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LXXXIX.—SYNONYMICAL NOTES ON SOME AMERICAN
BEMBICINI (HYM., SPHECIDAE).

By ABRAHAM WILLINK.*

WHILE working at the British Museum of Natural History I had the opportunity of studying some types of the genus *Bembecinus* in which certain problems of synonymy are involved. It seems advisable to publish the results.

Bembecinus moneduloides (Smith, 1856).

In a former paper (Krombein & Willink, 1950) in which we published a revision of the North American *Bembecinus*, *moneduloides* was not included in the key, since it was impossible to place it correctly. Mr. Robert B. Benson, at our request, was kind enough to study the Smith female and male types, both from Florida, U.S.A., and informed us that the male belonged to our *nanus* (Handl.), and the female to a different species not included in our key.

As Mr. Benson informed us, the male and female which were used by Smith to describe *moneduloides*, belong undoubtedly to different species, the male to the typical subspecies of *B. nanus* (not to *B. nanus floridanus* Krombein & Willink, as treated by us). The female is completely different from all the North American species we have seen. In the key it would fall to number 4, but without belonging to *neglectus* or *nanus*. Its general appearance is more like *B. godmani*, being very small (total length 7 mm., anterior wing 5 mm.), but it differs from that species by its sessile second cubital cell, by the shape of the postero-lateral angles of the propodeum and the last abdominal segment.

Its principal characters are: *coloration*: black, with the following parts whitish; frons anteriorly beneath the antennal sockets; narrow anterior orbits; clypeus except for a large central spot; labrum except for a reduced central oval spot; anterior surface of the antennæ except the termination of the flagellum; a narrow posterior band on pronotum that includes the lateral tubercles; a postero-lateral spot on scutum; lateral spots on scutellum; the greater part of the postscutellum and tegulæ; a narrow spot on the posterolateral angles of the propodeum; subapical band on the first tergite and an apical one on 2 to 5, all with sinuate anterior border; small postero-lateral spots on sternites 2 to 4; an elongated band on the anterior and intermediate femora and tarsi, and on all the tibiæ. The greater part of the antennæ, the last abdominal segment, the apical margin of first abdominal tergite and legs, are partly brownish. Silvery pubescence exists only on certain parts of frons and clypeus; a very fine whitish pubescence and pilosity covers the greater

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part of the body. *Morphological characters* : the most important are : anterior margin of clypeus slightly concave ; alveolo-clypeal nearly double the alveolo-ocular distance ; posterior side of propodeum slightly concave and the postero-lateral angles but little projecting, the inferior and superior teeth ending almost at the same height, with a narrow excavation in the middle ; without evident punctures on the thorax ; the abdomen with more definite punctures ; last tergites laterally with velvety pubescence and remaining tergites with long and fine hairs ; apex smooth, almost without punctures.

This species differs from *B. godmani* (Cam.) in having the second cubital cell sessile ; postero-lateral angles of propodeum less projecting and with a less well-defined excavation ; posterior side of propodeum less concave ; thorax and abdomen with considerably less evident puncturation and by the presence of velvety pubescence laterally on the last tergite.

It differs from *neglectus* by its much smaller size. From *nanus*, which it most closely resembles, by its light markings which in this species are whitish whilst in *nanus* they are golden yellow (with the exception of *nanus floridanus* in which the abdomen also has whitish markings though not the thorax and head) ; by having the posterior side of propodeum less concave, and the last abdominal tergite, which in *nanus* has no velvety pubescence, with more widely separated punctures, and by its smaller size.

The female of *B. nanus floridanus* is not known, but it is very improbable that it corresponds to *moneduloides*, which has been compared with the other subspecies of *nanus*, from which it differs considerably.

The female type in the British Museum is from St. John's Bluff, East Florida (R. Foster).

Bembecinus godmani (Cameron).

Cameron (1890) described under the name of *Stizus agilis* (Smith) what we actually know as *godmani*. He puts the name *godmani* in brackets when he refers to the figures, that name appearing also in the plates. This leads to the supposition that Cameron originally described the species as new under the name of *godmani*, deciding afterwards that it was *agilis*, without having time to change the names on the plates. As it is a species very different from *agilis* it has always been called *godmani* Cameron.

Possibly Cameron when he wrote the description of what he calls *agilis*, also included specimens that really belonged to the Smith species as there are in the collection several specimens from Atoyac, Vera Paz (H. H. Smith) and Senahu, Vera Paz (Champion), with labels that indicate that they belong to the material of the B.C.A. and are determined as *agilis* Smith. One of the males has a small tubercle inferiorly in the last antennite which corresponds with the figure of the antennæ of *godmani* given by Cameron ; the remaining figures could belong to either of both species. He includes the species in the group with "second cubital cellule appendiculate", which is not the case with true *agilis*,

but he also includes in *moneduloides*, which he puts in the group with "second cellule not appendiculate", a series of specimens that evidently are appendiculate.

The localities given by Cameron are: "Mexico, Presidio (Foster); Atoyac in Vera Cruz (Schumann); Teapa in Tabasco (H. H. Smith) and Guatemala, Teleman in Vera Paz (Champion)". He also gives "Ega, Brasil", from which locality *agilis* is described. From the material in the British Museum it is difficult to establish which are the specimens that Cameron used for his description, as there is a series, including specimens from the localities mentioned by him, which bear the label "*S. moneduloides*".

When Cameron speaks of *moneduloides*, he separates it emphatically from the other species of *Bembecinus*, in having the second cubital cell sessile which is not the case with any of the specimens labelled as *moneduloides*. They belong undoubtedly to *godmani*.

It has seemed convenient to select a lectotype of *Bembecinus godmani* Cameron; a male from Atoyac, Vera Cruz, Mexico (April, H. H. Smith), has been chosen, a specimen belonging undoubtedly to the series that Cameron used when he made the description, the colours corresponding to those given by him. The coloration of the lectotype is as follows: black; the following parts yellowish white: infra-antennal region with the exception of a small median spot; clypeus excepting a broad median longitudinal band; labrum; internal orbits; under side of antennæ; posterior band on pronotum reaching to the lateral tubercles; two narrow lateral bands on scutum at the level of the tegulæ; lateral spot on scutellum; postscutellum; postero-lateral angles and two median points above on the posterior side of propodeum; broad pre-apical band on the first abdominal tergites and a narrow apical band on tergites 2 to 6; a very narrow band on sternites 2 to 5, interrupted medially on 4 and 5; spots on femora, tibiæ and tarsus. The following parts are brownish; the last three segments of the antennæ partially; apical band of first and last tergites and apical end of tarsal claws. Sericeous pubescence is present on the greater part of frons, vertex, clypeus and labrum; whitish pilosity and pubescence on the whole body. Wings hyaline.

The female lectotype from Teapa, Tabasco, Mexico (February, H. H. Smith), varies very little from the male, having the antennæ more extensively brownish and lacking this colour on the last abdominal tergite.

It seems unnecessary to repeat a precise morphological description of this species, as this has been given in several publications. The fundamental characters are: second cubital cell pedicelate; postero-lateral spines of propodeum extensively projecting backwards, forming a relatively acute angle; distance between antennal sockets and clypeus approximately double that between antennal sockets and eyes; without definite punctures on scutum.

I have treated as paratypes of *B. godmani* Cameron, 21 males and females from Atoyac, Vera Cruz (April, H. H. Smith); Atoyac, Vera

Cruz (Schumann); Teapa, Tabasco, Mexico (March, H. H. Smith); Presidio, Mexico (Forrer) and Teleman Vera Paz, Guatemala (Champion). The specimens from Guatemala in the collection are labelled as *monedulooides*; but as Cameron does not give this locality for that species, though he does for *godmani*, there is little doubt that they were included in the description of this latter. The types and paratypes belong to the typical subspecies of *godmani*.

In the British Museum there is a male from Villa Nova, Amazonas, Brazil, belonging to the ex-collection Smith, that is presumably the type of *Larra dubia* Smith, 1856. It has no determination label, but the locality is the same as that given by the author and its coloration agrees with the description, excepting only a yellow spot under the wings, mentioned by Smith, and which is not present. As there is no other example that agrees with Smith's description, this specimen will have to be considered the type of *Larra dubia*. This is the first name under which *B. godmani* was known, and is preoccupied (see Willink, 1949). There is no doubt that *dubia* and *godmani* belong to the same species, the specimen known as *dubia* being more extensively marked with yellow than the typical *godmani* (the clypeus, labrum, base of frons and 6th and 7th abdominal tergites are completely of that colour). The type of *dubia* belongs to the subspecies *B. godmani bolivari* (Handl.).

In the British Museum there are four males, three from Jalisco, Mexico (July, Schumann) and one from Teleman, Vera Paz (Champion) all from the ex-collection Cameron, which agree with the types of *Stizus flavus* Cameron. Only the specimen from Teleman has a label with the name. All these belong to the xanthic forms of *B. godmani godmani* (Cam.).

I was not able to localize the type of *S. lineatus* Cameron. It is easily recognizable from the figure given by the author; there is no specimen from the ex-collection Cameron that agrees with it, so it is possibly lost. There is no doubt that it also is a synonym of *B. godmani*.

There is also one specimen from Pará, Barsil (ex-collection Smith) marked as type with a manuscript label: *Larra flavopicta* Smith, in Smith's handwriting. As far as I have been able to find out this species has never been described. It is another colour form of *B. godmani bolivari* (Handl.).

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