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A catalogue of the families Eunotidae, Melanosomellidae, Pirenidae and Pteromalidae (Hymenoptera, Chalcidoidea) of Eritrea

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A b s t r a c t : In Eritrea the family Eunotidae is represented by two species, the family Melanosomellidae by one species, the family Pirenidae by one species and the family Pteromalidae by 12 species. Two species, *Asaphes vulgaris* WALKER, 1835 and *Sennia acaciae* DE STEFANI PEREZ, 1907, have the status incertae sedis.

K e y w o r d s : Eunotidae, Melanosomellidae, Pirenidae, Pteromalidae, *Asaphes*, *Sennia*, catalogue, Eritrea.

Introduction

BURKS et al. (2022) proposed a new classification of the paraphyletic family Pteromalidae. The family has been split in several families, of which Eunotidae, Pirenidae, Melanosomellidae and Pteromalidae are recorded from Eritrea. Two Eritrean species are classified incertae sedis.

Annotated catalogue

Synonyms or misidentifications are marked with an asterisk (*) and printing errors with an exclamation mark (!).

Family Eunotidae

The family Eunotidae is represented by two species of the genus *Scutellista* DE MOTSCHULSKY, 1859. Species of *Scutellista* are parasitoids of Homoptera.

Scutellista caerulea obscurata SILVESTRI, 1915

Scutellista cyanea var. *obscurata* nov.: SILVESTRI 1915a: 307 (description ♀, biology, Nefasit), 308 (fig. 61).

Scutellista cyanea var. *obscurata* SILVESTRI, 1915: COMPERE 1931a: 242 (biology, Asmara Plateau without exact locality).

Scutellista cyanea var. *obscurata* SILVESTRI, 1915: COMPERE 1931b: 248 (dark form not collected), 250 (taxonomy (only clear winged form *obscurata*), biology, Eritrea without exact locality).

Scutellista cyanea var. *obscurata* SILVESTRI, 1915: MASI 1931: 457 (taxonomy (probably a synonym), Eritrea without exact locality).

Scutellista cyanea var. *obscurata* SILVESTRI, 1915: FULMEK 1943: 76 (world host-parasitoid catalogue: Africa = Eritrea), 92 (world parasitoid-host catalogue).

Scutellista cyanea obscurata SILVESTRI, 1915: THOMPSON 1944: 103 (world host-parasitoid catalogue).

Scutellista cyanea obscurata SILVESTRI, 1915: THOMPSON 1958: 620 (parasitoid-host catalogue).

**Scutellista cyanea* (DE MOTSCHULSKY, 1859): DE LOTTO & NASTASI 1955: Publication not seen.

Scutellista cyanea (DE MOTSCHULSKY, 1859): GRAHAM 1969: 76 (Eritrea – no reference)

Scutellista cyanea (DE MOTSCHULSKY, 1859): ABATE 1991: 11 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

H o s t : Hemiptera, Coccidae: *Saissetia oleae* (OLIVIER, 1791) (SILVESTRI 1915a, COMPERE 1931a, b).

D i s t r i b u t i o n : Asmara Plateau without exact locality, Nefasit.

The specific status of *Scutellista caerulea obscurata*, which is known only from Eritrea, should be checked, because BOUČEK (1988: 351) did not list the taxon in the synonymic list of *Scutellista caerulea* (BOYER DE FONSCOLOMBE, 1832). The taxon is not mentioned in MITROIU (2011: 160).

***Scutellista gigantea* BERLESE, 1916**

Scutellista gigantea n.sp.: BERLESE 1916: 179 (description ♀ ♂, Eritrea without exact locality).

Eugastropelte gigantea (BERLESE, 1916): MASI 1931: 415 (taxonomy), 417 (world catalogue Eunotini), 418 (taxonomy), 419 (taxonomy), 454 (taxonomy, description ♀ ♂, biology, Eritrea without exact locality), 455 (figs 6a-e).

Eugastropelte gigantea (BERLESE, 1916): FULMEK 1943: 21 (world host-parasitoid catalogue), 89 (world parasitoid-host catalogue).

Enargopelte gigantea (!) (BERLESE, 1916): THOMPSON 1944: 27 (world host-parasitoid catalogue).

Enargopelte gigantea (!) (BERLESE, 1916): THOMPSON 1958: 595 (parasitoid-host catalogue).

Scutellista gigantea BERLESE, 1916: BOUČEK 1988: 351 (taxonomy).

Scutellista gigantea BERLESE, 1916: MITROIU 2011: 160 (catalogue Afrotropical region).

**Scutellista cyanea* (DE MOTSCHULSKY, 1859): FULMEK 1943: 21 (world host-parasitoid catalogue – printing error = *Eugastropelte gigantea* (BERLESE, 1916)).

H o s t : Hemiptera, Coccidae: *Waxiella mimosae* (SIGNORET, 1872) (MASI 1931).

D i s t r i b u t i o n : no exact locality.

Scutellista gigantea is recorded only from Eritrea.

Family Melanosomellidae

The genus *Eucyrtonotus* SILVESTRI, 1915, which has been described from Eritrea, is considered a synonym of *Encyrtcephalus* ASHMEAD, 1900. Species of *Encyrtcephalus* are gall makers, e.g. on *Acacia* and *Eucalyptus*.

***Encyrtcephalus notabilis* (SILVESTRI, 1915)**

Eucyrtonotus notabilis sp.n.: SILVESTRI 1915b: 340 (fig. 3), 341 (typus generis, description ♀ ♂, biology, Nefasit), 342 (figs 4.1-9).

Eucyrtonotus notabilis SILVESTRI, 1915: GAHAN & FAGAN 1923: 58 (world catalogue generotypes Chalcidoidea).

Encyrtcephalus notabilis (SILVESTRI, 1915): BOUČEK 1988: 299-300 (taxonomy, Eritrea without exact locality: type examined).

Encyrtcephalus notabilis (SILVESTRI, 1915): MITROIU 2011: 160 (catalogue Afrotropical region).

D i s t r i b u t i o n : Nefasit.

Encyrtocophalus notabilis, which is known only from Eritrea, has been bred from the same seeds from an unknown plant as *Eurytoma elongatula* SILVESTRI, 1915 and *E. spermophaga* SILVESTRI, 1915 (Hymenoptera, Eurytomidae).

Family P i r e n i d a e

The family Pirenidae is represented only by the subfamily Euryischiinae, which has been transferred from Aphelinidae to Pirenidae by BURKS et al. (2022: 39). Only the genus *Euryischia* RILEY, 1889 is recorded from Eritrea. They are hyperparasitoids of Homoptera via Diptera.

Subfamily Euryischiinae

***Euryischia leucopidis* SILVESTRI, 1915**

Euryischia leucopidis sp.n.: SILVESTRI 1915a: 312 (description ♂, biology, Nefasit), 313 (figs 66.1-8).

Euryischia leucopidis SILVESTRI, 1915: THOMPSON 1943: 39 (world host-parasitoid catalogue).

Euryischia leucopidis SILVESTRI, 1915: THOMPSON 1955: 228 (world parasitoid-host catalogue).

Euryischia leucopidis SILVESTRI, 1915: ANNECKE & INSLEY 1971: 34 (catalogue Afrotropical region).

Euryischia leucopidis SILVESTRI, 1915: HAYAT & VERMA 1980: 32 (world catalogue: not examined).

Euryischia leucopidis SILVESTRI, 1915: ABATE 1991: 21 (host-parasitoid catalogue Ethiopia: Ethiopia = Eritrea).

P r i m a r y H o s t : Diptera, Chamaemyiidae: *Leucopis* sp. (SILVESTRI 1915a).

S e c o n d a r y H o s t : Hemiptera, Coccidae: *Stotzia chrysophyllae* (SILVESTRI, 1915) (SILVESTRI 1915a).

D i s t r i b u t i o n : Nefasit.

Euryischia leucopidis is recorded only from Eritrea.

Family P t e r o m a l i d a e

The family Pteromalidae has been split in eight subfamilies by BURKS et al. (2022: 85-87), of which Miscogastrinae, Pachyneurinae, Pteromalinae and Sycophaginae are known from Eritrea. Pteromalidae are mainly parasitoids of different insect orders, e.g. Diptera, Hymenoptera and Lepidoptera. Sycophaginae are associated with fig trees as gall makers or parasitoids of gall inducing insects.

Subfamily Miscogastrinae

The subfamily Miscogastrinae is represented only by the genus *Halticoptera* SPINOLA, 1811. Microgastrinae are parasitoids of Diptera.

***Halticoptera daci* SILVESTRI, 1914**

Halticoptera daci sp.n.: SILVESTRI 1914: 204 (description ♀ ♂, fig. 8, biology, Dedda, Nefasit), 205 (figs 9.1-10), 223 (biology).

Halticoptera daci SILVESTRI, 1914: SILVESTRI 1915a: 307 (biology, Dedda, Nefasit).

Halticoptera daci SILVESTRI, 1914: THOMPSON 1958: 563 (parasitoid-host catalogue).

Halticoptera daci SILVESTRI, 1914: NARAYANAN & CHAWLA 1962: 458 (host-parasitoid catalogue), 471 (host-parasitoid catalogue).

Halticoptera daci SILVESTRI, 1914: NEUENSCHWANDER 1982: 510 (catalogue parasitoids of *Bactrocera oleae* described by Silvestri recorded South Africa), 519 (biology, South Africa).

Halticoptera daci SILVESTRI, 1914: MITROIU 2011: 160 (catalogue Afrotropical region).

**Halticoptera* sp.: NASTASI & ANDEMESKEL 1968: Publication not seen.

Halticoptera sp.: ABATE 1991: 10 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

Host: Diptera, Tephritidae: *Bactrocera oleae* (ROSSIUS, 1790) (SILVESTRI 1914, 1915a).

Distribution: Dedda, Nefasit.

Halticoptera daci is also known from South Africa.

Subfamily Pachyneurinae

Only the genus *Pachyneuron* WALKER, 1833, whose species are hyperparasitoids of Homoptera via Diptera or Hymenoptera, is recorded from Eritrea.

Pachyneuron longiradiatus SILVESTRI, 1915

Pachyneuron longiradius sp.n.: SILVESTRI 1915a: 257 (biology), 310 (description ♀ ♂, biology, Nefasit), 311 (figs 55.1-7).

Pachyneuron longiradiatus SILVESTRI, 1915: THOMPSON 1943: 39 (host-parasitoid catalogue).

Pachyneuron longiradiatus SILVESTRI, 1915: THOMPSON 1958: 609 (parasitoid-host catalogue).

Pachyneuron longiradiatus SILVESTRI, 1915: MITROIU 2011: 162 (catalogue Afrotropical region).

Host: Hemiptera, Coccidae: *Stotzia chrysophyllae* (SILVESTRI, 1915) (SILVESTRI 1915a).

Distribution: Nefasit.

Pachyneuron longiradiatus is also recorded from Senegal.

Subfamily Pteromalinae

The subfamily Pteromalinae is the largest subfamily in Pteromalidae, is poorly represented in Eritrea. Currently, only eight species in the genera *Apocrita* COQUEREL, 1855 (one species), *Dibrachys* FÖRSTER, 1859 (one species), *Mesopolobus* WESTWOOD, 1833 (two species), *Otitessella* WESTWOOD, 1833), *Philotrypesis* FÖRSTER, 1878 (one species) and *Pteromalus* SWEDERUS, 1795 (two species) are known. Pteromalinae are mostly parasitoids of Coleoptera, Diptera, Hymenoptera and Lepidoptera.

Apocrypta longitarsus MAYR, 1906

Apocrypta longitarsus MAYR, 1906: GRANDI 1916: 274 (taxonomy, description ♀ ♂, biology, Asmara, Ghinda, Keren, footnote 1: taxonomy), 275 (figs 47.1-6).

Apocrypta longitarsus MAYR, 1906: GRANDI 1955: 137 (world catalogue).

Apocrypta longitarsus MAYR, 1906: WIEBES 1966: 32 (world host-fig wasps catalogue).

Apocrypta longitarsus MAYR, 1906: ULENBERG & PELT 1985: 63 (tab. 3: biology), 64 (biology), 99 (key), 101 (key), 105 (taxonomy ♀, taxonomy ♂), 118 (taxonomy, biology, no distribution data except Israel, but GRANDI (1916) is cited).

Apocrypta longitarsus MAYR, 1906: BERG & WIEBES 1992: 76 (biology), 179, 180 (catalogue Afrotropical region).

D i s t r i b u t i o n : Asmara, Ghinda, Keren.

Apocrypta longitarsus, which is known from the Afrotropical (Cameroon, Eritrea, Ethiopia, Senegal) and Palaearctic regions, is also recorded from Ethiopia and the Arabian peninsula (Yemen).

***Dibrachys microgastri* (BOUCHÉ, 1834)**

Dibrachys microgastri (BOUCHÉ, 1834): PETERS & BAUR 2011: 13 (key, taxonomy, description ♀ ♂, biology, Asmara), 14 (figs 7a, d), 15 (figs 8a, d), 16 (fig. 9a, d), 21 (tab. 9: host list), 22 (tab. 10: distribution).

H o s t : Lepidoptera, Bombycidae: probably *Ocinara ficicola* (WESTWOOD & ORMEROD, 1889).

D i s t r i b u t i o n : Asmara.

Dibrachys microgastri, which is recorded from all zoogeographical regions, is also known from South Africa and Sudan.

***Mesopolobus modestus* (SILVESTRI, 1914)**

Eutelus modestus sp.n.: SILVESTRI 1914: 207 (description ♀ ♂, fig. 10, biology, Eritrea without exact locality), 208 (figs 11.1-6).

Eutelus modestus SILVESTRI, 1914: SILVESTRI 1915a: 310 (biology, Nefasit).

Amblymerus modestus (SILVESTRI, 1914): THOMPSON 1943: 26 (host-parasitoid catalogue).

Mesopolobus modestus (SILVESTRI, 1914): ROSEN 1958: 234 (taxonomy).

Amblymerus modestus (SILVESTRI, 1914): THOMPSON 1958: 584 (parasitoid-host catalogue).

Mesopolobus modestus (SILVESTRI, 1914): MITROIU 2011: 162 (catalogue Afrotropical region).

H o s t : Diptera, Tephritidae: *Bactrocera oleae* (ROSSIUS, 1790) (SILVESTRI 1914, 195a).

D i s t r i b u t i o n : Nefasit.

Mesopolobus modestus is known only from Eritrea.

***Mesopolobus punctatus* (MERCET, 1930)**

Eutelus punctatus nov.sp.: MERCET 1930: 226 (description ♂, fig. 3, biology, Belesa), 227 (fig. 4).

Mesopolobus punctatus (MERCET, 1930): ROSEN 1958: 234 (taxonomy: generic assignment doubtful).

Mesopolobus punctatus (MERCET, 1930): MITROIU 2011: 162 (catalogue Afrotropical region).

D i s t r i b u t i o n : Belesa.

Mesopolobus punctatus is recorded only from Eritrea.

***Otitesella epicarioides* GRANDI, 1921**

Otitesella epicarioides n.sp.: GRANDI 1921a: 310 (key ♀, 311 (key ♂, description ♂, Asmara, Ghinda).

Otitesella epicarioides GRANDI, 1921: GRANDI 1922: 16 (key ♀), 17 (key ♂), 21 (taxonomy, description ♀ ♂, Asmara, Ghinda), 22 (figs 3.1-12), 23 (figs 4.1, 2), 26 (figs 5.1-3), 27 (figs 6.1-9).

Otitesella epicarioides GRANDI, 1921: WIEBES 1966: 9 (world host-fig wasps catalogue).

Otitesella epicarioides GRANDI, 1921: WIEBES 1967: 437 (world catalogue).

Otitesella epicarioides GRANDI, 1921: WIEBES 1969: 443 (taxonomy).

Otitesella epicarioides GRANDI, 1921: BOUČEK, WATSHAM & WIEBES 1981: 191 (key).

Otitesella epicarioides GRANDI, 1921: BERG & WIEBES 1992: 180 (catalogue Afrotropical region).

Otitesella epicarioides GRANDI, 1921: NOORT & RASPLUS 1997: 128 (key ♀ Afrotropical region), 129 (figs 2, 4, 6), 130 (key ♂ Afrotropical region).

D i s t r i b u t i o n : Asmara, Ghinda.

Otitesella epicarioides is known only from Eritrea.

***Philotrypesis erythraea* GRANDI, 1921**

Philotrypesis erythraea n.sp.: GRANDI 1921b: 107 (key ♀), 108 (key ♀), 118 (description ♀ ♂, Ghinda, footnote 2: taxonomy), 120 (figs 18.1-14), 123 (figs 19.1-8), 125 (figs 20.1-12), 127 (figs 21.1-14), 183 (world catalogue).

Philotrypesis erythraea GRANDI, 1921: GRANDI 1930: 73 (description ♀ ♂, Ghinda), 74 (figs 22.1-14), 77 (figs 23.1-8), 79 (figs 24.1-12), 81 (figs 25.1-14), 174 (world catalogue).

Philotrypesis erythraea GRANDI, 1921: WIEBES 1966: 9 (world host-fig wasps catalogue).

Philotrypesis erythraea GRANDI, 1921: BOUČEK, WATSHAM & WIEBES 1981: 175 (key).

Philotrypesis erythraea GRANDI, 1921: BERG & WIEBES 1992: 180 (catalogue Afrotropical region).

D i s t r i b u t i o n : Ghinda.

Philotrypesis erythraea is recorded only from Eritrea.

***Pteromalus albitarsis* DE STEFANI PEREZ, 1907**

Pteromalus albitarsis n.sp.: DE STEFANI PEREZ 1907: 51 (biology, Elaberet), 52 (description ♀ ♂).

Pteromalus albitarsis DE STEFANI PEREZ, 1907: MITROIU 2011: 162 (catalogue Afrotropical region).

D i s t r i b u t i o n : Elaberet.

Pteromalus albitarsis is known only from Eritrea.

***Pteromalus indagans* (SILVESTRI, 1915)**

Habroclytus indagans sp.n.: SILVESTRI 1915a: 277 (biology), 308 (description ♀ ♂, biology, Dedda, Nefasit), 309 (figs 62, 63.1-8), 310 (fig. 64).

Pteromalus indagans (SILVESTRI, 1915): BOUČEK & GRAHAM 1978: 228 (taxonomy).

Pteromalus indagans (SILVESTRI, 1915): MITROIU 2011: 163 (catalogue Afrotropical region).

H o s t : Hymenoptera, Eurytomidae: *Eurytoma oleae* SILVESTRI, 1915 (SILVESTRI 1915a).

D i s t r i b u t i o n : Dedda, Nefasit.

Pteromalus indagans is recorded only from Eritrea.

Subfamily Sycophaginae

Sycophaginae are represented only by the genus *Sycophaga* WESTWOOD, 1840, whose species are gallmakers in fig trees.

***Sycophaga gigantea* GRANDI, 1916**

Sycophaga gigantea n.sp.: GRANDI 1916: 235 (key ♂), 243 (description ♂, Ghinda, Keren), 244 (figs 36.1-5), 245 (figs 37.1-6).

Eukoebelea gigantea (GRANDI, 1916): GRANDI 1955: 139 (taxonomy, world catalogue).

Sycophaga gigantea GRANDI, 1916: BERG & WIEBES 1992: 178 (catalogue Afrotropical region).

D i s t r i b u t i o n : Ghinda, Keren.

Sycophaga gigantea, which is also known from Cameroon, is not mentioned in GRANDI (1963).

***Sycophaga sycomori* (LINNAEUS, 1758)**

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1916: 223 (figs 29.1-6), 224 (figs 30.1-4), 229 (figs 31.1-7), 232 (figs 32.1-6), 234 (taxonomy, Eritrea without exact locality), 235 (key ♀), 236 (key ♂).

? *Sycophaga sycomori* (LINNAEUS, 1758): GRANDI 1917: 30 (taxonomy, description ♀ ♂, biology, Eritrea without exact locality), 32 (figs 10.1-9), 38 (figs 11.1-3).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1928: 230 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1935: 235 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1941: 23 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1952: 91 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1955: 133 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): GRANDI 1963: 366 (world catalogue).

Sycophaga sycomori (LINNAEUS, 1758): WIEBES 1966: 32 (world host-fig wasps catalogue).

Sycophaga sycomori (LINNAEUS, 1758): BERG & WIEBES 1992: 76 (biology), 177 (fig. 39), 178 (catalogue Afrotropical region).

H o s t f i g : Rosales, Moraceae: *Ficus sycomorus* LINNAEUS, 1753.

D i s t r i b u t i o n : no exact locality.

Sycophaga sycomori, which is widely distributed in the Afrotropical and Palaearctic regions, is also known from Ethiopia and the Arabian peninsula (United Arab Emirates, Yemen).

Incertae sedis

BURKS et al. (2022: 87-88) could not assign to a family of Chalcidoidea several taxa. It concerns only two Eritrean species.

***Asaphes vulgaris* WALKER, 1835**

Asaphes vulgaris WALKER, 1835: GIBSON & VIKBERG 1998: 215 (key), 216 (key), 236 (taxonomy, description ♀ ♂, biology, Eritrea without exact locality), 241 (figs 11, 12), 242 (fig. 15), 244 (figs 29, 30), 246 (figs 41, 42), 247 (fig. 48), 249 (fig. 60), 251 (fig. 70).

D i s t r i b u t i o n : no exact locality.

Asaphes vulgaris, which is recorded from all zoogeographical regions, belongs to the subfamily Asaphesinae, which could not assigned to a family by BURKS et al. (2022: 44). This species is not mentioned in MITROIU (2011).

***Sennia acaciae* DE STEFANI PEREZ, 1907**

Sennia acaciae n.sp.: DE STEFANI PEREZ 1907: 51 (biology, Elaberet), 53 (typus generis, description ♀ ♂, figs 7a-f).

Sennia acaciae DE STEFANI PEREZ, 1907: GAHAN & FAGAN 1923: 132 (world catalogue Chalcidoidea).

Sennia acaciae DE STEFANI PEREZ, 1907: MITROIU 2011: 160 (catalogue Afrotropical region).

Sennia acaciae DE STEFANI PEREZ, 1907: BURKS et al. 2022: 88 (taxonomy, genus inquirendus).

D i s t r i b u t i o n : Elaberet.

Sennia acaciae, which was formerly placed in the subfamily Ormocerinae (Pteromalidae), is known only from Eritrea.

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Zusammenfassung

Die Familie Eunotidae ist in Eritrea mit zwei Arten vertreten, die Familie Melanosomellidae mit einer Art, die Familie Pirenidae mit einer Art und die Familie Pteromalidae mit 12 Arten. Zwei Arten, *Asaphes vulgaris* WALKER, 1835 und *Sennia acaciae* DE STEFANI PEREZ, 1907, haben den Status *incertae sedis*.

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