06.6" E, 2322m, on *Guizotia scabra* and *Cassia*.



36) Debre Tabor, $11^{\circ}51'28''$ N $38^{\circ}00'17''$ E, 2691m, hotel, at light.

21.X.2011

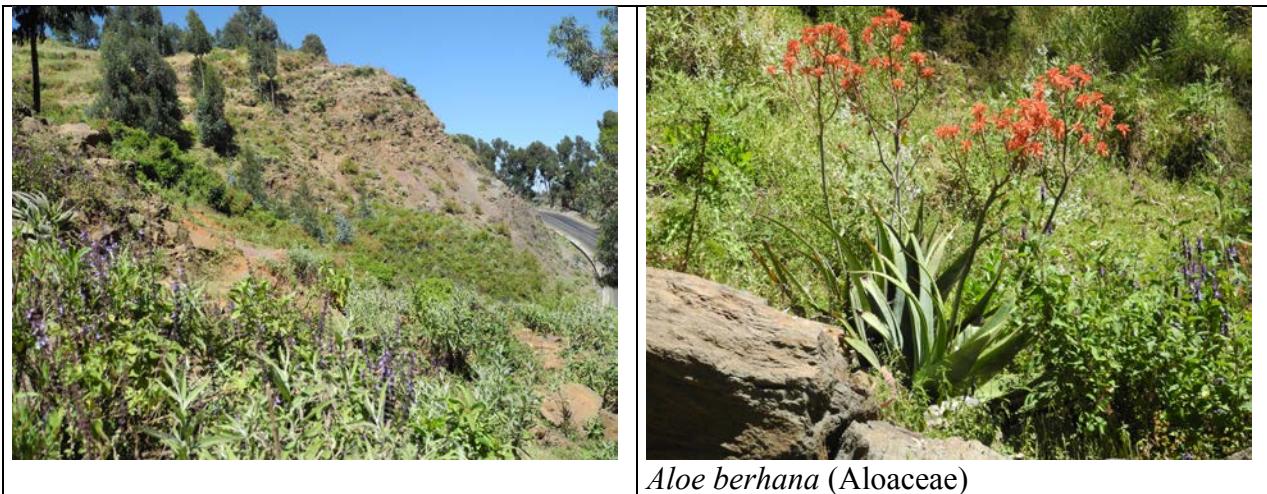
37) Chinese road near Mt Guna, $11^{\circ}44'46.6''$ N $38^{\circ}18'42.7''$ E, 3125m, on *Brassica*.



38) Nefas Meewcha, Tach Gyant, $11^{\circ}44'23.2''$ N $38^{\circ}25'06.2''$ E, 3115m, along small stream, on *Guizotia scabra*.



39) Nefas Meewcha, 11°45'21.1" N 38°29'10.5" E, 2900m, on *Plectranthus ornatus*, *Plectranthus lanuginosus* and *Aloe berhana*.



Aloe berhana (Aloaceae)

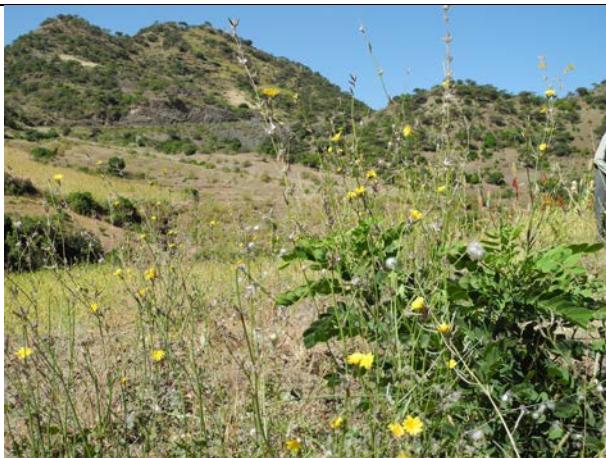
40) Mekit near Nefas Meewcha, 11°45'21.6" N 38°30'25.3" E, 2789m, on *Guizotia scabra*.



22.X.2011

41) Lalibela, 12°09'16.1" N 38°58'43.1" E, 2153m, on *Hypoestes forskaolii*.

42) N. Bilibala, 12°13'10.6" N 39°00'51.6" E, 2159m, on *Pulicaria undulata*, *Launea cornuta*, *Achyranthes aspera*.



Launea cornuta (Asteraceae)



Pulicaria undulata (Asteraceae)



Asteraceae



Rumex nervosus (Polygonaceae)

43) Between Bilibala and Asketema, $12^{\circ}13'26.9''$ N $39^{\circ}02'04.2''$, 1999m, on *Pulicaria undulata*, *Hypoestes forskaolii*, *Glycine wightii*, *Rumex nervosus*.





Hypoestes forskaolii (Acanthaceae)



Achyranthes aspera (Amaranthaceae)

43bis) Lalibela, *Xylocopa flavorufa* on *Justicia schimperana*



23.X.2011

44) S. Lalibela, 11°47'52" N 38°55'10" E, 1975m, *Acacia* woodland.



Acacia in teff crop



Acacia seyal (Mimosaceae)

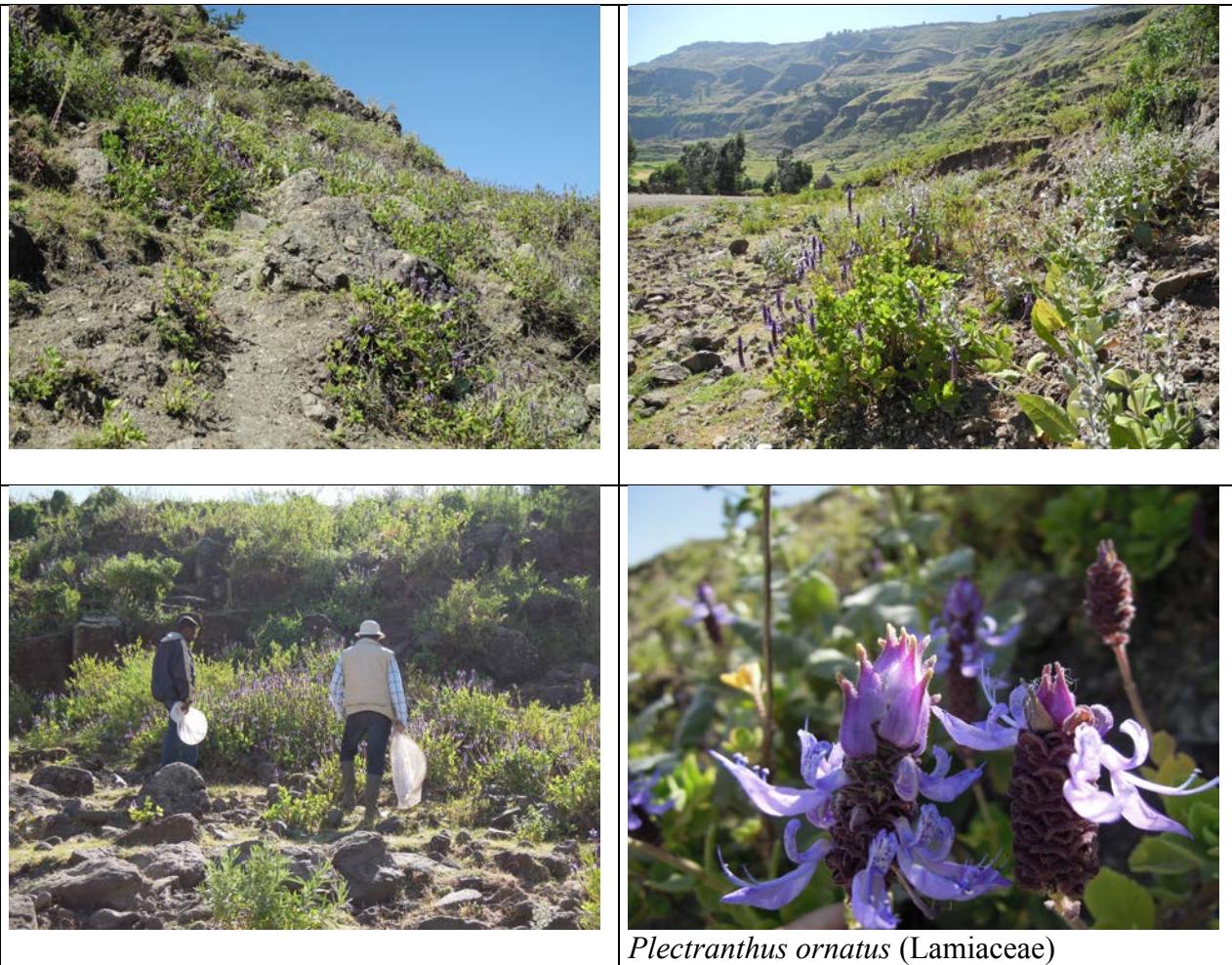


Tef crop with *Carthamus tinctorius*



Carthamus tinctorius (Asteraceae)

45) Digua, 60 km S. Lalibela, 11°43'17.2"N 38°55'19.5", 2475m, on *Plectranthus ornatus*.



46) Denssa, 11°54'08.8" N 39°20'18.0" E, 3451m, on *Senecio lyratus*





Asteraceae



Senecio sp.



Asteraceae



Brassicaceae

24.X.2011

47) Harego, Kembolcha, 11°06'11.4" N 39°39'58.4", 2063m, on *Guizotia abyssinica*, *Cassia alata*, *Justicia heterocarpa*, *Hypoestes forskaolii*, *Euphorbia candelabrum*..



Calotropis procera (Asclepiadaceae)



Calotropis procera



Euphorbia candelabrum (Euphorbiaceae)



Euphorbia candelabrum

25.X.2011

48) Debre Sina, Tarmaber Pass, 9°50'12.3"N 39°44'27.4"E, 3167m, on *Trifolium rueppelianum* and *Anthemis tigrensis*.



Rumex nepalensis (Polygonaceae)



Anthemis tigrensis (Asteraceae)

26.X.2011

49) Mt Entoto, 9°05'09.5" N 38°45'36.0" E, 2850m, on *Bidens prestinaria*, *Achyranthes aspera* and *Argyrolobium ramosissimum*.



Bidens prestinaria (Asteraceae)



Argyrolobium ramosissimum (Fabaceae)

27.X.2011

50) Abossa, Rift Valley, near Lake Ziway, 08°00'10.0" N 38°43'27.5" E, 1667m, sands, on *Hypoestes forskaolii*.



Sands with *Hypoestes forskaolii*



Hypoestes forskaolii



Hypoestes forskaolii

51) Bulbula, $7^{\circ}46'15.4''$ N $38^{\circ}39'03.6''$ E, 1648m, along the main road on *Ocimum urticifolium*.



The Abiyata-Shala-Hayak National Park



The Abiyata-Shala-Hayak National Park



Ocimum urticifolium (Lamiaceae)

52) Langano Lodge near Lake Langano, $7^{\circ}36'59.8''$ N $38^{\circ}40'48.4''$ E, 1631m, on *Leucas abyssinica*, *Ocimum urticifolium*, *Hypoestes forskaolii*.



Leucas abyssinica (Lamiaceae)



Leucas abyssinica



Leucas abyssinica



Leucas abyssinica

28.X.2011

53) Great Rift Valley, Gallo, on small road between Ziway and Ziwa, 7°59'47.0" N
38°38'46.1" E, 1690m, on *Launea cornuta* in wheat crop and *Hypoestes forskaolii*.





Wheat crop with *Launaea cornuta* (Asteraceae)



54) Dilela, between Gogetti and Tiya, 8°14'27"N 38°29'02", 1905m, on *Cassia alata* and *Caesalpinia decapetala*.



Caesalpinia decapetala (Caesalpiniaceae)