

Colton, California, by Mr. G. R. Pilate, and were deposited Oct. 21, 1888. They hatched March 27, 1889, and the last one hatched June 20th, making a total period from egg to imago of 242 days. The food-plant given me by Mr. Pilate was cotton wood or willow. At the time they hatched the willows were just beginning to swell their buds a little. These were given to them and they ate them by boring into them, acting as borers in this stage just as the larvæ of *Ilia* do in oak buds; and some of them continued this boring habit till after the second moult, the young leaves at this time being about half an inch long. The fringe along the sides of the larvæ places this species near *Ilia* instead of with some other species that do not have the fringe; but of this I expect to have something to say in another article.

SYNOPSIS OF THE NORTH AMERICAN SPECIES OF ASTATUS, LATR.

BY WM. J. FOX, PHILADELPHIA.

FEMALES.

1. Marginal cell as long or longer than the first submarginal (if shorter it is scarcely noticeable)..... 2
Marginal cell always much shorter than the first submarginal.....6
2. Dorsulum rather strongly and closely punctured.....3
Dorsulum more or less sparsely punctured5
3. Entirely black.....*unicolor*.
Abdomen red4
4. Pygidial area long, narrow, a little more than twice longer than it is broad at the base; stigma of wings black.....*bicolor*.
Pygidial area of a more triangular form, not more than twice longer than its base is broad; stigma of wings yellowish....*pygidialis*.
5. Metanotum with a well-marked, triangular depression at apex; the length of the marginal cell is fully equal to the first submarginal; pubescence of thorax white.....*occidentalis*.
Metanotum without a well-marked depression at apex (if present at all it is very faint); the length of the marginal cell is a little less than the first submarginal; pubescence of thorax black; abdomen black or red and black..... *nubeculus*.