

ground near Anacostia, D. C., and had been standing but little over a year. A number of the eggs are inserted proximately, often in the



Fig. 2. Ovipositor of *Prionus laticollis* Drury, ventral view c, c' cerci.

pores which are rich in food substances. The larvæ upon hatching excavate shallow longitudinal burrows, then enter the wood transversely. This habit of living in wood below the surface of the ground is shared with species of the Prionidæ and doubtless the earth about the wood serves the purpose of retaining moisture as does the bark upon logs under which many beetles insert their eggs.

The drawings are by C. T. Greene.

The following papers were accepted for publication:

A NEW SPECIES OF SIMULIUM FROM TEXAS.

BY J. R. MALLOCH.

Simulium distinctum, new species.

Male: Black. Antennæ yellow, generally more or less brown toward apices; face with silvery pollinosity; palpi and proboscis black, or brown. Mesonotum deep velvety black, with two silvery pollinose, slightly curved lines, which are broadest at anterior extremities, and extend the whole length of disk, meeting at the posterior margin with a cross band of the same color; side margin yellowish, with silvery pollinosity, prescutum yellow; pleuræ opaque gray, yellowish below wing base on the membranous portion of mesopleura; scutellum black; post-notum black with a silky lustre. Abdomen with basal scale velvety black or brown-black, the segment below it yellow, the succeeding three segments deep velvety black; next segment sometimes more or less yellowish, and almost entirely covered with silvery pollinosity, which is also noticeable on sides of next segment; apical segments and hypopygium black. Legs yellow; fore coxæ slightly, mid and hind coxæ distinctly grayish; hind femora with apical half blackened; fore tibiæ darkened towards apices and, like the other tibiæ, whitish on dorsal surfaces; hind tibiæ with apical half black; fore tarsi black; mid and hind tarsi with apices of first and second, and whole of third to fifth joints black. Wings clear. Halteres yellow.

Head normal in shape, the upper eye facets much larger than the lower; face with a few black hairs. Mesonotum with golden pilosity, which is

not very pronounced, and only visible, under a moderate magnification, on the pale stripes, though more conspicuous on posterior and lateral margins; scutellum with decumbent golden pilosity and upright yellowish hairs; pleuræ bare except for the usual tuft below wing base, which is not conspicuous, and confined to upper angle. Basal abdominal fringe yellow, other abdominal segments weakly haired. Legs strong; surfaces with golden pile, and scattered black hairs, which are most conspicuous on dorsal surfaces; fore tarsi slender; basal joint more than twice as long as second; the paired apical hairs present on joints 1 and 3, but not conspicuous; hind metatarsus not as broad as hind tibia, and distinctly longer than the other four tarsal joints together; claws trifid, wing venation normal.

Length, 1.5 mm.

Type: Cat. no. 15958, U. S. N. M.

Locality: Devils River, Texas, May 5, 1907, at light, (Bishopp and Pratt)

Female: In color very similar to the male, but the yellow is more predominant. The frons and face are thickly covered with a pale lavender-gray pollinosity; the antennæ are slightly darkened at base; and the palpi are black. Mesonotum with the appearance of having three deep black stripes on a brownish-yellow ground, the intervening spaces covered with thick pollinosity similar to that on frons, and the lateral margins also distinctly pollinose; pleuræ-black, anteriorly and posteriorly yellow-brown, with silvery pollinosity; scutellum brown, gray pollinose, post-notum black, with silky lustre. Abdomen with basal scale yellow; segment below scale silvery, on apex, laterally; the other segments yellow, more or less obscured with brown, and with three rows of black spots. Legs colored as male. Wings similar to male. Halteres yellow. Frons convergent anteriorly, at upper angles almost twice as wide as at lower; surface hairs sparse, pale; face distinctly longer than broad, its breadth slightly more than equal to breadth of frons at lower margin, haired as frons. Mesonotum with the pilosity very short, close and hairlike, yellow in color; scutellum with distinct, decumbent yellow pilosity and longer upright yellow hair. Basal fringe of abdomen short, yellow. Legs haired as in male; claws simple.

Length, 2 mm.

Same data as males. One specimen.

Another specimen with label, Victoria, Tam., Mexico, December 10, (F. C. Bishopp), though smaller agrees in other particulars with the allotype. I do not know of any recorded occurrence of *Simulium* at light, and it seems strange that species which normally prefer the sunshine should be attracted in this manner.

TWO NEW SPECIES OF BORBORIDÆ FROM TEXAS.

BY J. R. MALLOCH.

Leptocera (= *Limosina*) **mittelli**, new species.

Male: Black, shining, but not glossy. Third joint of antennæ, face, and cheeks more or less distinctly reddish brown. Legs brownish. Wings smoky; veins brown. Halteres brownish yellow.

Frons about as long as broad, opaque except on orbits; 3 outwardly directed, orbital bristles present; the center rows consist of 4 bristles each which are of about equal length; antennæ normal in size and shape; arista nearly bare, in length about $1\frac{3}{4}$ the width of frons; cheek about equal in height to the width of third antennal joint; vibrissa strong, situated slightly above mouth margin; posterior to the vibrissa there is a short bristle situated about midway from lower margin to eye margin, and the usual marginal bristles are distinct; face concave; eyes elongate oval. Mesonotum with only one pair of prescutellar, dorso-central bristles, and the disk thickly covered with short setulæ; pleuræ glossy; sterno-plura with two bristles neither of which is exceptionally long; scutellum with four marginal bristles and the disk covered with short setulæ. Abdomen with numerous surface hairs; hypopygium large, its surface covered with short hairs. Legs covered with short hairs; mid tibia with four to five bristles on the dorsal surfaces, the pair at about apical third strongest, and one ventral bristle at below middle; basal joint of hind tarsus barely longer than broad; second distinctly longer than broad. Wings with first costal division two-thirds as long as second; second subequal with third, or slightly shorter; basal section of third vein not half as long as last section of second; outer cross vein upright, at slightly more than its own length from inner; last section of third vein straight, ending before wing tip; costa extending well beyond end of third vein; fourth and fifth veins indistinct from outer cross vein.

Length, 1 mm.

Type and paratypes: Cat. no. 15972. U. S. N. M.

Locality: Victoria, Texas. 10-9-1907. (September?) (J. D. Mitchell) "on *Bumelia lanuginosa*." Five specimens.

Allied to *ferruginata* Stenh., which is cosmopolitan in its occurrence, and is common in North America.

Leptocera (= *Limosina*) **approximata**, new species.

Male: Black-brown, subopaque. Second antennal joint, viewed from above and the side, velvety opaque black; cheeks and face yellowish-brown. Pleuræ and legs yellow-brown. Halteres yellow, knob brown. Wings clear.

Frons occupying almost the entire width of head, fig. 2, center stripe shining, the narrow stripe on either side opaque orbits shining, lateral margins of center stripe with a row of hairs, orbits covered with short