## Notes on Aculeate Hymenoptera described in the period 1758-1810

by

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## F. A POMPILID ORIGINALLY DESCRIBED IN THE GENUS ICHNEUMON.

Ichneumon bifasciatus Geoffroy, in Fourcroy, 1785, p. 405 = "Ichneumon noir à deux bandes sur les ailes", Geoffroy, 1762 = Sphex bifasciatus Fabricius, 1793, p. 212, no. 58.

Apparently it has been overlooked that FABRICIUS (1793), in his description of *Sphex bifasciata*, refers to "Ichneumon niger alis fascia duplici transversa nigra. Geoff. Ins. 2. 337. 37." This species was named *Ichneumon bifasciatus* by Geoffroy in 1785, and the name used by FABRICIUS is perhaps only a new combination, not that of a new species. FABRICIUS wrote "Habitat in agro Parisino Dom. Bosc." and may have received from Bosc authentic material under the name *bifasciatus*.

However this is, Sphex bifasciatus Fabricius, if regarded as a new species, is a primary homonym of the older Sphex bifasciatus O. F. Müller, 1776, and therefore in any case invalid. On the other hand Ichneumon bifasciatus Geoffroy, 1785, which is an objective synonym of Geoffroy's Ichneumon no. 37, is an available name. In Dalla Torre's catalogue, vol. 3, p. 861, it is listed as an unidentified Ichneumonid, but this author seems not to have noticed that Fabricius identified Geoffroy's Ichneumon no. 37 as a species of Sphex in 1793 and transferred it to Pompilus in 1798. If we accept that Fabricius correctly identified Ichneumon no. 37 of Geoffroy, thereby acknowledging the probability that he saw material (perhaps authentic) from the type locality, Ichneumon bifasciatus Geoffroy, which is the same species, is a Pompilid of the genus Dipogon Fox (Deuteraginia Sustera), and must bear the name Dipogon bifasciatus (Geoffroy), 1785.

At this moment I am unable to establish the identity of this species with complete certainty. Berland (1925, p. 226) wrote: "A [genia] bifasciata F.— A. hircana Dahlbom, 1829 et auteurs; non bifasciata Dahlbom, Dalla Torre, etc.", adding in a footnote: "C'est cette espèce que les auteurs depuis longtemps appellent A. hircana, pour avoir méconnu le type de Fabricius. Tout ce qui a été dit au sujet de hircana s'applique donc à bifasciata, tant au point de vue systématique que éthologique". HAUPT (1926) distinguished Deuteragenia bifasciata Fabr., 1793, from D. hircana Fabr., 1798. Wahis (1955) lists Pompilus bifasciatus van der Linden, 1827, in the synonymy of Dipogon hircanus Fabr., and probably has accepted that the species described under this name by VAN DER LINDEN is the same as Sphex bifasciatus Fabr., 1793.

G. ON TWO WASPS DESCRIBED BY FABRICIUS AS VESPA CONICA.

Vespa conica Fabricius, 1775, p. 372.

"V(espa) nigra, thorace antice ferrugineo, abdomine conico, flavo: segmento secundo et sexto basi nigris. — Habitat in America.

Antennae nigrae, primo articulo subtus flavo. Caput nigrum, labio flavo. Thorax niger, antice scutelloque ferrugineis. Abdomen petiolatum, petiolo nigro; secundum segmentum maximum, basi nigrum, apice flavum: reliqua flava, excepto sexto basi atro. Pedes ferruginei."

In 1781, Fabricius (p. 469, no. 65) repeated part of this description, with a reference to the original, and added: "Habitat in America meridionali, in Italia. D. Allioni."

I have been unable to find any further references to this species in FABRICIUS's later works. In the 'Mantissa Insectorum' (1787) which contains only short diagnoses of one or two lines of the previously described species, we find on p. 293, under *Vespa conica* (no. 69) the description of an entirely different wasp:

"V(espa) ferruginea nigro maculata, abdominis segmento secundo fascia atra. Habitat in China.

Nimis affinis V. petiolatae attamen distincta videtur. Corpus totum ferrugineum maculis aliquot nigris. Petiolus elongatus, ferrugineus basi apiceque parum nigricans."

The further fate of these two species, *V. conica* F., 1775, and *V. conica* F., 1787, is remarkable. GMELIN (1790) appears to have been the only author who noticed the difference between the two diagnoses. He listed *V. conica* F. with a reference to Fabr. 1781, and created the name *conoidea* for FABRICIUS's second species (*V. conoidea* Gmel., p. 2753, no. 52). OLIVIER (1791), FABRICIUS (1793, 1804), DE SAUSSURE (1852), SMITH (1857), and BINGHAM (1897) all refer to *Vespa conica* F., 1787, and ignore the existence of the earlier species.

Dalla Torre's treatment of the case in his "Catalogus Hymenopterorum", vol. 9 (1894) is worth special attention. Vespa conica Fabr. 1775 is placed at the head of the series of references under "Eumenes conica", p. 22, and the usual absence of the habitat of the species under the various references effectively masks the fact that the first two citations refer to an American or European species, and not to the wasp which lives in "As.: India, China, Philippines." Vespa conoidea Gmel. is not overlooked by this author, but is listed as a doubtful species of Vespa on p. 141, where the name conoidea is ascribed to Fabricius, 1787!

My incomplete knowledge of the American Eumenidae does not permit me to conclude from the diagnose whether *V. conica* Fabr. 1775 is indeed an American species, or whether it was based on an incorrectly labelled specimen of a European *Eumenes*. For the moment *V. conica* F., 1775, may stand as a doubtful species in the genus *Eumenes*, and the Asiatic *Eumenes conicus* (Fabr., 1787) must bear the name *Eumenes conoideus* (Gmel., 1790).

H. New names of Sphex and Vespa species in W. Turton's edition of the "Systema Naturae", 1802.

TURTON'S work has been overlooked by DALLA TORRE. The Hymenoptera cover the pages 408—580 of vol. III; the author lists the previously described

species, with short diagnoses similar to those in GMELIN's edition of the same work, but he does not describe any new species. However, some new names are proposed in connection with cases of homonymy, created by the lumping together of various previously described genera. For example, all species placed by FABRICIUS in the genera *Mellinus*, *Philanthus*, *Crabro*, *Bembex*, and *Masaris*, are recorded here under the generic name *Vespa*.

According to the Index Animalium of Sherborn, Turton's work contains 7 new specific names in *Sphex*, and 15 in *Vespa*, but these numbers have proved to be incorrect. This is hardly astonishing, for the new names are not indicated as such, and literature references are generally lacking. Only by careful comparison of Turton's diagnoses with those of his predecessors, especially Gmelin and Fabricius, have I been able to determine the status of the names used in this work. In a few cases it is hard to say whether a name has been misspelt or emended.

The new names, including some possible emendations, are as follows:

Sphex argentea Turton, 1802, p. 485. — Lapsus or emendation for Sphex argentata Fabr. 1787, an oriental species of Sphex L.

Sphex bicolorata Turton, 1802, p. 493. — Objective synonym of Sphex bicolor Fabr., 1775, an Australian Pompilid.

Sphex ephippica Turton, 1802, p. 495. — Lapsus or emendation for Sphex ephippia Linn., 1767, a Swedish species of Sphecodes.

Sphex nigrita Turton, 1802, p. 484. — Lapsus or emendation for Sphex (Evania) nigrata Gmelin, 1790, p. 2723, no. 21, an unidentified European Evaniid.

Sphex tricolorata Turton, 1802, p. 492. — Objective synonym of Sphex tricolor Fabr., 1793, p. 215, no. 71, not Sphex tricolor Schrank, 1781. The correct name of Fabricius's species, which is the type of the genus Tachytes Panzer (see Pate, 1937, p. 64), is Tachytes tricolorata (Turton). This name replaces Tachytes tingitanus Pate, 1937, proposed by Pate upon the discovery that Sphex tricolor Fabr. is an invalid homonym (l.c., p. 64).

Vespa melanops Turton, 1802, p. 534. — Objective synonym of Vespa (Crabro) melanostoma Gmelin 1790, p. 2766, no. 137, an unidentified species. The reason for the change of name is not clear.

Vespa quinquelineata Turton, 1802, p. 529. — Turton proposed this name for Crabro quinquecinctus Fabr., 1787, p. 295, no. 11, which upon being transferred to the genus Vespa became a secondary homonym of Vespa quinquecincta Fabr. 1787, p. 288, no. 24 (= Rygchium quinquecinctum (Fabr.), a Chinese species). He overlooked, however, that GMELIN had already renamed Crabro quinquecinctus Fabr. for the same reason, calling it Vespa (Crabro) cingulata (see GMELIN, 1790, p. 2762, no. 108). Both replacement names may now be regarded as invalid, junior, objective synonyms of Crabro quinquecinctus Fabr., which was described from Kiel and which itself is a subjective synonym of Cerceris arenaria (Linn.). It should be noted that DALLA TORRE (vol. VIII, p. 451) erroneously cited FABRICIUS's species as "? Crabro cingulatus Fabricius, Mant. Insect. I. 1787, p. 295 n. 11."

Vespa trilineata Turton, 1802, p. 527. — This name was proposed for

Mellinus tricinctus Fabr., 1793, p. 287, no. 5 (from Italy), which upon being transferred to the genus Vespa became a secondary homonym of Vespa tricincta Fabr., 1775, p. 363, a junior synonym of the American Sphecid Sphecius speciosus (Drury). Mellinus tricinctus Fabr. is a synonym of Nysson spinosus (Forster), 1771 (see Dahlbom, 1843-5, Hym. Europ., p. XXIII).

The following species, recorded as new by Sherborn, are actually only new combinations. Turton's names are given here each with a reference to the

original description.

Sphex minuta Turton, 1802, p. 484 = Evania minuta Fabr. 1793, p. 194 (Gallia). Sphex sessilis Turton, 1802, p. 484 = Evania sessilis Fabr., 1793, p. 194 (Gallia). Vespa albilabris Turton, 1802, p. 533 = Crabro albilabris Fabr., 1793, p. 302 (Halae Saxonum).

Vespa apiformis Turton, 1802, p. 536 = Masaris apiformis Fabr., 1793, p. 284 (Italia). Vespa aurita Turton, 1802, p. 528 = Philanthus auritus Fabr., 1794, p. 459 (Italia). Vespa laeta Turton, 1802, p. 529 = Philanthus laetus Fabr., 1793, p. 291 (Hispania). Vespa lugubris Turton, 1802, p. 533 = Crabro lugubris Fabr., 1793, p. 302 (Halae

Sayonum)

Vespa lunata Turton, 1802, p. 537 = Bembex lunata Fabr., 1793, p. 249 (Tranquebar). Vespa mucronata Turton, 1802, p. 532 = Crabro mucronatus Fabr., 1793, p. 300 (Germania).

Vespa ornata Turton, 1802, p. 529 = Philanthus ornatus Fabr., 1793, p. 290 (Germania). Vespa peltata Turton, 1802, p. 531 = Crabro peltatus Fabr., 1793, p. 297 (Europa). Vespa quadrimaculata Turton, 1802, p. 530 = Crabro quadrimaculatus Fabr., 1793, p. 94 (Dania).

Vespa quinquemaculata Turton, 1802, p. 529 = Philanthus quinquemaculatus Fabr.,

1793, p. 292 (Dania).

Vespa trispinosa Turton, 1802, p. 533 = Apis trispinosa Fabr., 1787, p. 303, no. 60 = Crabro trispinosus Fabr., 1793, p. 301 (Halae Saxonum).

Vespa vespiformis Turton, 1802, p. 536 = Masaris vespiformis Fabr., 1793, p. 283 (Barbaria).

Finally it may be mentioned that the following names are evidently misspelt in Turton's work: Vespa fossoira, p. 530 = Vespa fossoria (L.) Gmel.; Vespa argurostoma, p. 534 = Vespa argyrostoma Gmelin; Vespa macensis, p. 515 = Vespa macaensis Fabr.

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(See also parts I-III, Ent. Ber. 19: 65, 127 and 211).

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