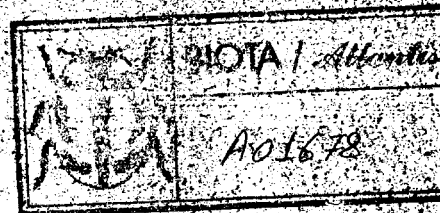


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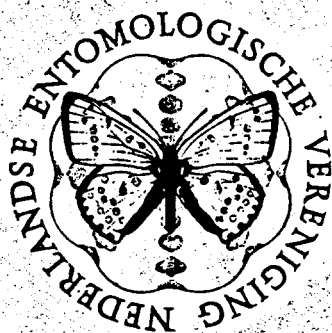
1979



TIJDSCHRIFT VOOR ENTOMOLOGIE

UITGEGEVEN DOOR

DE NEDERLANDSE ENTOMOLOGISCHE VERENIGING



INHOUD

C. VAN ACHTERBERG. — A revision of the subfamily Zelinae auct. (Hymenoptera, Braconidae), p. 241—479, figs. 1—900.

Augusta; Wongan Hills; 13 mi. NEE. Caiguna; 21 mi. NE. Fraser Range; 19 mi. NE. Mundrilla), Southern Australia (9 mi. E. Cook; Mambray Creek; Leigh Co.; 35 mi. ESE. Morgan; 5 mi. S. Mungewarrie Sta.; 35 mi. E. Ceduna; Old Alton Downs, Simpson Desert; Goyder Lagoon, Waterhole; 10 mi. ESE. Koonalda), South Western Australia (Lake Magenta, at flowers of *Eucalyptus*), Australian Capital Territory (2 mi. E. Mt. Coree; Canberra), Northern Territories (Tempe Downs; 36 km SW. Borroloola). New Caledonia (Noumea). Norfolk Islands (Burnt Pine, 370 ft; Duncornbe Bay, 300 ft; J. E. Road, 200 ft) (RMNH, CSIKO, CNC, BM, CAS, BPBM). From the Afrotropical and S. Palaearctic regions: Persia (Beshire (? = Beshneh, S. Iran)), Ethiopia (Addis-Abbeba; Haut-Aduache, Endessa; Karssa; Debra Zeit, 7200 ft), Kenya (S.W. Elgon, 6700 ft (specimen figured); Naivasha; Nairobi; Muguga; Mau Escarpment, Molo, 2420 m; Mt. Kenya, West side, lower zone, Ngaré Rungai, prairie river, 2000 m; Wa-Kikuyu, Wambogo, 1750 m; Elgon Saw Mill, Mt. Elgon, 2470 m; Mt. Elgon, 210 m; Meru), Tanzania (Kilimandjaro, Kibonoto culture zone; id., Himo River, 1000 m, lower zone), Malagasy (Ftanaransoa, Plateau Central; Bekily, Reg. Sud de l'île; Tananarive; Banian, 70 m, Ankazoabo; Périnet; Andronotobaka, 1400 m, Arnbatolampy; Montagne d'Ambre, Les Roussettes, 1100 m; Ankasoka, 1130 m, Route Lakete; Ankaratra, 1800 m; La Mandraka; Antsirabé), Ruanda (Nyabikenke, Nyanza Terr., 1700 m; Sabiro, 1300 m), Zaire (Lomani, Kaniama; Ituri, Blukwa; Lualaba, N'Zilo, N. Kolwezi, 1400 m; Kolwezi, Mulando; Lubumbashi), Zambia (Welsley), and Rhodesia (Marandellas) (BM, MNHN, ZSB, RMNH, MAC, TC, TMA, CNC, NR). Variation: Length of fore wing 5.8—9.0 mm; antennal segments 45—51; length of malar space 0.3—0.7 times basal width of mandible; length of hind femur 5.0—6.9 times its width; spurs of hind tibia of male truncate and pigmented apically (figs. 296, 297); length of 4th segment of labial palp 1.8—2.8 times 3rd segment; length of 1st tergite 1.9—2.5 times its apical width; length of ovipositor sheath 0.05—0.08 times fore wing; colour of pterostigma varies from yellowish-brown to more or less dark brown; sometimes mesosoma with dark patches (especially at the middle of the mesoscutal lobes); 2nd tergite rather whitish laterally; sometimes mesosoma with dark patches (especially at the middle of the mesoscutal lobes); metasoma partly, apex of hind femur, and main part of hind tibia and tarsus sometimes infuscated; vein 2-SC + R of hind wing shortly transverse. Cocoon white and thin.

Notes. This species is closely related to *australiensis*, which differs mainly by the presence of the black-and-white pattern of the metasoma. Known hosts of reared specimens are *Spodoptera exempta* Walker and *Agrotis segetum* (Denis & Schiff.), both belonging to the Noctuidae (Lepidoptera).

***Homolobus (Apatia) truncatoides* spec. nov.**

(figs. 302—314, 324—326)

Holotype, ♀, length of body 5.2, of fore wing 5.0 mm.

Head. — Antennal segments 42, 3rd segment 1.1 times 4th segment, length of 3rd and 4th segments 3.2 and 2.8 times their width, respectively, length of both penultimate segments 1.7 and 2.0 times their width; length of 4th segment of labial

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palp 1.8 times 3rd segment; length of maxillary palp equal to height of head; eye weakly emarginate (fig. 311); dorsal length of eye 2.1 times temple; POL : O ocellus : OOL = 12 : 10 : 13; frons mainly flat and smooth, only behind antennal sockets some sculpture (fig. 312); vertex convex, smooth; face rather flat, transversely rugulose-punctulate (fig. 311); clypeus rather convex, punctate; apical margin of clypeus straight medially, not differentiated from clypeus; length of malar space 0.9 times basal width of mandible; upper condyli of mandibles distinctly below lower level of eyes (fig. 311).

Mesosoma. — Length of mesosoma 1.4 times its height; side of pronotum smooth, but medially crenulate and posteriorly reticulate-rugose (fig. 302); epicnemial area and precoxal suture densely reticulate-rugose; rest of mesopleuron smooth, except for some punctures near the pleural suture; metapleural flange medium-sized, rounded and with a narrow carina apically (fig. 302); metapleuron smooth, only ventrally rugose; notauli crenulate (fig. 325); mesoscutal lobes weakly punctulate; surface of propodeum densely and rather finely reticulate-rugose, except for a narrow anterior part smooth and with a short medial carina anteriorly.

Wings. — Fore wing: $r : 3\text{-SR} : \text{SRI} = 6 : 10 : 47$; SRI almost straight, but slightly curved (fig. 306); cu-a weakly inclivous, postfurcal: $1\text{-CU1} : 2\text{-CU1} = 6 : 37$; $2\text{-SR} : 3\text{-SR} : r\text{-m} = 10 : 10 : 6$; 2Δ sclerotized basally (fig. 306); area basally of $2A$ sparsely setose (fig. 304). Hind wing: r absent; SR weakly sinuate, scarcely sclerotized (fig. 306); $2\text{-SC} + R$ transverse; $\text{SC} + R1$ rather short and weakly curved (fig. 307).

Legs. — Hind coxa largely punctulate, dorsally mainly rugulose; tarsal claws simple, only yellowish setose, outer hind claw rather spiny setose (figs. 313, 314); length of femur, tibia and basitarsus of hind leg 7.1, 10.2, and 8.8 times their width, respectively; length of spurs of hind tibia 0.6 and 0.5 times basitarsus.

Metasoma. — Length of 1st tergite 3.2 times its apical width, its surface longitudinally reticulate-rugose (fig. 326); dorsal carinae of 1st tergite absent, except for a weak remnant; length of ovipositor sheath 0.04 times fore wing; sheath truncate apically (fig. 303).

Colour. — Brownish-yellow; antenna (except inner side of scapus, pedicellus, and anellus), all tarsi, middle of mesoscutal lobes, metanotum partly, 1st and 2nd tergite, more or less brownish infuscated; wing membrane hyaline; pterostigma light brown.

Holotype in ZMB, Berlin: "Egypten, Schmiedekn. S., 1897", "Heliopolis bei Cairo", "28642", "*Phylacter nigricornis* Walk., ♀♂" (in Schmiedeknecht's handwriting), "Zool. Mus. Berlin". Paratypes: (40 ♀ and 30 ♂) from the Afrotropical region: 1 ♂, "Kenton-on-Sea, South Africa, XII.1—1 I.1970, Rex Jubb" (TC); 1 ♂, "S. Africa. R. E. Turner, Brit. Mus. 1922—97", "Mossel Bay, Cape Province, Febr. 1922" (BM); 1 ♀, id., 15.iii—20.iv.1932 (RMNH); 1 ♀, id., Febr. 1922 (BM); 1 ♀, "Madagascar, Tananarive, 6—13.x.1970", "Coll. P. Hammond, B.M. 1970-603" (BM); 1 ♀, "Nyassa See, Langenburg, VI.98, Fülleborn S.", "*Zelex nigricornis* Walk." (in Szépligeti's handwriting), "Zool. Mus. Berlin" (ZMB); 1 ♂, "Coll. Mus. Congo, Madagascar: Ankaratra, IV-1944, A.

Seyrig" (MAC); 2 ♂, "Muséum Paris, Afrique occidentale, Konakry, A. Chevalier, 1909", "Décembre" (MNHN, RMNH); 1 ♀, "Ilora, Nigeria, VIII.74, W. State, J. T. Medler" (TC); 2 ♀, "Grahamstown, South Africa, I.17—31.71 & 11.15—22.71, Fred Gess" (TC, RMNH); 1 ♂, St. Lucia Estuary, XI.10, 70. So Africa, H. & M. Townes" (TC); 1 ♀, "Kenton-on-Sea, South Africa, XII.11.1, 1970 (RMNH); 1 ♂, id., January 1971 (TC); 2 ♀, id., II.1—19, 1971 (TC); 1 ♂, id., XI.15—30, 1970 (RMNH); 2 ♀, id., XI.1—14, 1970 (TC, RMNH); 2 ♀, id., March 1971 (TC); 1 ♀, id., April 1971 (TC); 2 ♀, id., June 1971 (TC); 1 ♀, "Madagascar, Antsirabé", "Muséum Paris, XI.36, A. Seyrig", "*Zelee chlorophthalmus* Nees, B. Sigwalt" (RMNH); 1 ♀, "Madagascar, Ankaratra, Alt. 1800 (m)", "Muséum Paris, 11.38, A. Seyrig", "48", "*Zelee chlorophthalmus* Nees, B. Sigwalt" (MNHN); 1 ♀, "Muséum Paris, Madagascar, Région du Sud-est, Forêt Dauphin, Ch. Allaud, 1901", "*Zelee nigricornis* Walker" (in Szépligeti's handwriting). "*Zelee chlorophthalmus* Nees, B. Sigwalt" (MNHN); 2 ♀ and 1 ♂, "Muséum Paris, Zambéze, Nova Choupanga, près Chemba, P. Lesne, 1929", "*Zelee chlorophthalmus* Nees, B. Sigwalt"; 1 ♂, "Muséum Paris, Madagascar, Tananarive, R. Decary, 1921", "Février", "*Zelee chlorophthalmus* Nees, B. Sigwalt" (MNHN); 1 ♀, "Muséum Paris, Ethiopie Mérid., Haut-Aduache, Endessa, Maurice de Rothschild, 1905", "*Zelee nigricornis* Walk., V. Szépligeti, det. 1907" (TMA); 1 ♀, "Madagascar, Perinet, XI-7-1959", "E. S. Ross Collector" (CAS)). From the South Palaearctic region: 3 ♂, "Aegyptus, Schrnkn., 97", "Memphis", "*Zelee nigricornis* Walk., det. Szépligeti (TMA, RMNH); 1 ♂, "Alexandria, Egypt", "*Zelee chlorophthalmus* (Nees), det. P. Marsh" (USNM); 1 ♂, "Spain, Almeria, El Alquinar, 3 March 1966, Leif Lyneborg" (UZM); 4 ♀ and 4 ♂, "Museum Leiden, Bär, Blöte, De Jong & Osse, Estepona, 3.X.1952, Spanje" (RMNH); 2 ♀ and 2 ♂, id., but 30 km ZW. Malaga, 4.X.1952 (RMNH); 1 ♂, id., but from Jerez de la Frontera, 22.IX.1952 (RMNH); 1 ♂, "Islas Canarias, Tenerife, J. Wolschrijn", "Los Cristianos, 13/26.ii.1977" (RMNH); 1 ♂, "Almunecar, Granada Prov., Spain, 0—30 m, J. R. Vockeroth, 16.VII.1960" (CNC); 1 ♂, "nr. Limassol, XI.21.46, Cyprus Mavroumoustakis" (TC); 1 ♀ and 2 ♂, "Cyprus, Yermasovia R., 25.XI.66, 4.XI.1967, and 12.V.1966, respectively, Mavroustakis" (CNC, RMNH); 1 ♂, Italy, "Palermo, XI.63" (TC) 2 ♀ and 1 ♂ from Iraq: "Loc. Hindiya, 31/10/1956". "Host (on) *Beta*, Coll. S. Alyasiri", "*Zelee cf. calcarator* ♀", "8/11/195.", "Host (on) sugar beet, Coll. D. Ahrnad", "*Zelee cf. calcarator*" (HC), and "Iraq, Diwanyye, 12-9-1954, light trap", "*Zelee cf. calcarator* ♂" (HC); 1 ♀ and 1 ♂, "El Riyadh; Saudi Arabia, 9.X.1959, E. Diehl" (CNC, RMNH). And from the Oriental Region: 1 ♀, "1400 ft, Coimbatore, South India, XI.1966, P. S. Nathan" (CNC); 1 ♀, "India, Mysore, 10 mi. NW. Kittur, 15.11.1962, E. S. Ross & D. Q. Cavagnaro" (CAS); 1 ♀, "Malaya, Cameron Highlands, Mt. Brichang, 2—7.1.59" (BPBM); 2 ♀, "India, A. P., Warangal, A. R. S. Coll." (DZD, RMNH); 1 ♀, "India, U.P., Dehra Dun, 600 m, 8.IV.1976, S. Biswas No. B 13" (DZD). Specimens excluded from the type-series: 1 ♂, "Kandy, Ceylon, W. Horn", "Co-type", "*Macrocentrus ceylonicus* Enderl., ♂, Type, Dr. Enderlein det. 1912". A wrongly identified specimen, still belonging to the type-series of *Metapleurodon ceylonicus* (Enderlein) (PAN). Furthermore 1 ♀, "Jonkershoek, near Stellenbosch, X.8.70. S.

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Africa, H. & M. Townes" (TC), excluded from the type-series because of the colour and sculpture. Middle of frons, stemmaticum, middle of mesoscutal lobes, antenna apically, pterostigma, propodeum, meso- and metapleura dorsally, 1st tergite, base of 2nd tergite and tarsi, more or less dark brown; 2nd tergite is somewhat rugulose basally; 1 ♂, "Kenton-on-Sea, South Africa, April 1971, Rex Jubb" (TC), excluded because the apices of the hind tibia are sharp and hyaline.

Variation: length of fore wing 3.5—7.1 mm, antennal segments 39—44; length of 4th segment of labial palp 1.6—2.5 times 3rd segment; length of 1st tergite 1.7—2.6 times its apical width; length of malar space 0.8—1.1 times basal width of mandible; length of hind femur 5.6—6.3 times its width, exceptionally 4.9 times; hind tibial spurs of male (sub)truncate and pigmented apically (figs. 308, 310); length of ovipositor-sheath 0.08 times fore wing; claws at most indistinctly yellowish pectinate basally; apical width of marginal cell 1.9—2.2 times its maximum basal width.

***Hornolobus (Apatia) pallidistigmus* (Cameron) comb. nov.**
(figs. 327—331, 334—340, 709, 712)

Cameron. 1911. Ann. Transv. Mus. 2: 210 (as *Macrocentrus pallidistigmus*)
Shenefelt, 1969. Hym. Cat. (nov. ed.) 4(1): 166.

Holotype, ♂, length of body 9 (according to Cameron), of fore wing 8.9 mm, metasoma and hind leg absent.

Head. — Remaining antennal segments 12, 3rd segment 1.1 times 4th segment, length of 3rd and 4th segments 2.9 and 2.6 times their width, respectively; length of 4th segment ca. twice 3rd segment; length of maxillary palp about equal to height of head; inner sides of eyes rather emarginate (fig. 330); POL : O ocellus : OOL = 9 : 9 : 7; frons mainly rugose, flat (fig. 328); vertex superficially punctulate; face densely punctulate, near eyes and near clypeus almost smooth, rather flat; clypeus almost smooth, superficially and remotely punctulate, flattened; apical margin of clypeus somewhat convex medially, not differentiated from clypeus (fig. 330); length of malar space ca. 0.8 times basal width of mandible; upper condyli of mandibles distinctly below lower level of eyes (fig. 330).

Mesosoma. — Length of mesosoma 1.4 times its height; side of pronotum ventrally smooth, medially crenulate, posteriorly and dorsally closely punctate (fig. 327); epicnemial area densely punctate; precoxal suture shallow, densely punctate; rest of mesopleuron finely punctulate, almost smooth; metapleural flange large, lamelliform, rounded apically (fig. 327); notauli deep and finely crenulate (fig. 331); surface of propodeum densely punctate-rugose, but almost smooth anteriorly, without carinae medially.

Wings. — Fore wing: $r : 3\text{-SR} : \text{SRI} = 10 : 17 : 73$; SRI curved (fig. 329); cu-a subinterstitial, inclivous, and somewhat curved basad apically; $2\text{-SR} : 3\text{-SR} : r\text{-m} = 17 : 17 : 10$; 2A sclerotized basally (fig. 329); area basally of 2A remotely setose. Hind wing: r absent; $2\text{-SC} + R$ transverse; SR weakly sinuate, basally rather sclerotized (fig. 329); $\text{SR} + R1$ straight (fig. 337); apical width of marginal cell 2.4 times its maximum basal width.