DESCRIPTIONS OF SIX NEW SPECIES OF ICHNEUMON-FLIES

By R. A. Cushman,

Of the Bureau of Entomology, United States Department of Agriculture.

The present paper deals largely with insects of economic importance, here described in order to have names available for use in discussions of their host relations in economic papers.

Family BRACONIDAE.

Genus BASSUS Fabricius.

As shown by Viereck in his "Type Species of the Genera of Johneumon-flies," the genus Microdus Nees 2 is isogenotypic with Bassus Fabricius, 3 while the Bassus of authors is Anomalon Jurine 4 and Anomalon of authors is Paranomalon Viereck. He also reduced Diplazon (Nees) Gravenhorst 6 to synonymy with Anomalon Jurine on the ground that it is isogenotypic with that genus. He, however, overlooked the fact that Panzer had used the name Anomalon for his cruentatus two years before it was proposed by Jurine. A. cruentatus is unrecognisable.

Viereck's genotype list should, therefore, be amended to read as follows:

(Anomalon Authors) = Paranomalon Viereck.

(Anomalon Jurine) = Diplazon (Nees) Gravenhorst.

Anomalon Panzer.

Fauna Ins. German., 1805, Heft 94, pl. 15.

Type.—Anomalon cruentatus Panzer. (Monobasic.)

(Bassus Authors) = Diplazon (Nees) Gravenhorst.

Diplazon (Nees) Gravenhorst (= Anomalon Jurine, preoccupied).

The species described below is a representative of the genus Bassus in its true sense.

Bulletin 83, U. S. Nat. Mus., 1914.

² Nov. Act. Acad. Nat. Curios, vol. 9, 1818, p. 304.

³ Syst. Piez., 1804, p. 93,

⁴ Nouv. Math. Class. Hym., 1807, p. 114, pl. 3, fig. 2.

Proc. Ent. Soc. Wash., vol. 14, 1912, p. 175.
Nov. Act. Acad. Nat. Curios., vol. 9, 1818, p. 292.

⁷ Fauna Ins. German., 1805, Heft 94, pl. 15.

BASSUS CARPOCAPSAE, new species.

Female.—Length, 4.5 mm. Black with abdomen (except first tergite, which is black) and legs rufous. Head with orbits, sides of face, and clypeus testaceous, middle of face, vertex, and occiput black; face densely and vertex sparsely, finely punctured; mouth parts (except tips of mandibles, which are black) pale fulvous; scape and pedicel reddish-piceous, tip of pedicel paler, flagellum black; mesonotum and scutellum sparsely, finely punctured, notauli strongly crenulate; propodeum with a short median elevation at base, disk strongly, finely reticulate, laterally more coarsely reticulate; fore and middle legs entirely rufous; hind legs darker with base of coxae shading into black, apex of tibiae and first three tarsal joints ringed with fuscous; wings tinged with brown, nervures and stigma brown. the latter with a pale spot at base; tegulae pale brownish; first tergite black bordered apically and laterally with rufous, rather coarsely aciculate throughout; remaining tergites smooth, shining, rufous, the apical ones somewhat darkened, second and third long and subequal. the others short; exposed portion of ovipositor somewhat shorter than thorax and abdomen combined, sheath black, densely pilose,

Type.—Cat. No. 18353, U.S.N.M.

Type-locality.—South Acton, Massachusetts.

Host.—Carpocapsa pomonella.

Described from eight female specimens; four (the type and paratypes, A, B, and C) from the type-locality reared by E. H. Siegler of the Bureau of Entomology under Quaintance No. 6115 and on the following dates: June 30, July 5 (the type and one other), and July 13, 1913; one (paratype D) from Woodside, Delaware, August 15, 1901, under Delaware Station No. 350; one reared by the author at Vienna, Virginia, under Quaintance No. 7938; one (paratype F) from Smithsburg, Maryland, reared by E. B. Blakeslee of the Bureau of Entomology under Quaintance No. 7466; and one (paratype G) from Rouserville, Pennsylvania, reared by F. L. Simanton of the Bureau of Entomology May 22, 1913, under Quaintance No. 6116.

All of these specimens, except possibly paratype D, the history of which is not known, were reared from the codling moth (Carpocapsa

pomonella).

Paratypes A and B have the testaceous color on the face reduced to a narrow space surrounding the eyes and the apex of the clypeus. Paratypes D and E differ from the type in having the occiput and thorax, especially on the sides of the latter, reddish-piceous rather than black, all abdominal segments fulvous, the first medially and the apical ones somewhat dusky, and the dark color on the hind legs much reduced, while the general color of the legs is paler. Paratypes F and D differ from the type in having the dark portion of the face

No. 2085.

reduced to a V-shaped mark with its base at the base of the clypeus, and the scape and pedicel much lighter; the pronotum in F is reddish-piceous, lighter at the posterior angles. Paratype G has the face and first tergite entirely black and the apex of the abdomen nearly so; the legs are somewhat paler than in the type.

Family ICHNEUMONIDAE.

Genus AENOPLEX Foerster.

AENOPLEX CARPOCAPSAE, new species.

Female,-Length, 7 mm. Black, with second and third tergites and less rufous, tergites beyond second margined with whitish; clothed throughout with short whitish pubescence; antennae 26jointed. Face closely, finely punctured; clypeus sparsely punctured at base and apex, smooth and polished medially: vertex and temples sparsely punctured: antennae black with scape beneath, pedicel at apex, and first joint of flagel at base reddish-piceous; mandibles sparsely punctured, reddish at base, tips black; palpi stramineous; pronotum laterally rugulose; mesoscutum rather densely punctured medially, the punctation fading out laterally; weakly striate medially in front of scutellum, notauli distinct anteriorly; meso and metapleurae rugulose ventrally, the rugulosity fading out dorsally into sparse punctation; scutellum sparsely punctured, the furrow between it and the mesoscutum without longitudinal raised lines; propodeum sharply areolated, basal median and basal lateral areas smooth and shining, the latter with a few minute punctures; areola slightly rugulose and with a slight median notch behind, other areas rugulose, spiracle round; tegulae and wing bases whitish, a small spot in front of the tegula reddish-piceous; wings suffused with brownish, veins and stigma brown, the latter with a pale spot at base, position of second transverse cubitus indicated by thickenings in the radius and cubitus; legs rufous, their trochanters pale; tips of posterior tibiae and their tarsi, together with the apical joints of all tarsi, infuscated; first tergite black narrowly tipped with reddishpiceous, opaque basally, laterally longitudinally rugulose, smooth and shining apically, with two longitudinal carinae extending about two-thirds of way to apex; second and third tergites dark rufous, opaque basally smooth and shining apically, suture between deeply impressed; remaining tergites black tipped with whitish, smooth; exserted portion of ovipositor one-third length of abdomen; sheath black.

Type.—Cat. No. 18351, U.S.N.M. Type-locality.—Vienna, Virginia. Host.—Carpocapsa pomonella. Described from six female specimens, the type and paratypes A to E reared from the larvae of the host species by the writer under Quaintance No. 7897, and one female (paratype F) taken in the same locality October 23, 1913.

The size of the specimens in the type series varies from 5.5 mm. to 7 mm., A being the smallest. Paratype B differs from the type in having the abdomen entirely black, while in F the rufous color embraces the fourth tergite.

AENOPLEX PLESIOTYPUS, new species.

Female.—Length, 5.5 mm. Black, with each of the tergites except the first narrowly margined with white; legs, including coxae rufous, posterior tibiae, and tarsi infuscated. Extremely like the genotype, Aenoplex betulæcola Ashmead, from which it differs as follows: antennae only about two-thirds as long as body and 22-jointed; areola two-thirds as wide basally as apically (in betulaecola it is less than half as wide basally as apically); petiolar area transversely rugulose (in betulaecola the rugulosity is confined to the edges of the area); exserted portion of the ovipositor not more than half as long as abdomen (in betulaecola it is distinctly more than half as long).

Type.—Cat. No. 18352, U.S.N.M. Type-locality.—Alameda, California.

Host.—Carpocapsa pomonella.

Described from a single female recorded by A. Koebele under Bureau of Entomology No. 235° as reared August 26, 1887, from a chrysalis of the codling moth.

Genus GLYPTA Gravenhorst.

GLYPTA BREVIS, new species.

Female.—Length, 7 mm., exserted portion of ovipositor 5 mm. Black, mesopleurae laterally, metapleurae, scutellum, middle and hind coxae and all femora rufous; anterior coxae basally, fore and middle tibiae, basal joints of middle and hind trochanters, and front tarsi stramineous; anterior coxae apically, both joints of fore and apical joints of middle and hind trochanters, wing base, tegulae, and spot in front white; hind tibiae white with basal and apical blackish annuli connected below by a longitudinal line of the same color; hind tarsi blackish with the first three joints white basally; middle tarsi rufous with the bases of the first three joints white; antennae dark brownish paler below, scape black; wings hyaline, velns dark brownish; body clothed with short, dense, glistening pubescence; face densely punctured, a prominent rounded tuberele medially, clypeus elevated at base, reddish apically, mandibles

black, frons densely, vertex and cheeks more sparsely punctured; thorax evenly, rather densely punctured throughout, lateral lobes of mesoscutum tinged with reddish; propodeum with the transverse apical carina very prominent and with two arcuately diverging longitudinal carinae, posterior face nearly perpendicular; abdomen short and broad, densely, coarsely punctured, first tergite about as long as broad at apex, its longitudinal carinae flattened and polished, tergites 2–4 each but little longer than half their width, the oblique furrows deeply impressed on 2 and 3; remaining tergites together somewhat shorter than first, tergites 1 and 2 tipped medially with reddish.

Type.—Cat. No. 18356, U.S.N.M.

Described from a single female reared by W. D. Kearfott under his No. 239.

A deformed female was reared at French Creek, West Virginia, from *Carpocapsa pomonella* by Fred E. Brooks under No. 708.

In Cresson's table to the species of the genus¹ this species runs to rufiscutellaris Cresson, from which it is at once distinguished by the stouter form, proportionately shorter tergites, and proportionately longer ovipositor.

Genus NOTOPYGUS, Holmgren.

Table to the North American species.

Abdomen mostly rufous; face black; fore and middle coxae rufous. excavatus Davis. Abdomen mostly black; face yellow; all coxae black...virginiensis, new species.

NOTOPYGUS VIRGINIENSIS, new species.

Female.—Length, 13 mm. Head black with face, clypeus, palpi, and mandibles except at tip yellow; rather densely clothed with brownish hair which is very long on clypeus and mandibles; temples and occiput finely, face, clypeus, and mandibles rather coarsely punctured; antennae (broken) black, first flagellar joint about three times as long as thick, others gradually decreasing in length until toward the tip they are quadrate; thorax black, tegulae yellow, small spots in front and below brownish; densely punctured except for smooth spot on mesopleura; propodeum somewhat more coarsely punctured, especially on lateral areas; clothed throughout with dense, short, brownish pubescence; coxae and femora black, the latter yellow apically and basally, except that the posterior pair lack the yellow basally; fore and middle trochanters yellow with a brown spot behind, hind trochanters blackish except apically and ventrally where they are yellowish; all tibiae and tarsi yellow; wings dusky,

veins blackish except spot at base of stigma and costa, which are brownish-yellow; wing base yellow, areolet subtriangular and petiolate; abdomen black above with the terminal tergites largely brownish-yellow and a broad band of the same color on each of the first two intersegmental sutures and tergites 3-5 narrowly tipped with this color; sternites blackish except for narrow brownish-vellow margins; hypopygium prominent and broadly vellowish at apex; abdomen clothed throughout like thorax; first tergite elevated in the middle with two parallel longitudinal carinae reaching nearly to the apex and inclosing a deep furrow, another furrow on each side extending from spiracle to apex, a deep fovea below each spiracle, irregularly transversely rugulose on sides of petiole and in the furrow, coarsely and densely punctured apically and laterally beyond spiracles; second tergite coarsely, densely punctured with the carinae extending hardly halfway to the apex; remaining tergites, except base of third, which is rather densely punctate, smooth with fine. sparse punctures; ovipositor directed upward, pale brown, sheath vellowish.

Type.—Cat. No. 18355, U.S.N.M. Type locality.—Vienna, Virginia.

Described from a single female taken by the writer November 2, 1913.

Genus IDECHTHIS (Foerster) Ashmead.

IDECHTHIS NIGRICOXALIS, new species.

Female.—Length, 10 mm. Related to erythropus Ashmead, from which it differs as follows: Scape and pedicel beneath and mandibles dark testaceous instead of pale yellow; pronotum laterally shining with strong longitudinal rugæ (opaque in erythropus); tegulae dark testaceous rather than whitish; all coxae and hind legs throughout black, front and middle femora and trochanters and middle tibiae infuscated; basal lateral areas of propodeum with a few large punctures, petiolar areas more strongly transversely rugose.

Male.—Length, 8 mm. Differs from female principally in having the posterior legs beyond the coxae dark testaceous, in largely lacking the infuscation on the front and middle legs, and in lacking the punctures on the basal lateral areas of the propodeum.

Type.—Cat. No. 18354, U.S.N.M.

Type-locality.—Youngstown, New York.

Host.—Euzophera semifuneralis.

Described from two females and two males as follows: The type female bears the further data Quaintance No. 574, 7.31.05, F. Johnson, collector; and the allotype Quaintance No. 7966, Vienna, Virginia, VII.11.13, reared by R. A. Cushman (host unknown); a female (paratype B) which agrees with the allotype in the color of the legs

bears the data Quaintance No. 407 (this number referring to a note which shows that the host was the larva of *E. semifuneralis*), Fort Valley, Georgia, 6.8.05, J. H. Beattie, collector; and a male (paratype A) which is somewhat smaller than the allotype, labeled Quaintance No. 5626, Lakeside, Ohio, 5.22.08, on peach, H. F. Wilson, collector.

With the exceptions noted this species is very similar to *erythropus* and may possibly be an eastern form of that species, especially since some specimens of *erythropus* have the four anterior coxae more or less

infuscated basally.

Additional specimens from Youngstown, New York, were reared from Euzophera semifuneralis and one from Fort Valley, Georgia, from Sanninoidea exitiosa.

59758°--Proc.N.M.vol.48--14---33