

ENTOMOLOGY.—*On the identity of a European chalcidoid parasite of the alfalfa leaf-weevil.* A. B. GAHAN, Bureau of Entomology, U. S. Department of Agriculture. (Communicated by S. A. ROHWER.)

The following note is published at this time for the reason that the European Chalcidoid dealt with is one of those parasites which the United States Department of Agriculture Bureau of Entomology is about to attempt to establish in the state of Utah for the purpose of aiding in the natural control of the destructive alfalfa leaf-weevil *Phytonomus posticus* Gyllenhal.

FAMILY PTEROMALIDAE.

GENUS PERIDESMIA FOERSTER

Type of the genus—*Isocyrtus (Trichomalus) aquisgranensis* Mayr, by present designation.

The genus *Peridesmia* was described¹ by Foerster, in a table of genera, without included species. The description was apparently based upon the male sex only. Foerster's original specimens afterward came into the possession of G. Mayr and were described² by him under the name of *Isocyrtus (Trichomalus) aquisgranensis*. Mayr considered *Trichomalus* Thomson a subgenus of *Isocyrtus* Walker and *Peridesmia* a synonym of *Trichomalus*. His description of *T. aquisgranensis* included both sexes.

Although, strictly speaking, Mayr did not include *aquisgranensis* in *Peridesmia* it is apparent that this species should be considered the genotype of that genus and it is herewith so designated. In order that the type of *Peridesmia* may be definitely fixed the male of Mayr's description is desig-

¹ Hym. Stud. 2 : 65. 1856.

² Verh. zool.-bot. Ges. Wein. 1903 : 394.

nated the holotype of the species, this seeming necessary because there appears to the writer to be a possibility that Mayr has wrongly associated the sexes.

The genera of Pteromalidae are at present in a chaotic condition making it practically impossible, in many instances, to place a species satisfactorily. *Peridesmia* may be truly a synonym of *Trichomalus* as Mayr considered it. Nevertheless the presence in the male of a perfectly smooth area extending from the base of the mandible upward along the posterior eye-margin nearly or quite to the top of the eye, makes the genus readily recognizable in the one sex, at least, and for that reason the name *Peridesmia* is resurrected from the synonymy to cover the species *aquisgranensis* Mayr and the new species described herewith, which are the only two species in which the character is known to occur.

No specimens of the genotype species have been seen by the writer. The generic diagnosis here given is, therefore, drawn from the new species. The characters given by Mayr for both sexes of *aquisgranensis* agree with this diagnosis, in so far as they go, except that the propodeum is said to have a large neck. The new species is practically without a neck on the propodeum in either sex.

The description of the male of *aquisgranensis* agrees so closely with the male of the new species that there can be no doubt that the two are closely related, and the smooth area on the cheek and posterior orbit is such an unusual character in Pteromalidae that I find it difficult to believe that it would occur in two species which differed otherwise by having a large neck on the propodeum in the one case and practically no neck at all in the other. Mayr apparently associated the females with the males on the basis of collected specimens which he found in the Foerster collection pinned with the males but which Foerster seems to have refrained from sending to his correspondents under the name, perhaps because of a doubt as to the correctness of the association. I am of the opinion that Mayr may have drawn his description of the propodeum from a female which was wrongly associated with the male and that the male may be found to lack the neck on the propodeum. Only an examination of Mayr's types can settle this point.

Generic description—Head strongly transverse, wider than the thorax and thin antero-posteriorly; eyes not hairy; occiput concave and immargined; antennae 13-jointed, inserted near middle of head; scape slender, pedicel longer than the first funicle joint, two ring-joints transverse, funicle 6-jointed, club 3-jointed; mandibles both 4-toothed; maxillary palpi 4-jointed; labial palpi 2-jointed; head of the male somewhat thicker antero-posteriorly than in the female, the cheeks slightly swollen with a perfectly smooth area extending from the base of the mandible upward along the posterior eye-margin nearly or quite to the top of the eye; female without such a smooth area; pronotum strongly transverse, perpendicularly truncate in front, the truncature not distinctly margined above, mesoscutum distinctly broader than long, the parapsidal grooves very delicate but traceable for the whole length of mesoscutum; axillae broadly separated; scutellum about as long as mesoscutum and slightly flattened dorsally; propodeum without a neck, punctate, with well

developed lateral folds and a distinct median carina; propodeum laterally, hind coxae above, and sides of the abdomen beneath, distinctly hairy; legs normal, the hind tibiae with one spur; wings fully developed, submarginal vein more than twice as long as marginal, stigmal subequal to marginal, postmarginal slightly longer than marginal; abdomen subpetiolate, as broad as the thorax and about as long as the thorax, elliptical in outline, depressed above and slightly convex beneath, the apices of ovipositor sheaths barely exerted.

***Peridesmia phytonomi* new species.**

If the above conjectures regarding *aquisgranensis* are correct this species may very possibly be a synonym. Aside from the absence of a neck on the propodeum the male apparently differs from Mayr's description only in that the smooth area on the posterior orbit does not extend to the vertex but terminates a little below and behind the top of the eye or a considerable distance from the lateral ocellus.

Female—Length 1.75 to 2 mm. Head with strong close reticulate-punctate sculpture, the punctures on frons somewhat larger than those on vertex and face; clypeus with converging striae; malar space as long as the eye; ocellar triangle very low; postocellar line barely longer than the ocellular line; antennae weakly clavate; scape reaching to front ocellus; pedicel twice as long as thick at apex; first ring-joint about half as long as the second which is more than twice as broad as long; funicle joints increasing very slightly in thickness from first to last, the first a little broader than long, second subquadrate, sixth a little less than twice as broad as long; club ovate, barely thicker than the sixth funicle joint, about as long as the three preceding funicle joints together, the first and second joints broader than long, apical joint conical and about as long as broad at base; dorsum of thorax sculptured like the head, the punctures on mesoscutum very slightly coarser than those on scutellum; propodeum punctate, a little more strongly so medially than laterally; spiracles elliptical; mesopleura punctate but with a smooth area below the base of hind wing; legs rather slender; hind coxae outwardly reticulate; forewing bare of discal cilia at base, the apex of costal cell with a few cilia, and the surface of wing from a little basad of apex of submarginal vein outwardly to apex of wing rather closely set with short cilia except immediately behind the base of marginal vein where the ciliation is weak and sparse; hind wing sparsely ciliated at base and more strongly so beyond the vestigial basal vein; abdomen polished, the petiole very short; the first segment (not counting the petiole) comprising about one-third the total length; following segments subequal. Head and thorax dull coppery green; antennal scape reddish testaceous basally, shading into dark brown beyond the middle, pedicel and flagellum brownish-black; coxae all concolorous with the thorax, rest of the legs dark reddish testaceous; abdomen above mostly purplish-black but with the base and apex more or less metallic green, the under side concolorous with the thorax but more shining; wings hyaline, the venation dark brown; tegulae testaceous.

Male—Length 1.5 to 1.75 mm. Smooth area on head narrowest at base of mandible, becoming gradually broader on the cheek and broadest behind the eye and terminating at a point on the eye-margin about as far below the vertex as the lateral ocellus is distant from the eye; abdomen shorter than the thorax and about as broad as thorax, elliptical in outline; antennae more slender than in the female, the funicle joints all subequal and subquadrate, the scape entirely testaceous and the pedicel and flagellum brownish testaceous. Otherwise agrees with description of the female.

Type locality—Hyerès, France.

Type—Cat. No. 26537 U. S. N. M.

Host—*Phytonomus posticus* Gyll.

Described from twenty-eight females and forty-two males received from G. I. Reeves of the Bureau of Entomology Laboratory at Salt Lake City, Utah, under Salt Lake Station No. 2745, and reared from material collected at Hyerès, France, by T. R. Chamberlain. Specimens of the species are in the collection of the National Museum also from Milazzo, Sicily.

The species is one of those which the Bureau of Entomology is attempting to introduce into the western states to combat the alfalfa weevil. The female is figured in Bureau of Entomology Bulletin 112, p. 35, Fig. 16, where it is referred to as a Pteromalid egg-parasite of the alfalfa weevil. This figure is acceptable, except in one respect, i.e. the parapsidal grooves are not nearly so well defined as illustrated being traceable on the posterior half of the mesoscutum as very faint lines only.

The larva is said to feed externally on the egg masses of *Phytonomus posticus*.