

Linzer biol. Beitr.	55/1	275-286	August 2023
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## A catalogue of the families Aphelinidae and Azotidae (Hymenoptera, Chalcidoidea) of Eritrea

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**A b s t r a c t :** In Eritrea the family Aphelinidae is represented by four genera and 16 species. The subfamily Aphytinae is known by four species in the genus *Aphytis* HOWARD, 1900. The subfamily Coccophaginae is represented by the genera *Coccobius* RATZEBURG, 1852 (one species), *Coccophagus* WESTWOOD, 1833 (10 species) and *Encarsia* FÖRSTER, 1878 (one species). The family Azotidae is known only by one species, *Ablerus elegantulus* (SILVESTRI, 1915).

**K e y w o r d s :** Aphelinidae, *Aphytis*, *Coccobius*, *Coccophagus*, *Encarsia*, Azotidae, *Ablerus*, catalogue, Eritrea

### Introduction

Members of the families Aphelinidae and Azotidae are known as parasitoids or hyperparasitoids of Hemiptera (Homoptera). As the hosts are often of economic importance, Aphelinidae are used in biological control programs. Hitherto 16 species of Aphelinidae have been recorded from Eritrea. The subfamily Aphytinae is represented by the genus *Aphytis* HOWARD, 1900 and the subfamily Coccophaginae by the genera *Coccobius* RATZEBURG, 1852, *Coccophagus* WESTWOOD, 1833 and *Encarsia* FÖRSTER, 1878. Two new genera of Aphelinidae have been described from Eritrea, but *Euxanthellus* SILVESTRI, 1915 and *Prococcophagus* SILVESTRI, 1915 are considered as synonyms of *Coccobius* RATZEBURG, 1852.

There is no key to the African genera of the family Aphelinidae. HAYAT (1983) keyed the world genera of the Aphelinidae s.l. The species of Europe and Mediterranean Bassin were keyed by FERRIÈRE (1965) and the Indian species by HAYAT (1998).

### Annotated catalogue

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

#### **Family Aphelinidae**

##### **Subfamily Aphelininae**

###### ***Aphytis diaspidis* (HOWARD, 1881)**

*Aphytis diaspidis* (HOWARD, 1881): COMPERE 1955: 281 (fig. 3: *diaspidis*), 283 (fig. 5: *diaspidis*), 289 (key, taxonomy, biology, Asmara, (introduced into USA in 1952 and bred – no males), 290 (fig. 7).

*Aphytis diaspidis* (HOWARD, 1881): ROSEN & DEBACH 1979: 106 (world catalogue), 107 (world catalogue), 171 (taxonomy), 212 (biology), 194 (taxonomy), 222 (key), 375 (taxonomy), 376 (taxonomy), 377 (taxonomy), 405 (taxonomy, description ♀ ♂, biology, Eritrea without exact locality), 443 (figs 642-647), 444 (figs 648-653), 445 (figs 654-656, 657: taxonomy), 750 (tab. 4: distribution), 753 (world host-parasitoid catalogue), 755 (world host-parasitoid catalogue), 756 (world host-parasitoid catalogue), 757 (world host-parasitoid catalogue), 758 (world host-parasitoid catalogue), 759 (world host-parasitoid catalogue), 753 (world host-parasitoid catalogue), 760 (world host-parasitoid catalogue), 761 (world host-parasitoid catalogue), 763 (world host-parasitoid catalogue), 764 (world host-parasitoid catalogue), 765 (world host-parasitoid catalogue), 767 (tab. 5: host records).

*Aphytis diaspidis* (HOWARD, 1881): PRINSLOO & NESER 1994: Publication not seen.

Distribution: Asmara.

*Aphytis diaspidis* is known from all zoogeographical regions.

### ***Aphytis erythraeus* (SILVESTRI, 1915)**

*Aphelinus erythraeus* sp.n.: SILVESTRI 1915a: 260 (biology), 315 (description ♀ ♂, biology, Nefasit partim), 316 (figs 67.1-5).

*Aphelinus erythraeus* SILVESTRI, 1915: FULMEK 1943: 13 (world host-parasitoid catalogue: Africa = Eritrea), 84 (world parasitoid-host catalogue), 98 (biology).

*Aphelinus erythraeus* SILVESTRI, 1915: THOMPSON 1944: 18 (world host-parasitoid catalogue), 121 (world parasitoid-host catalogue).

*Aphelinus erythraeus* SILVESTRI, 1915: THOMPSON 1953: 3 (world parasitoid-host catalogue).

*Aphytis erythraeus* (SILVESTRI, 1915): COMPERE 1955: 279 (key), 299 (taxonomy, description ♀ ♂, types examined), 300 (fig. 10).

*Aphelinus erythraeus* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 28 (catalogue Afrotropical region).

*Aphytis erythraeus* (SILVESTRI, 1915): ROSEN & DEBACH 1979: 106 (world catalogue), 123 (taxonomy), 140 (taxonomy), 180 (taxonomy), 193 (taxonomy), 234 (taxonomy), 672 (taxonomy), 674 (taxonomy, description ♀ ♂, biology, Nefasit partim (see *Aphytis mimosae*), 691 (key ♂), 692 (key ♀), 703 (figs 1193-1198), 704 (figs 1199-1204), 705 (figs 1205, 1206), 751 (tab. 4: distribution), 755 (app. 2: world host-parasitoid catalogue), 771 (tab. 5: host records).

*Aphytis erythraeus* (SILVESTRI, 1915): PRINSLOO & NESER 1994: Publication not seen.

Habitat: Diaspididae: *Aspidiotus elaeidis* MARCHAL, 1909 (SILVESTRI 1915a).

Distribution: Nefasit.

*Aphytis erythraeus* is known only from Eritrea.

### ***Aphytis mimosae* ROSEN & DEBACH, 1976**

*Aphytis mimosae* ROSEN & DEBACH, 1976: ROSEN & DEBACH 1979: 107 (world catalogue), 225 (key), 672 (taxonomy), 678 (taxonomy, biology, Nefasit), 694 (description ♀ ♂), 705 (figs 1208, 1209), 721 (figs 1286-1291), 722 (figs 1292-1296), 751 (tab. 4: distribution), 755 (app. 2: world host-parasitoid catalogue), 771 (tab. 5: host records).

*Aphytis mimosae* ROSEN & DEBACH, 1979: PRINSLOO & NESER 1994: Publication not seen.

\**Aphytis erythraeus* sp.n. smaller form: SILVESTRI 1915a: 316 (fig. 67.6), 317 (taxonomy ♀, Nefasit partim).

Habitat: Diaspididae: *Aspidiotus elaeidis* MARCHAL, 1909 (ROSEN & DEBACH 1979).

Distribution: Nefasit.

*Aphytis mimosae* is also recorded from South Africa.

### *Aphytis secundus* (COMPERE, 1936)

*Marlattiella secunda* n.sp.: COMPERE 1936: 279 (key), 280 (description ♀ ♂, fig. 2, biology, Nefasit).  
*Marlattiella secunda* COMPERE, 1936: FULMEK 1943: 28 (world host-parasitoid catalogue), 90 (world parasitoid-host catalogue), 98 (biology).

*Marlattiella secunda* COMPERE, 1936: FERRIÈRE 1965: 98 (world catalogue).

*Marlattiella secunda* COMPERE, 1936: ANNECKE & INSLEY 1971: 35 (catalogue Afrotropical region).

*Aphytis secundus* (COMPERE, 1936): ROSEN & DEBACH 1979: 95 (taxonomy), 107 (world catalogue), 109 (taxonomy), 123 (taxonomy), 126 (taxonomy), 702 (figs 1188-1192), 751 (tab. 4: distribution), 752 (no host record), 771 (tab. 5: host records).

*Marlattella* (!) *secunda* COMPERE, 1936: ABATE 1991: 21 (host-parasitoid catalogue Ethiopia: Ethiopia = Eritrea).

*Aphytis secundus* (COMPERE, 1936): PRINSLOO & NESER 1994: Publication not seen.

H o s t : probably coccid on *Olea chrysophylla* (COMPERE 1936).

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

*Aphytis secundus* is known only from Eritrea.

### Subfamily C o c c o p h a g i n a e

#### *Coccobius seminotus* (SILVESTRI, 1915)

*Physcus seminotus* sp.n.: SILVESTRI 1915b: 361 (description ♀, biology, Nefasit), 362 (figs 19, 20.1-6).

*Physcus seminotus* SILVESTRI, 1915: FULMEK 1943: 25 (world host-parasitoid catalogue), 91 (world parasitoid-host catalogue), 98 (biology).

*Physcus seminotus* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 35 (catalogue Afrotropical region).

*Coccobius seminotus* (SILVESTRI, 1915): HAYAT 1985: 309 (taxonomy, biology, Ethiopia = Eritrea), 314 (key ♀).

*Physcus seminotus* SILVESTRI, 1915: ABATE 1991: 21 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

*Coccobius seminotus* (SILVESTRI, 1915): PRINSLOO 1995: 1519 (key ♀, Ethiopia = Eritrea).

H o s t : Diaspididae: *Chionaspis* s.l. (SILVESTRI 1915b).

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

*Coccobius seminotus* is recorded from the Afrotropical (Eritrea, Uganda, Malagasy subregion: Mauritius) and Oriental regions.

#### *Coccophagus baldassarii* COMPERE, 1931

*Coccophagus baldassarii* COMPERE (nomen nudum): COMPERE 1931a: 242 (biology, Asmara Plateau without exact locality (see COMPERE 1931b)).

*Coccophagus baldassarii* n.sp.: COMPERE 1931b: 251 (description ♀, biology, Asmara, Ez'Taclesan = Adi Tekelezan).

*Coccophagus baldassarii* COMPERE, 1931: COMPERE 1940: 397 (key ♀), 401 (taxonomy, biology, Eritrea without exact locality).

*Coccophagus baldassarii* COMPERE, 1931: FULMEK 1943: 75 (world host-parasitoid catalogue), 86 (world parasitoid-host catalogue), 98 (biology).

*Coccophagus baldassarii* COMPERE, 1931: THOMPSON 1944: 102 (world host-parasitoid catalogue), 129 (world parasitoid-host catalogue).

*Coccophagus baldassarii* COMPERE, 1931: FLANDERS 1953: Publication not seen.

*Coccophagus baldassarii* COMPERE, 1931: THOMPSON 1953: 12 (parasitoid-host catalogue).

*Coccophagus baldassarii* COMPERE, 1931: DE LOTTO & NASTASI 1955: Publication not seen.

*Coccophagus baldassarii* COMPERE, 1931: BOSCH et al. 1955: 54 (biology, Hamasien Plateau (Asmara, Ghescinascim)).

*Coccophagus baldassarii* COMPERE, 1931: ANNECKE 1963: 338 (figs 6-9), 340 (taxonomy, description ♀, biology, no Eritrean material examined).

*Coccophagus baldassarii* COMPERE, 1931: ANNECKE & INSLEY 1971: 30 (catalogue Afrotropical region).

*Coccophagus baldassarii* COMPERE, 1931: ABATE 1991: 19 (parasitoid- host catalogue Ethiopia: Ethiopia = Eritrea).

*Coccophagus baldassarii* COMPERE, 1931: ANNECKE & INSLEY 1974: 3 (key ♀), 14 (taxonomy, description ♀ ♂, biology, Eritrea (BOSCH et al. 1955)), 19 (fig. 29), 58 (host-parasitoid catalogue), 59 (host-parasitoid catalogue).

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

D i s t r i b u t i o n : Adi Tekelezan, Asmara, Ghescinascim.

In the Afrotropical region *Coccophagus baldassarii* is known only from Eritrea.

### ***Coccophagus eleaphilus* SILVESTRI, 1915**

*Coccophagus eleaphilus* sp.n.: SILVESTRI 1915a: 257 (biology), 318 (description ♀ ♂, biology, Nefasit), 319 (figs 69.1-3).

*Coccophagus eleaphilus* SILVESTRI, 1915: MERCET 1927: 495 (taxonomy).

*Coccophagus eleaphilus* SILVESTRI, 1915: MERCET 1930: 221 (taxonomy, biology, Asmara).

*Coccophagus eleaphilus* SILVESTRI, 1915: COMPERE 1931b: 254 (taxonomy, biology, Nefasit).

*Coccophagus eleaphilus* SILVESTRI, 1915: COMPERE 1931c: 11 (footnote 18: taxonomy), 16 (key ♀), 57 (taxonomy), 59 (taxonomy), 60 (key ♂), 63 (taxonomy, description ♀ ♂, biology, Nefasit).

*Coccophagus eleaphilus* SILVESTRI, 1915: COMPERE 1940: 396 (key ♀), 400 (taxonomy, biology, Eritrea without exact locality).

*Coccophagus eleaphilus* SILVESTRI, 1915: FULMEK 1943: 59 (world host-parasitoid catalogue – Africa including Eritrea), 73 (world host-parasitoid catalogue), 75 (world host-parasitoid catalogue), 87 (world parasitoid-host catalogue), 96 (biology).

*Coccophagus eleaphilus* SILVESTRI, 1915: THOMPSON 1944: 35 (world host-parasitoid catalogue), 53 (world host-parasitoid catalogue), 102 (world host-parasitoid catalogue), 105 (world host-parasitoid catalogue), 129 (world parasitoid-host catalogue).

*Coccophagus eleaphilus* SILVESTRI, 1915: THOMPSON 1953: 13 (world parasitoid-host catalogue).

*Coccophagus eleaphilus* SILVESTRI, 1915: DE LOTTO & NASTASI 1955: Publication not seen.

*Coccophagus eleaphilus* SILVESTRI, 1915: BOSCH et al. 1955: 54 (biology, Hamasien Plateau (Asmara, Ghescinascim)).

*Coccophagus eleaphilus* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 31 (catalogue Afrotropical region).

*Coccophagus eleaphilus* SILVESTRI, 1915: ANNECKE & INSLEY 1974: 4 (key ♀), 23 (figs 51, 52), 24 (taxonomy, description ♀ ♂, biology, Eritrea (SILVESTRI 1915a, COMPERE 1940), 58 (host-parasitoid catalogue), 59 (host-parasitoid catalogue).

*Coccophagus eleaphilus* SILVESTRI, 1915: MOUND & HALSEY 1979: 198 (world host-parasitoid catalogue Aleyrodidae).

*Coccophagus eleaphilus* SILVESTRI, 1915: ABATE 1991: 19 (parasitoid- host catalogue Ethiopia: Ethiopia = Eritrea).

H o s t s : Coccidae: *Coccus longulus* (DOUGLAS, 1897) (MERCET 1930), *Saissetia oleae* (OLIVIER, 1791) (MERCET 1930), *Stotzia chrysophyllae* (SILVESTRI, 1915) (SILVESTRI 1915a).

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

In the Afrotropical region *Coccophagus eleaphilus* is also known from South Africa, Uganda, Zimbabwe and Seychelles.

### ***Coccophagus eritreaensis* COMPERE, 1931**

*Coccophagus eritreaensis* n.sp.: COMPERE 1931b: 253 (description ♀ ♂, biology, Asmara, Nefasit).  
*Coccophagus eritreaensis* COMPERE, 1931: COMPERE 1940: 397 (key ♀), 401 (taxonomy, biology, Eritrea without exact locality).  
*Coccophagus erythraeensis* (!) SILVESTRI (!): FULMEK 1943: 46 (world host-parasitoid catalogue), 73 world (host-parasitoid catalogue), 87 (taxonomy as *Coccophagus eritreaensis* (!) COMPERE), world parasitoid-host catalogue, 98 (biology as *Coccophagus eritreaensis* (!) COMPERE).  
*Coccophagus eritreaensis* COMPERE, 1931: THOMPSON 1944: 36 (world host-parasitoid catalogue), 100 (world host-parasitoid catalogue), 129 (world parasitoid-host catalogue).  
*Coccophagus eritreaensis* COMPERE, 1931: THOMPSON 1953: 13 (world parasitoid-host catalogue).  
*Coccophagus eritreaensis* COMPERE, 1931: DE LOTTO & NASTASI 1955: Publication not seen.  
*Coccophagus eritreaensis* COMPERE, 1931: BOSCH et al. 1955: 54 (biology, Hamasien Plateau (Asmara, Ghescinascim)).  
*Coccophagus eritreaensis* COMPERE, 1931: FLANDERS 1959: 597 (taxonomy: colour form of *Coccophagus pulvinariae* COMPERE, 1931). Publication not seen.  
*Coccophagus eritreaensis* COMPERE, 1931: PECK 1963: 313-314 (synonym of *Coccophagus pulvinariae* COMPERE, 1931).  
*Coccophagus eritreaensis* COMPERE, 1931: ANNECKE & INSLEY 1971: 31 (taxonomy, catalogue Afrotropical region).  
*Coccophagus eritreaensis* COMPERE, 1931: ANNECKE & INSLEY 1974: 4 (key ♀), 21 (taxonomy, biology, Eritrea (COMPERE 1931, 1940)), 23 (fig. 47), 58 (host-parasitoid catalogue Afrotropical region).  
*Coccophagus eritreaensis* COMPERE, 1931: ABATE 1991: 19 (parasitoid- host catalogue Ethiopia: Eritrea, Ethiopia).

**H o s t s :** Coccidae: *Coccus hesperidum* (LINNAEUS, 1758) (COMPERE 1931b),  
*Parasaissetia nigra* (NIETNER, 1861) (COMPERE 1931b).

**D i s t r i b u t i o n :** Asmara, Ghescinascim, Nefasit.

*Coccophagus eritreaensis* is also recorded from Angola and Ethiopia. As the synonymy with *Coccophagus pulvinariae* COMPERE, 1931 proposed by FLANDERS (1959) and PECK (1963: 313-314) has not been accepted by ANNECKE & INSLEY (1971, 1974), the specific status should be checked.

### ***Coccophagus nigritus* COMPERE, 1931**

*Coccophagus nigritus* COMPERE, 1931: COMPERE 1940: 397 (key ♀), 402 (taxonomy, biology, Eritrea without exact locality).  
*Coccophagus nigritus* COMPERE, 1931: FULMEK 1943: 73 (world host-parasitoid catalogue), 87 (world parasitoid-host catalogue), 98 (biology).  
*Coccophagus nigritus* COMPERE, 1931: THOMPSON 1944: 36 (world host-parasitoid catalogue), 100 (world host-parasitoid catalogue), 102 (world host-parasitoid catalogue), 130 (world parasitoid-host catalogue).  
*Coccophagus nigritus* COMPERE, 1931: THOMPSON 1953: 16 (parasitoid-host catalogue).  
*Coccophagus nigritus* COMPERE, 1931: BOSCH et al. 1955: 54 (biology, Hamasien Plateau (Asmara, Ghescinascim)).  
*Coccophagus nigritus* COMPERE, 1931: ANNECKE & INSLEY 1971: 32 (catalogue Afrotropical region).  
*Coccophagus nigritus* COMPERE, 1931: ANNECKE & INSLEY 1974: 5 (key ♀), 39 (taxonomy, description ♀ ♂, biology, Eritrea (COMPERE 1940)), 43 (figs 103-105), 58 (host-parasitoid catalogue Afrotropical region), 59 (host-parasitoid catalogue Afrotropical region).  
*Coccophagus nigritus* COMPERE, 1931: ABATE 1991: 20 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

\**Coccophagus* sp. – *nigritus* in press: COMPERE 1931b: 253 (taxonomy, biology, Ez'Taclesan = Adi Tekelezan, Giglasciu = Ghescinascim, Nefasit).

H o s t : Coccidae: *Parasaissetia nigra* (NIETNER, 1861) (COMPERE 1931).

D i s t r i b u t i o n : Adi Tekelezan, Asmara, Ghescinascim, Nefasit.

In the Afrotropical region *Coccophagus nigritus* is also known from Cameroon, Kenya and South Africa.

### *Coccophagus ochraceus* HOWARD, 1895

*Coccophagus ochraceus* HOWARD, 1895: COMPERE 1931a: 242 (biology, Asmara Plateau without exact locality).

*Coccophagus ochraceus* HOWARD, 1895: COMPERE 1931b: 250 (biology, Eritrea without exact locality).

*Coccophagus ochraceus* HOWARD, 1895: COMPERE 1940: 396 (key ♀), 398 (taxonomy, biology, Eritrea without exact locality).

*Coccophagus ochraceus* HOWARD, 1895: THOMPSON 1944: 102 (world host-parasitoid catalogue), 130 (world parasitoid-host catalogue).

*Coccophagus ochraceus* HOWARD, 1895: THOMPSON 1953: 16 (world parasitoid-host catalogue).

*Coccophagus ochraceus* HOWARD, 1895: DE LOTTO & NASTASI 1955: Publication not seen.

*Coccophagus ochraceus* HOWARD, 1895: ANNECKE & INSLEY 1971: 32 (catalogue Afrotropical region).

*Coccophagus ochraceus* HOWARD, 1895: ANNECKE & INSLEY 1974: 4 (key ♀), 27 (figs 66-69), 29 (taxonomy, description ♀ ♂, biology, Eritrea (COMPERE 1931b, 1940)), 58 (host-parasitoid catalogue Afrotropical region), 59 (host-parasitoid catalogue Afrotropical region).

*Coccophagus ochraceus* HOWARD, 1895: ABATE 1991: 20 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

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

D i s t r i b u t i o n : Asmara Plateau without exact locality (COMPERE 1931a).

In the Afrotropical region *Coccophagus ochraceus* is also recorded from Kenya and South Africa. The introduction into the USA was successful.

### *Coccophagus philippiae* (SILVESTRI, 1915)

*Euxanthellus philippiae* sp.n.: SILVESTRI 1915a: 257 (biology), 321 (typus generis, fig. 70), 322 (description ♀, figs 71.1-5, biology, Nefasit).

*Euxanthellus philippiae* SILVESTRI, 1915: GAHAN & FAGAN 1923: 64 (world catalogue generotypes Chalcidoidea).

*Euxanthellus philippiae* SILVESTRI, 1915: COMPERE 1931b: 255 (taxonomy, biology, Nefasit, various localities in Eritrea).

*Euxanthellus philippiae* SILVESTRI, 1915: COMPERE 1936: 281 (taxonomy, biology, Nefasit), 282 (taxonomy, description ♀ ♂, fig. 2, biology, Debre Bizen, Nefasit), 283 (figs 4a, c, g).

*Euxanthellus philippiae* SILVESTRI, 1915: COMPERE 1940: 395 (footnote: taxonomy, biology), 413 (biology).

*Euxanthellus philippiae* SILVESTRI, 1915: FULMEK 1943: 59 (world host-parasitoid catalogue), 73 (world, host-parasitoid catalogue), 89 (world parasitoid-host catalogue), 97 (biology).

*Euxanthellus philippiae* SILVESTRI, 1915: THOMPSON 1944: 53 (world host-parasitoid catalogue), 103 (world host-parasitoid catalogue), 135 (world parasitoid-host catalogue).

*Euxanthellus philippiae* SILVESTRI, 1915: THOMPSON 1953: 20 (parasitoid-host catalogue).

*Euxanthellus philippiae* SILVESTRI, 1915: FERRIÈRE 1965: 164 (world catalogue: Africa = Eritrea).

*Euxanthellus philippiae* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 34 (catalogue Afrotropical region).

*Euxanthellus philippiae* SILVESTRI, 1915: ANNECKE & PRINSLOO 1976: 1 (taxonomy, biology, South Africa), 2 (tab. 1: taxonomy), 3 (fig. 1), 5 (tab. 2: taxonomy), 6 (key).

*Coccophagus philippiae* (SILVESTRI, 1915); HAYAT 1994: 85 (taxonomy).

\**Euxanthellus* sp.: BOSCH et al. 1955: 54 (biology, Hamasien Plateau (Asmara, Ghescinascim)).

*Euxanthellus* sp.: ANNECKE & INSLEY 1971: 34 (catalogue Afrotropical region).

H o s t s : Coccidae: *Parasaissetia nigra* (NIETNER, 1861) (COMPERE 1936), *Stotzia chrysophyllae* (SILVESTRI, 1915) (Coccidae) (SILVESTRI 1915a, COMPERE 1936).

D i s t r i b u t i o n : Asmara, Debre Bizen, Ghescinascim, Nefasit.

*Coccophagus philippiae* is known from the Afrotropical (Eritrea), Eswatini (Swaziland), South Africa, Australian and Palaearctic regions.

### ***Coccophagus princeps* SILVESTRI, 1915**

*Coccophagus princeps* sp.n.: SILVESTRI 1915b: 357 (description ♀, Keren), 358 (figs 16.1-8).

*Coccophagus princeps* SILVESTRI, 1915: MERCET 1927: 495 (taxonomy).

*Coccophagus princeps* SILVESTRI, 1915: COMPERE 1931c: 19 (key ♀), 88 (taxonomy, description ♀ ♂, biology, Keren).

*Coccophagus princeps* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 32 (catalogue Afrotropical region).

*Coccophagus princeps* SILVESTRI, 1915: ANNECKE & INSLEY 1974: 6 (key ♀), 43 (fig. 118), 45 (taxonomy, description ♀, biology, Eritrea (SILVESTRI 1915, COMPERE 1931c)), 57 (fig. 151), 58 (host-parasitoid catalogue Afrotropical region), 59 (host-parasitoid catalogue Afrotropical region).

*Coccophagus princeps* SILVESTRI, 1915: ABATE 1991: 20 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

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

*Coccophagus princeps* is also recorded from Sudan.

### ***Coccophagus saintebeauvei* GIRAULT, 1917**

*Coccophagus saintebeauvei* GIRAULT, 1917: COMPERE 1931a: 242 (biology, Asmara Plateau without exact locality (see COMPERE 1931b)).

*Coccophagus saintebeauvei* GIRAULT, 1917: COMPERE 1931b: 251 (biology, Ez'Taclesan = Adi Tekelezan, Giglasciu = Ghescinascim).

*Coccophagus saintebeauvei* GIRAULT, 1917: COMPERE 1940: 397 (key ♀), 402 (taxonomy, biology, Eritrea without exact locality).

*Coccophagus saintebeauvei* GIRAULT, 1917: FULMEK 1943: 75 (world host-parasitoid catalogue), 87 (world parasitoid-host catalogue), 98 (biology).

*Coccophagus saintebeauvei* GIRAULT, 1917: THOMPSON 1944: 102 (world host-parasitoid catalogue), 130 (world parasitoid-host catalogue).

*Coccophagus saintebeauvei* GIRAULT, 1917: THOMPSON 1953: 16 (world parasitoid-host catalogue).

*Coccophagus saintebeauvei* GIRAULT, 1917: DE LOTTO & NASTASI 1955: Publication not seen.

*Coccophagus saintebeauvei* GIRAULT, 1917: ANNECKE & INSLEY 1971: 32 (catalogue Afrotropical region).

*Coccophagus saintebeauvei* GIRAULT, 1917: ANNECKE & INSLEY 1974: 5 (key ♀), 37 (figs 96-98), 38 (taxonomy, description ♀ ♂, biology, Giglasciu = Ghescinascim (Ethiopia = Eritrea, COMPERE 1931b, 1940)), 57 (fig. 150), 59 (host-parasitoid catalogue Afrotropical region).

*Coccophagus saintebeauvei* GIRAULT, 1917: ABATE 1991: 20 (parasitoid- host catalogue Ethiopia: Eritrea, Ethiopia).

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

D i s t r i b u t i o n : Adi Tekelezan, Ghescinascim.

*Coccophagus saintebeauvei* is also known from Ethiopia, Kenya, Uganda, South Africa and Zimbabwe.

### ***Coccophagus spectabilis* COMPERE, 1931**

*Coccophagus spectabilis* COMPERE, 1931: COMPERE 1940: 397 (key ♀), 403 (taxonomy, biology, Asmara, Ez'Taclesan = Adi Tekelezan, Giglasciu = Ghescinascim).

*Coccophagus spectabilis* COMPERE, 1931: ANNECKE & INSLEY 1971: 33 (catalogue Afrotropical region).

*Coccophagus spectabilis* COMPERE, 1931: ANNECKE & INSLEY 1974: 5 (key ♀), 33 (figs 78-80), 34 (taxonomy, description ♀ ♂, biology, Eritrea (COMPERE 1931b, 1940), 57 (fig. 145), 58 (host-parasitoid catalogue Afrotropical region), 59 (host-parasitoid catalogue Afrotropical region).

*Coccophagus spectabilis* COMPERE, 1931: ABATE 1991: 20 (parasitoid-host catalogue Ethiopia: Eritrea, Ethiopia).

\**Coccophagus* sp.: COMPERE 1931b: 254 (taxonomy, biology, Giglasciu = Ghescinascim).

*Coccophagus* sp.: THOMPSON 1944: 102 (world host-parasitoid catalogue), 129 (world parasitoid-host catalogue).

*Coccophagus* sp.: THOMPSON 1953: 11 (parasitoid-host catalogue).

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

D i s t r i b u t i o n : Adi Tekelezan, Asmara, Ghescinascim.

*Coccophagus spectabilis* is also recorded from Ethiopia, Kenya, South Africa and Uganda.

### ***Coccophagus varius* (SILVESTRI, 1915)**

*Prococcophagus varius* sp.n.: SILVESTRI 1915b: 359 (fig. 17), 360 (typus generis, description ♀, Keren), 361 (figs 18.1-5).

*Prococcophagus varius* SILVESTRI, 1915: GAHAN & FAGAN 1923: 120 (world catalogue generotypes Chalcidoidea).

*Prococcophagus varius* SILVESTRI, 1915: COMPERE 1936: 290 (key), 292 (world catalogue).

*Prococcophagus varius* SILVESTRI, 1915: FERRIÉRE 1965: 164 (world catalogue).

*Prococcophagus varius* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 36 (catalogue Afrotropical region).

*Prococcophagus varius* SILVESTRI, 1915: ANNECKE & MYNHARDT 1979: 290 (taxonomy, description \$, biology, Keren), 291 (figs 1-3).

*Prococcophagus varius* SILVESTRI, 1915: ABATE 1991: 21 (parasitoid-host catalogue Ethiopia: Eritrea = Eritrea).

*Coccophagus varius* (SILVESTRI, 1915): Viggiani 1985: 92 (taxonomy).

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

*Prococcophagus varius* is known from the Afrotropical (Eritrea, South Africa) and Palaearctic regions.

### ***Encarsia siphonini* SILVESTRI, 1915**

*Encarsia siphonini* sp.n.: SILVESTRI 1915a: 249 (biology), 317 (description ♀ ♂, figs 68.1-5, biology, Nefasit).

*Encarsia siphonini* SILVESTRI, 1915: FULMEK 1943: 77 (world host-parasitoid catalogue: Africa = Eritrea), 88 (world parasitoid-host catalogue), 98 (biology).

*Encarsia siphonini* SILVESTRI, 1915: THOMPSON 1944: 105 (world host-parasitoid catalogue), 132 (world parasitoid-host catalogue).

*Encarsia siphonini* SILVESTRI, 1915: THOMPSON 1953: 19 (parasitoid-host catalogue).

*Encarsia siphonini* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 33 (catalogue Afrotropical region).

*Encarsia siphonini* SILVESTRI, 1915: MOUND & HALSEY 1979: 198 (host-parasitoid catalogue).

*Encarsia siphonini* SILVESTRI, 1915: VIGGIANI & MAZZONE 1980: 9 (biology), 12 (key).

*Encarsia siphonini* SILVESTRI, 1915: HAYAT 1989: 10 (taxonomy), 65 (taxonomy – probably synonym of *Encarsia inaron* (WALKER, 1839)).

*Encarsia siphonini* SILVESTRI, 1915: ABATE 1991: 21 (host-parasitoid catalogue Ethiopia: Ethiopia = Eritrea).

*Encarsia siphonini* SILVESTRI, 1915: HAYAT 1998: 181 (taxonomy).

H o s t : Aleyrodidae: *Siphoninus finitimus* SILVESTRI, 1915 (SILVESTRI 1915a).

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

*Encarsia siphonini* is recorded only from Eritrea.

## Family Azotidae

### *Ablerus elegantulus* (SILVESTRI, 1915)

*Azotus elegantulus* sp.n.: SILVESTRI 1915b: 363 (description ♀ ♂, figs 21.1-6, biology, Nefasit).

*Azotus elegantulus* SILVESTRI, 1915: MERCET 1922: 197 (world catalogue).

*Azotus elegantulus* SILVESTRI, 1915: FULMEK 1943: 24 (world host-parasitoid catalogue), 85 (world parasitoid-host catalogue), 98 (biology).

*Azotus elegantulus* SILVESTRI, 1915: THOMPSON 1953: 9 (world parasitoid-host catalogue).

*Azotus elegantulus* SILVESTRI, 1915: GHESQUIÈRE 1960: 8 (taxonomy).

*Azotus elegantulus* SILVESTRI, 1915: ANNECKE & INSLEY 1970: 245 (figs 20-24), 246 (taxonomy, biology, no Eritrean material seen), 247 (key ♀).

*Azotus elegantulus* SILVESTRI, 1915: ANNECKE & INSLEY 1971: 29 (catalogue Afrotropical region).

*Azotus elegantulus* SILVESTRI, 1915: ABATE 1991: 19 (parasitoid-host catalogue Ethiopia: Ethiopia = Eritrea).

*Ablerus elegantulus* (SILVESTRI, 1915): HAYAT 1994: 84 (taxonomy).

H o s t : Diaspididae: *Chionaspis* s.l. (SILVESTRI 1915b).

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

*Azotus elegantulus*, a hyperparasitoid, is known from the Afrotropical (Eritrea, South Africa, Mauritius), Neotropical and Palaearctic regions.

## Acknowledgements

I would like to thank Manfred A. Jäch und Manuela Vizek (both Natural History Museum Vienna, Austria) for their support in compilation of the catalogue.

## Zusammenfassung

Die Familie Aphelinidae ist in Eritrea mit vier Gattungen und 16 Arten vertreten. Die Unterfamilie Aphytinae ist mit vier Arten aus der Gattung *Aphytis* HOWARD, 1900 nachgewiesen und die Unterfamilie Coccophaginae mit den Gattungen *Coccobius* RATZEBURG, 1852 (eine Art), *Coccophagus* WESTWOOD, 1833 (10 Arten) und *Encarsia* FÖRSTER, 1878 (eine Art). Die Familie Azotidae ist nur mit einer Art, *Ablerus elegantulus* (SILVESTRI, 1915), vertreten.

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Jahr/Year: 2023

Band/Volume: [0055\\_1](#)

Autor(en)/Author(s): Madl Michael

Artikel/Article: [A catalogue of the families Aphelinidae and Azotidae \(Hymenoptera, Chalcidoidea\) of Eritrea 275-286](#)