

**Notes on some type-species described by Fabricius of the subfamilies
Braconinae, Rogadinae, Microgastrinae and Agathidinae (Hymenoptera:
Braconidae)**

by

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ABSTRACT. — A study is reported of type-specimens of species described by Fabricius, and examined as far as the species concerned are types of genera. The following new synonyms were established: *Microgaster* Latreille, 1804 is a senior synonym of *Microplitis* Foerster, 1862; *Rogas* Nees, 1818 is a senior synonym of *Pelecystoma* Wesmael, 1838, and its type-species *Ichneumon testaceus* Fabricius, 1798 (nec Gmelin, 1790) is a synonym of *Rogas luteus* Nees, 1834; *Bracon lanceolator* Fabricius, 1804 is a senior synonym of *B. nigriceps* Brullé, 1846; *Ichneumon initiator* Fabricius, 1793 is a senior synonym of *Atanycolus flaviceps* Ivanov, 1896; *Ichneumon minutator* Fabricius, 1798 is a senior synonym of *Bracon abscissor* Nees, 1834; and *Vipio* Latreille, 1804 has to be synonymized with *Cremnops* Foerster, 1862.

Lectotypes are selected for *Ichneumon calculator* Fabricius, 1798; *I. deprimator* Fabricius, 1798; *I. flavator* Fabricius, 1793; *I. minutator* Fabricius, 1798; *I. urinator* Fabricius, 1798; *Bracon armator* Fabricius, 1804; and *B. lanceolator* Fabricius, 1804. The lectotype of *Ichneumon deprimator* Fabricius is redescribed and illustrated. A neotype is designated for *Ichneumon sticticus* Fabricius, 1798.

Owing to the kindness of Dr. B. Petersen (Copenhagen) I have been able to study the type-species of genera described by Fabricius. Several of the types examined belong to species incorrectly interpreted up to the present. For the terminology used, see Van Achterberg, 1979: 242-249.

Ichneumon armator Fabricius

Fabricius, 1804: 107.

Spinaria armator; Shenefelt, 1975: 1257.

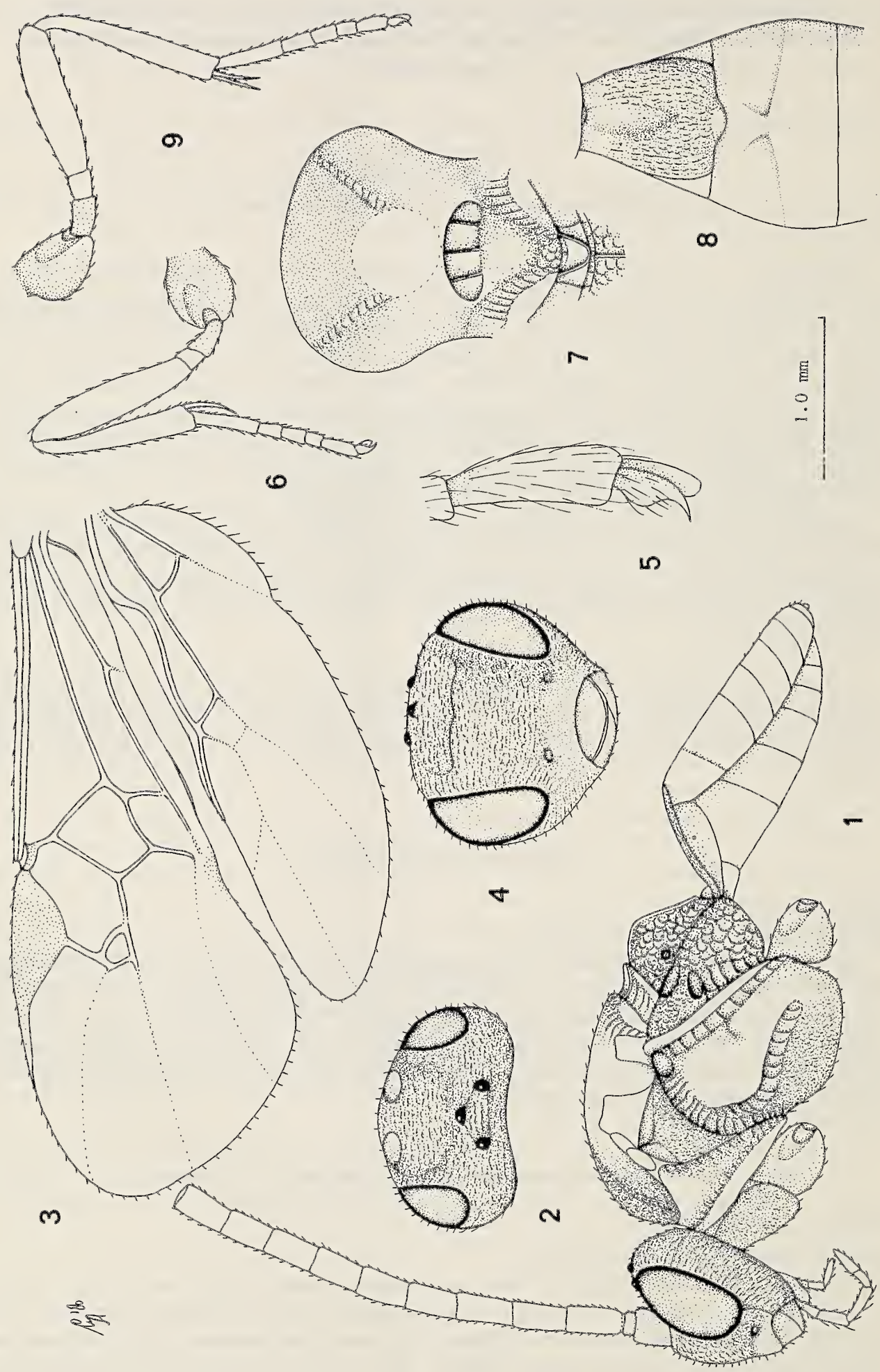
Type-species of *Spinaria* Brullé, 1846 (designation by Viereck, 1914). In the Copenhagen part of the Fabricius Collection are two syntypes, both in good condition. The ♀ with the following labels is here designated as lectotype: "Type", "Sumatra, Daldorff, Mus. T. Lund, Bracon armator Fabr.", "Lectotypus Bracon armator F., K.-J. Hedqvist, det. 1962" (unpublished). The paralectotype has the antennae missing. The type-species agrees with the common interpretation of the genus *Spinaria* Brullé.

Ichneumon calculator Fabricius

Fabricius, 1798: 225.

Agathis calculator; Shenefelt, 1970: 323.

Type-species of *Bassus* Fabricius, 1804 (designation by Curtis, 1825) and *Microdus* Nees, 1814 (designation by Haliday, 1840). Of the type-series received by Fabricius from Italy only one male is left in the Kiel part of the Fabricius Collection. This specimen is here designated as lectotype; it bears an old label "calculator/3960", and it agrees well with the general interpretation of this species.



Ichneumon deprimator Fabricius (figs. 1-9)

Fabricius, 1798: 227.

Microgaster deprimator; Shenefelt, 1973: 702-703.

Type-species of *Microgaster* Latreille, 1804 (designation by Latreille, 1810). In the Fabricius Collection (Kiel part) are three male syntypes, belonging to *Microplitis* Foerster, 1862. One male is here designated as lectotype and redescribed.

Lectotype, ♂, length of body 4.5 mm, of fore wing 4.0 mm.

Head. — Remaining antennal segments 11, length of 3rd segment 1.1 times 4th segment, length of 3rd and 4th segments 2.2 and 2.0 times their width, respectively, length of 11th segment 2 times its width, shortly setose; maxillary palp with 5 segments, its length 0.8 times of head; labial palp with 3 segments; dorsal length of eye 1.5 times temple (fig. 2); temple rugulose, dull, and gradually narrowed posteriorly; POL: Ø ocellus: OOL = 17 : 5 : 14; frons rather concave, rather coarsely and densely rugulose, dull; vertex and face rather coarsely rugulose, rather convex; clypeus punctulate-coriaceous, its ventral margin not differentiated, concave (fig. 4); length of malar space 1.8 times basal width of mandible; malar suture shallowly impressed.

Mesosoma. — Length of mesosoma 1.3 times its height; side of pronotum crenulate-rugose medially and posteriorly (fig. 1); prepectal carina completely absent; epicnemial area rugulose-crenulate; precoxal sulcus present in anterior three-quarters of mesopleuron (fig. 1); mesopleuron below the precoxal sulcus coriaceous-rugulose, rest smooth; pleural sulcus coarsely crenulate; metapleuron coarsely reticulate, its anterior part small (fig. 1), and with a large elliptical depression above the metapleural pit; metapleural flange and posterior flange of propleuron absent; notauli completely indicated, shallow, and rugulose (fig. 7); mesoscutal lobes coriaceous and dull medially, laterally largely smooth and punctate, without distinct medial carina, but posterior part destroyed by pin; scutellar sulcus wide and rather deep, with 3 longitudinal carinae; scutellum medially almost smooth, only somewhat punctulate, laterally rugulose and moderately convex, without lateral carina, and medio-posteriorly broadly rugose (fig. 7); metanotum medially with U-shaped carina and slightly protruding posteriorly; surface of propodeum very coarsely reticulate, its medial carina complete; posterior part of propodeum differentiated from antero-dorsal part of propodeum, distinctly longer than antero-dorsal part (fig. 1); antepropodeal depression wide, but not widened near middle of propodeum (fig. 7).

Wings. — Fore wing: length of vein 1-SR about 1/5 of vein 1-M; r : 3-SR : SR1 = 7 : 2 : 42; vein cu-a long, postfurcal and somewhat inclivous (fig. 3); 1-CU1 : 2-CU1 = 4 : 10; 2-SR : 3-SR : r-m = 6 : 2 : 4; vein 1-R1 (metacarp) shorter than pterostigma (fig. 3); vein 2A unsclerotized. Hind wing: vein cu-a long, slightly curved, almost straight (fig. 1).

Legs. — Hind leg missing; middle coxa smooth; (hind coxa of paralectotypes about as long as 1st tergite); tarsal claws simple, widened basally, not pectinate (fig. 5); femur, tibia and basitarsus of middle leg 4.2, 7.2 and 3.2 times their width, respectively; length of both middle spurs 0.9 times their basitarsus.

Metasoma. — Length of 1st tergite 1.3 times its apical width (and 1.2 times its maximum width), its surface densely rugulose and rather shiny (fig. 8), with a rather convex, smooth medio-apical knob, flat, but medially somewhat depressed; 2nd tergite smooth, medio-apically slightly elevated, without differentiated area; 2nd suture smooth, rather shallow, curved towards 1st tergite medially (fig. 8); 3rd tergite smooth, 1.5 times medial length of 2nd tergite.

Colour. — Black; legs (as far as present, and except for coxae and trochanters), tegulum

Figs. 1-9. *Microgaster deprimator* (Fabricius), lectotype. 1, habitus, lateral aspect; 2, head, dorsal aspect; 3, wings; 4, head, frontal aspect; 5, outer middle claw; 6, fore leg; 7, mesoscutum, dorsal aspect; 8, 1st-3rd tergites, dorsal aspect; 9, middle leg. 1, 3, 6, 9: scale-line (1 ×); 2, 4, 7, 8: 1.2 ×; 5: 5 ×.

(humeral plate largely dark), and palpi, reddish-yellow; wing membrane slightly infuscated, without cloud below pterostigma; pterostigma dark brown, but basal third yellowish; hind leg missing, but according to the original description completely reddish ("Pedes omnes rufi").

Lectotype in Kiel part of Fabricius Collection, Copenhagen: "deprimator". The locality is Halle (East Germany) and the types were donated by Hübner. In the same collection are two males, without labels and conspecific, obviously belonging to the same series as the lectotype because of similar pins and mounting and therefore labelled as paralectotypes.

Ichneumon deprimator Fabricius belongs to *Microplitis* Foerster, and in Nixon's key (1970: 4-10) this species runs to *M. sordipes* Nees, because of the smooth middle of the scutellum. However, *M. sordipes* differs by the dark pterostigma, the longer vein 1-R1 of fore wing (subequal to length of pterostigma), dark cloud below the pterostigma, 2nd tergite with weak lateral depressions, mesoscutum with a medial carina, scapus brownish, and tegulum brown (not reddish!).

Since the generic position of *I. deprimator* has been incorrectly understood, *Microplitis* Foerster, 1862 becomes a junior synonym of *Microgaster* Latreille, 1804 and *Microgaster* auct. sensu stricto has to be renamed as *Lissogaster* Bengtsson, 1926. The name *Liganira* Walker in Tennent, 1859 is unavailable, since it was published in 1859 as a nomen nudum. When the type-species was described in 1860 by Walker he described *Liganira* as a synonym of *Microgaster*, thereby making the name *Liganira* unavailable. The correct name for *Microgaster deprimator* auct. is *Lissogaster australis* (Thomson, 1895) comb. nov.

Ichneumon desertor Fabricius

Fabricius, 1775: 334.

Vipio desectus; Shenefelt, 1978: 1845-1847.

Type-species of *Vipio* Latreille, 1804 as designated by Foerster in 1862. However, *Ichneumon desertor* Fabricius is not a separate species, since Fabricius cited in his first description only the original description of *Ichneumon desertor* Linnaeus, 1758, together with the reference to Linnaeus' description. Therefore there cannot be any doubt that there is no separate species named *Ichneumon desertor* Fabricius. This fact was overlooked by Bradley (1919: 59) when he stated that "the type of *Vipio* Latreille is *Ichneumon desertor* Fabricius, not of Linnaeus". At present in the Fabricius Collection there are specimens under *desertor* which are not conspecific (or congeneric) with *I. desertor* Linnaeus and this indicates only that Fabricius had difficulties in interpreting *I. desertor* Linnaeus. Because nomenclatorily *Ichneumon desertor* Fabricius is actually *I. desertor* Linnaeus, 1758, the genus *Vipio* Latreille, 1804 has to be transferred from the Braconinae to the Agathidinae and becomes there a new senior synonym of *Cremnops* Foerster, 1862. Viereck (1914: 156) recognized that the name *Vipio* Latreille was incorrectly used and proposed the (unnecessary) replacement name *Zavipio*. The oldest available name for the genus *Vipio* auct. in the Braconinae is *Isomecus* Kriechbaumer, 1895. The valid name for *Vipio desertor* auct. is *Isomecus pectoralis* (Brullé), of which the type could not be found in the Paris Museum. *Vipio desectus* Bradley, 1919 is an unnecessary replacement name for *Ichneumon desertor* Fabricius, 1775 sensu auct., since there exist several older names for this taxon.

Ichneumon flavator Fabricius

Fabricius, 1793: 161.

Cyanopterus flavator; Shenefelt, 1978: 1678-1679.

Type-species of *Cyanopterus* Haliday, 1835 (by monotypy). In the Fabricius Collection (Kiel part) are five specimens, of which only one fits the original description; this ♀ (with the old handwritten label "flavator") is here designated as lectotype. The lectotype agrees with the general interpretation of this species. Other types may have been returned to Mr. Desfontaines, but are probably lost.

Ichneumon initiator Fabricius

Fabricius, 1793: 161.

Atanycolus initiator; Shenefelt, 1978: 1443-1445.

In 1840 Haliday (in Westwood) mentioned *initiator* as type-species of *Coeloides* Wesmael, 1838. However, *I. initiator* was misidentified by Wesmael and the true *initiator* completely disagrees with the original diagnosis of the genus *Coeloides* Wesmael. To solve the discrepancy between the original diagnosis of the genus *Coeloides* Wesmael and the type-designation by Haliday I have requested the International Commission on Zoological Nomenclature to suppress all designations for the genus *Coeloides* and to designate *Coeloides scolyticida* Wesmael, 1838 (= *initiator* sensu Wesmael, 1838 (nec Fabricius, 1793)) as type-species.

In the Kiel part of the Fabricius Collection under *initiator* there is one ♀, obviously the holotype of *I. initiator* Fabricius. It belongs to the genus *Atanycolus* and runs in existing keys to *Atanycolus flaviceps* Ivanov, 1896. Since *Atanycolus initiator* (Fabricius) is a new senior synonym of *A. flaviceps*, the correct name for *A. initiator* auct. is *A. genalis* (Thomson, 1892).

Bracon lanceolator Fabricius

Fabricius, 1804: 106.

Lasiophorus lanceolator; Shenefelt, 1978: 1692.

Type-species of *Lasiophorus* Haliday, 1838 (by monotypy). In the Copenhagen part of the Fabricius Collection are 3 ♀-syntypes. Here I designate the ♀ with "Type", "Essequibo [= Guyana], smidt, Mus: de Sehestedt, *Bracon lanceolator* Fabr." as lectotype. It is in an excellent condition (as are both paralectotypes), it agrees with the general interpretation of the genus, and the species is a senior synonym of *Bracon nigriceps* Brullé, 1846 syn. nov. The specimens referred to by Fabricius (1804: 106) as "variat forte sexu absque cornu frontali" belong (as could be expected) to another genus and are only concolorous.

Ichneumon minutator Fabricius

Fabricius, 1798: 225.

Bracon minutator; Shenefelt, 1978: 1511-1514.

Type-species of *Bracon* Fabricius, 1804; designated by the International Commission on Zoological Nomenclature in 1945 (Opinion 162). In the Fabricius Collection (Kiel part) are four females, of which three cannot be types of *I. minutator*, because they differ from the original description by the completely dark femora. The remaining female (with the old label "minutator") agrees with the original description and is here designated as lectotype. It belongs to *Bracon abscissor* Nees, 1834 (syn. nov.). The next available name for *Bracon minutator* auct. seems to be *Bracon trucidator* Marshall, 1888.

Ichneumon sticticus Fabricius

Fabricius, 1798: 229.

Pygostolus sticticus; Shenefelt, 1969: 123-124.

Type-species of *Pygostolus* Haliday, 1833 by monotypy. The type is lost according to Zimsen (1964: 369). The specimen of *Prio(no)poda stictica* auct. (referred to under *testaceus*) in the Fabricius Collection cannot be the type of *Ichneumon sticticus* Fabricius, 1798, because it differs from the original description (e.g., by the colour of the body, the width of the ovipositor and the shape of the metasoma). Because *I. sticticus* is the type-species of the genus *Priopoda* Holmgren, 1855 in the Ichneumonidae and of the genus *Pygostolus* Haliday, 1833 in the Braconidae, a choice has to be made. In the original description Fabricius mentions one crucial character, viz., the ovate metasoma ("abdomen ovatum"); a feature unknown of *Priopoda sticticus* auct. and typical for the genus *Pygostolus* Haliday.

The conclusion is inescapable that the designation of the type-species of *Priopoda* Holmgren, 1855 by Viereck (1914) is based on a misidentification of *Ichneumon sticticus* Fabricius and further action should be undertaken by the specialists working on Ichneumonidae. To fix the genus *Pygostolus* I designate here (in connection with my revision of the genera of Braconidae) a neotype of *Ichneumon sticticus* Fabricius, a ♀ deposited in the Rijksmuseum van Natuurlijke Historie, Leiden: "Nederland, Heerde (Gld.), 11.VI.1976, J. B. Wolschrijn". The neotype of *Pygostolus sticticus* (Fabricius) agrees with the common interpretation of the species.

Ichneumon testaceus Fabricius

Fabricius, 1798: 228 (nec Gmelin, 1790).

Rogas testaceus; Shenefelt, 1975: 1254.

Type-species of *Rogas* Nees, 1818; designation by Curtis, 1834. In the Kiel part of the Fabricius Collection are under "*testaceus*" two specimens. One female belongs to the Ichneumonidae with the metasoma distinctly compressed apically. This feature contradicts the original description ("... abdomine ovato depresso...") and therefore cannot be a type-specimen of *I. testaceus*. It bears the labels "a", "*testaceus*" (old handwriting), "*Prionopoda* ♀ *stictica* F., Holm., det. J. F. Perkins, 1958". The other specimen is heavily damaged; head and metasoma indicate a synonymy with *Rogas luteus* Nees, 1834. This specimen agrees perfectly with the original description of *I. testaceus*, e.g., the metasoma is depressed. Actually the second specimen is the real type as indicated by a label in Dr. Perkins' handwriting "Type of *Ichneumon testaceus* F., 1798 nec Gmelin, 1790 = *Pelecystoma luteus* Nees, 1834". I have labelled this specimen as holotype of *I. testaceus*, because there is no evidence that Fabricius had more than one specimen. Because of the synonymy of *I. testaceus* with *Rogas luteus* Nees, the genus *Rogas* Nees, 1818 becomes a senior synonym of the genus *Pelecystoma* Wesmael, 1838. The next available name for *Rogas* auct. is *Aleiodes* Wesmael, 1838. *Bracon testaceus* Spinola, 1808 is nomenclatorily a junior synonym of *I. testaceus* Fabricius, since Spinola refers to it in the original description. Actually it is a misidentification of *Aleiodes circumscriptus* (Nees, 1834).

Ichneumon urinator Fabricius

Fabricius, 1798: 224.

Bracon urinator; Shenefelt, 1978: 1650-1653.

Type-species of *Rostrobracon* Tobias, 1957 by monotypy. In the Kiel part of the Fabricius Collection one male type-specimen is present, with the old label "*urinator*". It is here designated as lectotype, because Fabricius got this species from Hübner in Halle (now East Germany) and it is likely that he returned some specimens and retained one specimen for his own collection. The fate of the Hübner material is uncertain and is most likely lost. The lectotype of *urinator* agrees with the generally accepted interpretation of this species. It is rather long setose, has a somewhat humped mesoscutum, 1st tergite with no dorso-lateral carinae, and the mesoscutum is rather steep and very low anteriorly. The labo-maxillary complex ("rostrum") is rather short (0.4 times height of head), the length of the eye is 1.4 times its width, and the malar space is 0.7 times the basal width of the mandible.

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LYMANTRIA DISPAR (LINNAEUS) (LEP.: LYMANTRIIDAE). Op 29 mei 1981 ging ik weer eens een kijkje nemen in het natuureservaat „de Groote Peel” bij Ospel. Sinds 1975 was ik er niet meer geweest. In dat jaar wemelde het er van de rupsen, vooral bij de ingang van het reservaat. *Lymantria dispar*, *Euproctis chrysorrhoea* (Linnaeus) en *Malacosoma neustria* (Linnaeus) waren er toen zeer talrijk en schadelijk. In het reservaat zelf was *Leucoma salicis* (Linnaeus) schadelijk op wilg. Nu, zes jaar later, was er niets meer van dit alles. Ik vond geen *chrysorrhoea*, *neustria* of *salicis* en slechts vier rupsen van *dispar*. Twee daarvan waren beparasiteerd, de andere twee leverden een fraai paartje. Het hoeft geen betoog dat de bomen en struiken in het reservaat er fris en groen uitzagen. Rupsenvrij waren ze echter niet. Kennelijk had *Euproctis similis* (Fuessly) de opengevallen plaatsen opgevuld, want deze was nu heel gewoon, vooral op wilg. *E. similis* heeft trouwens een goed jaar achter de rug: in het reservaat „Hatertse en Overasseltse Vennen” bij Nijmegen vloog de vlinder heel goed in juli.

Op 26 december 1981 heb ik de bossen van Lierop weer opgezocht om te kijken hoe het daar met *L. dispar* stond. Ik vond nu bijzonder veel dode rupsen en lege poppen aan de bomen, alsmede veel eilegels, die echter zonder uitzondering lege eitjes bevatten. Het hele beeld deed me sterk denken aan de situatie die Van Frankenhuyzen (*Ned. Boschb. Tijdschr.* 53: 344-347 (1981)) beschreef voor een bosgebied bij Venray. Ook hier was *dispar* een plaag, totdat in 1980 de kolonie gedecimeerd werd door een virusinfectie. Het lijkt erop dat dit ook bij Lierop gebeurd is, maar dan een jaar later. Wat er in „de Groote Peel” is voorgevallen, is nog onduidelijk, maar misschien weten verzamelaars in het oosten van Brabant er meer van.

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