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## HYMENOPTERA

THE BEE GENUS PASIPHAE IN NORTH AMERICA

BY C. F. BAKER

While in Central America I collected a number of species of Prosopis (descriptions to appear soon) which were typical representat ives of that genus in every way. Scattered through this collection were a number of bees, very Prosopis-like, but possessing a truncated and appendiculated marginal cell and otherwise corresponding to Ashmead's description of the genus Pasiphae, previously known only from the southern Andean region. In Trans. Am. Ent. Soc. XXIX, p. 186, Cockerell says "Mr. Vachal remarks that this has a distinct tibial pollen brush, and cannot go with the Prosopidae. It appears to be a Colletid with only two submarginal cells." The Prosopidae are usually described almost without reservation, as "non-pubescent", a statement that should be considerably modified. It is true that the pubescence is reduced—thin and fine, but distinctly present over most. of the body in all of the American species I have seen. What the naked eye or the simple lens does not show in this case, the compound microscope will prove a clearly distinct feature. If the hind tibiae of any Prosopis are carefully examined. they will be found usually thickly covered with pubescence. In these Central American bees which I am calling Pasiphae, this pubescence is more pronounced than I have found it in any Prosopis, and while it might possibly be called a "distinct pollen brush", still I cannot see it as especially similar to any Colletid and believe that the status and relationships of the genus are as stated by Ashmead. The genus Stilpnosoma, which is placed in the Prospidae, is still more pubescent, the hind tibiae very thickly so. In S. turneri the hairs on under side of tibiae are long, compound and somewhat matted. If the Central American form which I have is a true Pasiphae', and by Ashmead's description it appears to be, then Pasiphae can be no Colletid even by general habitus, to say nothing more. I shall name this species.

4896 Pasiphae Cameroni n. sp.

Male. Length 6 mm. Black, with yellow markings on face and legs

only. All of clypeus except anterior margin and lower lateral angles, a narrow band immediately above the clypeus, sides of face nearly to antennae—these marks obliquely truncate above, pale yellow. Bases of tibiae and first tarsal articles yellow, the remainder of tarsi testaceous.

Head rugoso-puncate, scape also finely so. Middle anterior margin of clypeus straight, the mandibles nearly reaching the eyes. Viewed from above the head is subrectangular, the width about twice the length, the cheeks above are very wide—as seen from side nearly half the width of eye; from above, the very strong bulge of clypeus and front is brought strikingly into relief. First and second articles of maxillary palpi about equal, the second nearly as long as the third and fourth together. The first article of the labial palpi is more than twice as long as the remainder together.

The thorax is densely evenly rugoso-punctate, the tegulae shining black. Between postscutellum and metanotum is a broad shining furrow partitioned by longitudinal carinae into about sixteen rectangular pits. The metanotum on apical three fourths has a deep rounded shining furrow which is forked caudad. On the upper angles of the metanotum are large patches of silvery white plumose hairs. Sternum thickly pubescent with long white plumose hairs.

Abdomen finely thickly evenly punctate except for the broad smooth, shining, piceous hind margins. The abdomen is rather strongly constricted between the first three segments. The pubescence is rather conspicuous along the bases of the segments after the first, especially at the sides, and along the inner edge of smooth areas, becoming longer and thicker apically where they converge. Femora not especially pubescent but tibiae and tarsi with thick white fine pubescence, longer and heavier on under sides of tibiae. Wings very slightly obscured basally, but evenly smoky in marginal cell and on apical margin. The submarginal cells are of about equal length, the second narrowing above to about half its length below. The basal vein arises considerably beyond the transverse median. I collected several specimens of this very interesting form at San Marcos, on the eastern slope of the Nicaraguan coast range.

# AMERICAN BEES RELATED TO MELECTA BY C. F. BAKER

The group of species previously placed in *Melecta* by American authors is a very heterogeneous one. *Melecta maculată* of Cresson differs as widely from other species of the genus as does *Ericrocis lata*, and is equally entitled to generic recognition. I do not know *mucida*, but from the description I can scarcely believe it a true *Melecta*. The superficial markings are similar in all these groups, but the resemblance

is no greater than for instance between Leiopodus and certain Epcolus or between Melecta and certain Crocisa.

#### Table of Genera.

- A.—Middle tibial spur entire; marginal cell not extending beyond third submarginal.

  - BB.—Scutellum broadly bilobed; flagellum greatly swollen; abdomen but little longer than broad

Micromelecta n. gen. (type—M. maculata Cr.)

AA.—Middle tibial spur bidentate; scutellum broadly roundly bilobed; marginal cell extending far beyond third submarginal; submarginal cells strikingly different in the two sexes; flagellum normal ...... Ericrocis.

In a large series of *Melecta* from Colorado, Arizona. Nevada and California, I am unable to separate the *miranda* of Fox from the *californica* of Cresson, except as a variety, since some of the Nevada forms are fairly intermediate. Still I must say that I have not seen Dakota specimens. In my collections are also several specimens of *Micromelecta maculata* from Arizona, collected by Oslar.

In coming to re-examine some Arizona Ericrocis on which, following others, I had placed the Texan name lata, the conclusion was finally reached that they were not lata, at all, and that there were before me two good species in place of one. In both of these the scutellum is pale with two large black spots,—a character which would surely have been mentioned for lata had it occurred. Cresson says only, "a patch behind scutellum......... clothed with black pubescence". The species may be separated by the following table:

### Ericrocis

- AA.—Scutellum white with two very large black patches occupying most of its surface.

  - BB.—Pubescence of face, and thorax above, tawny; wings fuscous throughout ..., melectoides n. sp.

### 4897 Ericrocis arizonensis n. sp.

Male. Length 12 mm. Black; whole face above labrum to midway between antennae and ocelli completely covered with very dense silky. white, appressed pubescence. Mandibles entirely jet black. The pubes-

cence of gular region black, that of checks and occiput sordid white. Antennae narrowly black, ferruginious below, except on scape, the first article of flagellum scarcely longer than second. Mesothorax above and below, except between wings above, covered with long fluffy white pubescence. Two closely approximated angular black spots in center of anterior margin of mesothorax, a large less well defined spot low down on mesopleura, a spot between tegulae and scutellum and two very large completely separated trapezoidal spots on scutellum. The tegulae are testaceous, dark margined within. The metathorax with very little pubescence and that in tufts on the upper outer angles. The pubescence on scutellum is close and appressed, that back of scutellum erect and thin. The hair bands on the abdomen resemble those in certain Melecta .- all interrupted, quite narrowly so on the first segment where there is a sparing i 'ermixture of long erect hairs, and most widely on the third; bands on first segment brand and subrectangular, without ventral extensions as in the remainder; on third to sixth narrower but more or less broadened proximally. The lateral enlargments are subrectangular, narrower on second segment and reaching hind margin of the segment, broad and not reaching hind margin on segment III and IV and occurring as nearly or quite disconnected spots on V. Terminal segment deeply angularly emarginate. Venter black except for a median spot of appressed white pubescence on the first segment.

Legs black, the tarsi except basal article ferruginous; fore coxae at tips and middle and hind coxae largely, covered with white appressed pubescence—likewise small areas on underside of middle and hind trochanters; middle and hind femora with a conspicuous fringe of short sooty plumose hairs below, with a sparing intermixture of long pale simple hairs; tibiae three banded above, black below, the terminal bands of pubescence white, the middle black. Wings hyaline, with the veins ferruginous the stigma paler, a smoky cloud through the marginal cell, the outher margin radiately obscured.

Collected at Oracle, Arizona, by Osler.

### 4898 Ericrocis melectoides n. sp.

Male. Length 12 mm. Black; antennae piceous, narrowly ferruginous below. Face, except labrum, to above antennae, covered with very dense silky yellowish white appressed pubescence. Mandibles varying through piceous to ferruginous at tips. Mesothorax anteriorly above with white only. Anteriorly on mesonotum with two large widely separated subrectangular black spots. Mesopleurae below broadly nude, the venter together with mid and hind coxae and trochanters below, covered with short appressed white pubescence. The tegulae testaceous, darker within, a large black spot between tegulae and scutellum, and on the latter two very large subrectangular black spots which are connected beind. Metanotum with tufts of loose pale hairs at outer angles.

Ornamentation of abdomen as in certain Melecta, the bands all interrupted—those on first and second for about same distance, on the fourth and fifth a little wider. The bands on first segment are narrowed to rounded points within, and have no ventral extension, those on fifth occurring as large lateral spots; the lateral enlargements are anteriorly narrowed and rounded, those on second segment not reaching anterior margin, those on the remaining segments occupying the entire width of the segments. The venter is entirely black. The legs are colored as in arizonensis except that the femora lack the fringes of dark plumose hairs below. The wings are smoky throughout, slightly paler basally.

Collected at Oracle, Arizona by Osler.

fulvous in the middle. The depression at the sides of the scutellum covered with longish fulvous pubescence.

This species belongs to Saussure's group 3 b, Cf. Syn. of American Wasps, 209.

### 3947 Ancistrocerus gunnisonensis sp. nov.

Black; the head, thorax, and base of abdomen thickly covered with long fuscous pubescence; the clypeus, a triangular mark above the antennae, mandibles, a small mark on the outer orbits near the top, a line on the apex of pronotum, a small irregular mark on the sides of