

agrees perfectly with the description. The material left by Mr. G. C. Davis, on which he based his article on "Mealy Bugs and their Allies"[†], was examined and found to agree with both the description and the recently collected specimens. As no description of the adult female has as yet been found by the writer, it was thought that one might be of some interest.

The adult female measures a little more than two millimetres in length, is reddish-brown in colour, covered with a coating of waxy or mealy secretion. The legs are dirty yellow in colour. From the sides project from 15 to 17 (usually 17) waxy processes, forming a fringe around the body in the usual manner, with the shortest filaments near the head, and those near the tail considerably longer, sometimes one-third as long as the body. The antennae are 8-jointed; joint 1 is swollen, as broad as long; 2 and 3 subequal, each about as long as 1; 4, 5, 6 and 7 subequal, a little over half as long as 2 or 3; 8 usually a little longer than 5 and 6 joined. There is considerable variation in 4, it is sometimes smaller than 5, 6, or 7, and sometimes slightly larger. The legs are dirty yellow, in length the tarsus is slightly more than half the tibia, which about equals the femur. Digitules 4; the 2 superior long and slender, the 2 inferior shorter and more stout. (The digitules were not distinct, but appeared as described.) Anal tubercles not very prominent, with a mass of small glandular spots, and bearing one long hair, with sometimes several smaller ones. Among the glandular spots are placed two conical projections or processes on each tubercle. These processes are from two to three times as long as broad at the base.

The figures of the antenna and leg (Fig. 34) are from drawings made from the Ithaca specimens in 1893.

NEW COCCIDS FROM KANSAS.

BY PERCY J. PARROTT, MANHATTAN, KANSAS.

Antonina Nortoni, Parrott and Ckll.

Sac white, subglobular, cottonlike, completely enveloping female.

♀ oval, plump, cream-coloured, with slight tinge of brown on margin. Boiled in caustic potash, becomes transparent, with the exception of the antennae, the two pairs of spiracles, and ultimate segment, including anal region, which are a dark yellowish-brown. There are many single glands, especially towards and about posterior segments;

[†] Insect Life, Vol. VII., 1894, p. 168.

they are less numerous anteriorly. On outer side of each spiracle there is a crescentic group of rather large circular glands, placed very close together. Antennae aborted, short, thick, composed of three segments measuring respectively 18-25, 13-16 and 27-28 mm. Mouth-parts large. Spiracles chitinous, large and extended. Anal orifice circular, situated in a depression, surrounded by a strong chitinous ring. Anal ring with six long, stout hairs measuring from 53 to 89 mm. in length. Around

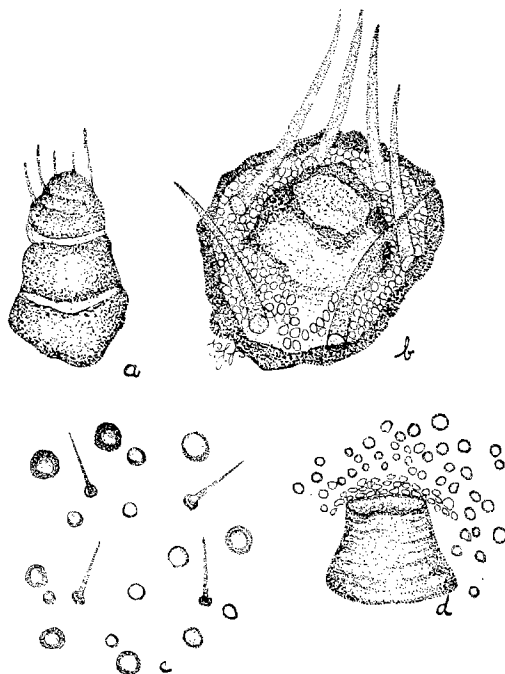


Fig. 35.--*Antonina Nortoni*.

the anal area are many slender hairs, very much smaller than the bristles of the anal ring.

In Fig. 35 *a* represents the antenna; *b*, anal ring; *c*, portion of derm about anal ring; *d*, spiracle.

This species was collected by Mr. J. B. Norton, on April 25th, 1899, at the bases of the stems of *Boutelona racemosa* on Blue Mont, Manhattan, Kans.

Aspidiotus (Targionia) Marlatti, sp. nov.

♀ scale 2 mm. in diameter, flat to slightly convex, dark reddish-brown, resembling walnut, on margin to a lighter shade at centre; exuviae lateral, large, black, often covered with brownish secretion; ventral pellicle thin, light reddish-brown, not easily separated from scale, and leaves no mark on host plant when detached.

♀ oval, white, with irregular spots of yellow; ultimate segment yellow, with the margin dark brown and strongly chitinous. Boiled in caustic potash, the female becomes transparent, with the exception of the lobes, which remain yellow. There are three pairs of lobes (Fig. 36), which are short, broad, and quite widely separated, with the sides parallel; first pair either broadly rounded or truncate, and notched at distal end; second and third lobes similar, broader than mesal lobes, notched on

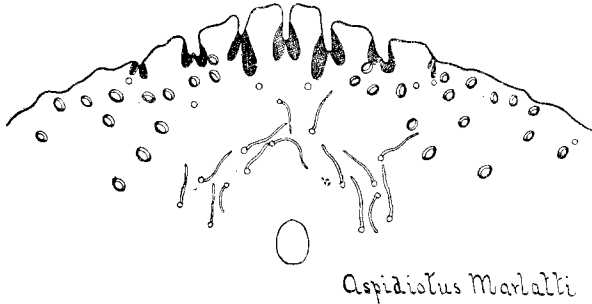


Fig. 36.

margin, with that part lateral of the notch generally the larger. There is one small spine at the base of each of the mesal lobes, one larger one at the base of the lateral margin of each of the second and third lobes respectively, and another one on margin as distinct from the third spine as the combined width of one mesal and one second lobe. Chitinous processes are of medium size, one pair to each incision; the ones lateral of mesal lobes are the largest. Plates are short and truncate, and apparently easily shed, as they do not appear in the boiled specimens; in the untreated specimens there are from one to two plates to each incision. There are no groups of circumgenital glands. The dorsal glands are large and fairly numerous. On each side and posterior of the anus there are a few tubular glands.

This interesting species was collected by Mr. J. B. Norton, who found it upon the base of the stems of grasses, *Andropogon furcatus* and *A. scoparius*, on Blue Mont, Manhattan, Kansas, and is named in honor of Mr. C. L. Marlatt, in recognition of his many valuable contributions to the knowledge of the Coccidae.