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## Three New Anthophorid Bees From Texas

T. D. A. Cockerell

*University of Colorado*

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FROM  
THE ENTOMOLOGIST

JUN. 1909

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rent nervure is received beyond the middle of the cellule, and the area on the base of metanotum is almost of equal width throughout.

*Mutilla devia*, sp. nov.

Black; the head, thorax (the pronotum and the mesopleuræ densely), the apices of the abdominal segments and the legs covered with longish white pubescence; the wings hyaline, the nervures black; the first abscissa of the radius straight, sharply oblique, about one-fourth shorter than the following two united, the second about one-fourth longer than the third; the first recurrent nervure is received in the middle of the cellule. Tegulæ dark testaceous at the base, the apex white; they are covered with white pubescence. Keel on basal ventral abdominal segment distinctly dilated at the apex. ♂. Length, 7 mm.

Kuching, Borneo (John Hewitt, B.A.).

Vertex on either side of the ocellar region finely, closely, longitudinally striated, sparsely covered with longish black hair; the front densely covered with silvery pubescence. Pronotum closely, the mesonotum less closely, but more strongly punctured; there are two distinct furrows near the centre of the apical half of the mesonotum. Scutellum more closely, rugosely punctured than the mesonotum. The space bordering the scutellums and the base of the metanotum densely covered with depressed silvery pubescence. There is no clearly defined area on the base of the metanotum unless it is hidden by the dense pubescence; the metanotum is rather coarsely reticulated. Calcaria white. Third antennal joint about one-quarter longer than the fourth.

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### THREE NEW ANTHOPHORID BEES FROM TEXAS.

By T. D. A. COCKERELL.

*Tetralonia argyrophila*, sp. nov.

♂. Length about  $13\frac{1}{2}$  mm., black, with the hair on the head, thorax, and basal segment of abdomen (covering the latter densely) ochreous, rather bright on the thorax above. Clypeus bright lemon-yellow, the yellow angularly incised laterally; labrum cream-colour with a narrow black edge; mandibles without any yellow spot; antennæ very long, entirely black; third joint very short, its shorter (anterior side) about as long as its apical breadth antero-posteriorly; mesothorax dull, densely punctured; area of metathorax rugose; legs with pale hair, that on inner side of basitarsi light orange; middle tarsi not distorted; hind spur of hind tibiæ normal; abdomen beyond the first segment shining black with sparse black hair, but with scattered long silvery-white hairs, becoming numerous toward the apex, and forming a sort of thin fringe on the sides of segments four to six; apical margin of sixth and sides of seventh with short light hair. In my table in Trans. Amer. Ent. Soc. 1906, this runs to 4 on p. 79, and does not precisely fall in either category there indicated. On the whole



it runs nearest to *T. edwardsii* (Cresson), to which it has a very strong superficial resemblance, differing, however, by the black hair on the basal part of the second abdominal segment (although that segment has some light hair subapically), the brilliant silvery hairs on the apical part of the abdomen, and the shorter third antennal joint. The last two characters also separate it from *T. acerba* (Cresson). There is no light band on the fifth segment, such as is seen in *T. edwardsii vagabunda*, Ckll. In some respects *T. argyrophila* closely resembles *T. fedoris*, Ckll., from the same region, but the apical part of the abdomen is very different, and the wings have none of the dusky yellowish tint of *fedoris*.

*Hab.* Lee County, Texas, March 24th (Birkmann, No. 16).

*Melissodes masuca*, sp. nov.

♂. Length about 11½ mm., black, with ochreous pubescence, becoming bright yellowish red on the thorax above. No black hair on head or thorax. Head rather broad; eyes dark reddish; clypeus (except the two black spots), labrum, and large spots on base of mandibles yellow; antennæ long, flagellum black above, clear ferruginous below; third joint broader than long; mesothorax with strong punctures; tegulæ clear ferruginous; wings dusky, nervures rather dilute brown; legs ordinary, apex of middle and most of hind tibiæ ferruginous; abdomen with continuous bands; hind margin of first segment rather narrowly whitish hyaline, of the others broadly and suffusedly dark reddish brown; segments two to five with broad basal bands of ochreous tomentum; second with also an entire straight median band; sixth segment with black hair; seventh with lateral red teeth. In the table in Trans. Amer. Ent. Soc., 1906, this runs to 8 on p. 81; it also runs to that vicinity (*i.e.* of *M. aurigenia* and *agilis*) in Robertson's table in Trans. Amer. Ent. Soc., 1905. It differs from *M. trinidadis*, Rob., by the yellow on mandibles and other characters; from *M. agilis* and various other species it is readily known by the entire narrow median band (separated from the basal one by a black exposed area) on the second segment. In colour and general appearance (except for the much longer antennæ) it is curiously like an undersized *M. suffusa*, Cress., but the distribution of hair on the second abdominal segment and other characters are entirely different.

*Hab.* Fedor, Texas, June 17th, 1901 (Birkmann, No. 17). The name means golden-haired in a dialect of Ceram.

*Melissodes loena*, sp. n.

♂. Length about 12 mm.; hair of thorax, &c., ochreous, but not quite so bright as in *M. masuca*; clypeus (except the spots), labrum, and large spot on mandibles yellow; flagellum black above, clear ferruginous beneath; tegulæ shining ferruginous; nervures fuscous. In the characters of the head, thorax, &c., this is almost the same as *M. masuca*; were the abdomen removed, it would be hard to separate them. The maxillary blade is shorter in *loena*, the tegulæ are shining (dull in *masuca*), and the hind tibia is more slender, less densely

covered with hair, and red only at the apex. The venation is distinctly darker. The abdomen is conspicuously different, being narrower, with the hair-bands white. The hind margins of the segments are more transparent, so that the basal hair-bands can be seen through them. The first segment is very strongly punctured. From *M. kallstromiae phenacoides*, Ckll., this is readily known by the greyish-red (instead of green) eyes, the dark venation, the shorter tongue, the much less hairy hind tibia, and the white hair-band on segment five.

*Hab.* Lee County, Texas, November, 1908 (Birkmann, No. 15). The name *loena* is derived from a Malay word referring to flowers.

Boulder: April 1st, 1909.

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## THE ATHALIA GROUP OF THE GENUS MELITÆA.

By REV. GEORGE WHEELER, M.A., F.E.S.

(Continued from p. 115.)

WE must now pass to the named forms of other species than *athalia*, though it may be well to note in passing that Aurivillius in the 'Nordens Fjärilar' treats both *aurelia* and *parthenie* (called by him *parthenie* and *parthenoides* respectively) as varieties of *athalia*, on the ground of their mutual resemblance and specific variability. It is possible that this use of the name *parthenie* for *aurelia* elsewhere may account for the apparent confusion between the two species in many German authors, a confusion so great as often to leave one in doubt as to how many of the latter really know *parthenie* at all, a doubt which more rarely assails one when dealing with French or Swiss writers.

*Deione* var. *berisalensis* has already been somewhat fully dealt with, and the resemblance between the Swiss and the southern Spanish forms touched upon. I have, in fact, specimens from South Spain which I should certainly have supposed to come from Martigny, though they are perhaps slightly lighter in ground colour and the *x*-mark is not so defined as is usual in the more northern specimens. To my mind this resemblance appeals as a further confirmation of the specific identity of the two forms, and should they ever be proved to be distinct, the Southern Spanish race will have to be united with *berisalensis* and not with *deione*. It should perhaps be noted that Freyer's *deione* ('Neüere Beiträge,' vi. p. 21, pl. 493, fig. 1, 1852) is merely a small specimen of *parthenie*, which accounts for his unwillingness to allow it specific rank, as he was evidently unacquainted with the real insect.

There appear to be three named forms of *parthenie*, viz.: *aphæa* (Freyer nec Hübner), which has already been described (*antea*, p. 57), *jordisi*, Rühl, and *beata*, Caradja.

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