SOME BEES FROM VICTORIA, MEXICO.

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The bees enumerated below were all collected by T. C. Barber and T. E. Holloway at Victoria, Mexico, March 16, 1922, and sent through the Bureau of Entomology to the United States National Museum. Victoria is in the State of Tamaulipas, about 175 miles south of the Rio Grande. The bees represent an essentially tropical fauna, having little in common with that of the United States.

This small collection, made on one day in a single locality, gives these results:

1. Three new species.
2. Two species new to Mexico.
3. Five species previously known from Mexico, but now first recorded from a definite locality.
4. Three species known from definite localities in Mexico, but new to the State of Tamaulipas.

MEGACHILE TOTONACA Cresson.

One female. The abdomen is slightly metallic dorsally; the last ventral segment has some black hairs. Described from "Mexico."

MEGACHILE NIGROMIXTA Cockerell.

Two males. Described from Mexico and Guatemala, but no exact locality previously known.

MEGACHILE CHRYSOPHILA Cockerell.

One female. Described from the State of Vera Cruz.

MEGACHILE POCULIFERA Cockerell.

One male; differs a little from the type in having hair of face creamy white. Originally described (1919) from a specimen labeled "Mexico."
MEGACHILE ALOPECURA, new species.

**Male.**—Length about 10.5 mm., with the general aspect of *M. poculifera*; eyes blackish, green at lower end; face covered with cream-colored hair, that on cheeks pure white; mandibles broad, black, with a red subapical spot, just before which is a broad tuft of white hair; lower border of mandibles expanded into a keel, above which is a shallow longitudinal depression or channel; vertex closely but irregularly punctured; antennae black, slender and simple; hair of thorax white, a little brown on disk of mesothorax; mesothorax and scutellum entirely dull, very densely rugosopunctate; a line of white hair along posterior border of mesothorax: legs black, with last joint of middle and hind tarsi clear red; anterior tarsi light yellow, the basitarsi hollowed and boat-shaped, the edges of the hollow fringed with reddish hair; posteriorly the anterior tarsi have a long fringe, blackened apically, but there is no longitudinal black stripe on the inner side, such as is seen in *poculifera*; anterior coxae with stout diverging spines, and their trochanters pointed or subconical below; middle femora stout but not toothed; tegulae piceous with broadly reddened margins; wings smoky, nervures dark, basal nerve falling short of nervulus, or meeting it; abdomen with rather weak white hair bands on segments 2 and 3, that on 2 failing in middle; fourth segment with the band somewhat reddish; fifth and sixth segments covered with fox-red hair; keel of sixth segment very broadly and quite deeply emarginate (general style of *M. gemula* Cresson), the margin somewhat irregular but not dentate; no ventral spines.

Two males: Victoria, Mexico, March 16.

Easily known from *M. gemula* by the anterior tarsi, and from *M. poculifera* by the characters of the anterior and middle legs.

**Type.**—Cat. No. 25580, U.S.N.M.

The above species of *Megachile* may be separated thus:

Hair of pleura at least partly black -------------------------- 1.
Hair of pleura all light -------------------------- 2.

1. Larger; abdomen black, without light hair above, totonaca Cresson.
    Smaller; abdomen with light hair bands laterally, nigromixta Cockerell.
2. Female; a broad pale ochreous band between mesothorax and scutellum, chrysophila Cockerell.

**Male:** a narrow white band between mesothorax and scutellum 3.

3. Anterior tarsi with a short fringe of black hair along anterior edge, poculifera Cockerell.

   Anterior tarsi with a longer fringe of red hair along anterior edge, alopecura Cockerell.

**COELIOXYS TOLTECA** Cresson.

One female. Differs from the next species by the form of the scutellum. the black stigma, the first recurrent nervure entering second submarginal cell far from base, and the basal nervure failing to reach nervulus. Described from "Mexico."
COELIOXYS TOLTECOIDES, new species.

*Male.*—Length about 10.5 mm.; black, with red legs (except tarsi), tubercles and tegulae; first three ventral abdominal segments obscurely stained with red; pubescence white, slightly yellowish on thorax above; face with white hair; mandibles black (red in *C. tolteca*); antennae black, scape red in front; cheeks covered with white hair, the depressed space below also hairy; mesothorax with exceedingly large partly confluent punctures; axillary spines stout and well-developed; scutellum with large partly confluent punctures, subconically produced but not dentate at apical middle; pleura strongly punctured, thinly hairy; anterior coxae with very short red spines; tarsi black, the anterior ones reddened basally; wings somewhat dusky, especially the broad apical margins; stigma red. Nerves black; first recurrent nervure almost meeting intercubitus, joining extreme base of second cubital cell; abdomen shining, the segments sparsely punctured in middle, more densely at sides; second segment with dull closely punctured areas sublaterally; first three segments with thin marginal band of white hair; segments 2 to 5 with interrupted subbasal white hair-bands, successively less narrowly interrupted caudal; caudal end with sharp lateral spines, and sharp, widely separated, inferior apical ones, but upper apical represented by a short more or less trilobed structure, giving the abdomen a broadly truncate appearance; fourth ventral segment with two short apical spines. Hair of eyes short.

One male; Victoria, Mexico, March 16.

This is so similar to *C. tolteca* that I thought at first it must be its male, but the great differences in the scutellum and wings negative such an idea. Among the United States species there is a certain affinity with *C. texana* Cresson, but it is not close.

*Type.*—Cat. No. 25581, U.S.N.M.

MELISSODES TRISTIS Cockerell.

One male. Described from New Mexico. Also known from Arizona and from Juarez, Mexico.

MELISSODES MASUCA Cockerell.

One male. Described from Texas; new to Mexico. The specimen differs from the type in having the posterior side of the hind femora red only at the apical end, and the nervures dark. Similar variation occurs in specimens from the extreme south of Texas.

CHALEPOGENUS APICALIS (Cresson).

One female. Described as *Tetrapedia apicalis*, from "Mexico." Friese has recorded it from Orizaba. In our specimen the second submarginal cell receives the recurrent nervure a short distance
from the tip (Cresson says "at the tip") on one side; on the other side the second intercubitus is missing. The abdomen is entirely black. The species is extremely like *C. moesta* (Cresson), but the character of the front at once separates it.

**AUGOCHLORA QUIRIGUENSIS SIDAFOLEÍAE Cockerell.**

One female. New to Mexico; described from Guatemala. The specimen differs slightly from the type, in having the area of metathorax more finely sculptured, and strongly flushed with purple. The resemblance of this species to *A. nigrocyanea* Cockerell is only superficial, as I find on examining Guatemalan specimens of the latter, that it belongs to the subgenus *Odontochlora*, the female having a large spine on the first ventral abdominal segment.

**AUGOCHLORA (ODONTOCHLORA) AZTECA (Vachal).**

*Female.*—Length about 8.5 mm.; bright blue-green; legs black, with the anterior femora green behind, and the middle ones sometimes green beneath; antennae black, the flagellum obscurely brown beneath; mandibles black; head ordinary; clypeus shining, with large punctures; supraclypeal area rough, but distinctly punctured; the vertex and vertex very densely rugosopunctate; anterior angles of prothorax very wide; tubercles sharp and prominent; mesothorax and scutellum densely and finely punctured; area of metathorax large, entirely covered with fine radiating striae; mesopleura rugose; tegulae dark brown, with hyaline margin anteriorly; wings hyaline, apical margin broadly faintly dusky; stigma brown; nervures dark; first recurrent joining second submarginal cell a little before end; legs with white hair, pale yellowish on inner side of tarsi; hind spur microscopically serrulate; abdomen brilliant green, delicately silvery pruinose, hind margins of segments narrowly black, and apical segment entirely black; punctures of abdomen very fine and delicate; venter black, the first segment green, and having a long sharp spine.

Two females; Victoria, Mexico, March 16.

In Schrottky's table of *Odontochlora* this runs nearest to *A. phemenoë* Schrottky, which it much resembles, differing by the clearer wings and more distinctly (though very finely) punctured abdomen. It is easily known from *A. mulleri* Cockerell by the longer area of metathorax and much more delicately punctured abdomen. From *A. bogotensis* (Vachal) it is easily known by the basal area of metathorax being covered with striae. From *A. sporas* (Vachal) by the densely punctured middle of mesothorax. Some of the punctures on the clypeus are confluent, and the apical striae of the area of metathorax spread out to become more or less transverse, so that the characters are precisely those designated for *A. azteca* (Vachal).
based on a female from Mexico in the Paris Museum. Vachal's species has never been fully described, but I can only presume that our insect is identical.

**AUGOCHLORA (OXYSTOGLOSSA) DIMISSA, new species.**

*Female.—Extremely similar to *A. metallica* (Fabricius), bright green with the hind margins of the abdominal segments narrowly black; but easily separated by the area of metathorax, which is large, fully as long as the scutellum, evenly rounded (instead of angulate) posteriorly, and covered, nearly to the margin, with very fine radiating striae, except in the middle, where it is minutely rugosopunctate. The abdomen is not so shining as in *metallica*, and the mandibles are reddened subapically. The legs are black, with the anterior femora behind, and the middle and hind coxae green. The fifth abdominal segment is green basally, not all black as in *metallica*. The scutellum is as densely (partly confluent) punctured as possible, the punctures not of two sizes. The pubescence of the legs is pale, not black as in *A. feronia* Smith. The supraclypeal area is microscopically roughened and has sparse punctures. The hind spur of hind tibia is microscopically serrulate. The punctures of the abdomen are very small, and not dense. The wings are 6 mm. long, moderately dusky. Scutellum and postscutellum with fulvous hair.

Victoria, Mexico, March 16, one female.

This is a northern representative of the South American group of *A. metallica* (Fabricius), *A. iheringi* Cockerell, *A. caeruleus* Cockerell, etc.

*Type.—Cat. No. 25582, U.S.N.M.*

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