

long as four. Third segment with seven or eight regular and round sensoria whose diameter is about one-half the diameter of the segment. Fourth segment with two or three and five with two sensoria. Beak extending slightly beyond the hind coxæ. Wings typical of the genus.

Measurements.—Length of body 4 mm. Length of antennal segments: III, 0.6 mm.; IV, 0.29 mm.; V, 0.29 mm.; VI, 0.15 mm. Total length 1.48 mm. Rostrum: III, 0.31 mm.; IV, 0.30 mm.; V, 0.1 mm. Total length 2.4 mm. Length of hind tibiæ 2.9 mm.; hind tarsus 0.39 mm.

Lachniella schwarzii, new species.

From material collected by E. A. Schwarz at Prescott, Arizona, June 20, 1901, on *Pinus* sp. Also three specimens collected by Professor C. P. Gillette at Laporte, Colorado, July 1, 1898, on *Pinus ponderosa*. Types in U. S. Bureau of Entomology collection.

At a first glance this species may be taken for *Lachniella montanensis* as the markings of the legs and antennæ are quite alike and the wings, nectaries and cauda are very similar. The antennæ vary considerably, and the beak of *L. schwarzii* is much the longer in proportion to the length of the body.

Apterous viviparous female.—Antennæ light coloured over basal two-thirds of third and basal one-third of fourth and fifth segments, remaining parts and sixth segment dusky black. The three pairs of legs except the base of the femora and a yellowish area towards the base of the tibiæ dusky black. This light coloured area is much more extensive on the two front pairs than on the rear pair.

Third antennal segment equal to or slightly longer than the fourth and fifth segments together. Fifth segment slightly longer than fourth, and sixth about two-thirds as long as four. Third segment with one small sensoria at the distal end, fourth and fifth with two each. These are larger than the one on the third segment. Beak long, extending almost to or beyond the tip of the abdomen. Hairs on antennæ and body moderately abundant. Legs thickly set with short drooping hairs. Hind tibiæ strongly curved. Nectaries large and volcano-shaped. Cauda angular.

Measurements.—Length of body 2.5 mm. Length of antennal segments: III, 0.56 mm.; IV, 0.23 mm.; V, 0.26 mm.; VI, 0.166 mm.; IV, 0.23 mm.; V, 0.1 mm. Total length 2.49 mm. Length of hind tibiæ 2.45 mm.; hind tarsus 0.33 mm.

Alate viviparous female.—Colour markings of antennæ and legs like those of the apterous female except that the light areas on the tibiæ are not as extensive. Comparative length of antennal segments as in the apterous form. Third antennal segment with four to six round sensoria of irregular size, fourth with one or two and fifth with two. Rostrum long, reaching to or beyond the tip of the abdomen. Cornicles large and volcano-shaped, cauda angular.

Measurements.—Length of body 3 mm. Length of antennal segments: III, 0.51 mm.; IV, 0.23 mm.; V, 0.25 mm.; VI, 0.166 mm. Total length 1.3 mm. Rostrum: III, 0.25 mm.; IV, 0.22 mm.; V, 0.1 mm. Total length 2.9 mm. Hind tibiæ 2.49 mm.; hind tarsus 0.31 mm.

Lachniella pergandei, new species.

Description made from four slides selected from 25 as being representative of the different stages of the species.