## THE LARVA OF NEOARCTIA BEANII, NEUM. BY ARTHUR GIBSON, OTTAWA.

On May 19th, 1908, the late Dr. Fletcher, received from Mr. N. B. Sanson, of Banff, Alta., two arctian larvæ, which had been found on Sulphur Mountain. These larvæ were given to the writer. Both specimens moulted on May 22nd, but one died immediately afterwards. The plant Antennaria racemosa was sent with them. Antennaria rosea, some plants of which (from British Columbia) were growing on the Experimental Farm, was offered to the larvæ, as well as plantain, willow, grass and dandelion. The only food which the remaining larva would eat was plantain. This it ate readily. On May 28th the following description was taken:

Mature larva.—Length, 32 mm. Head, 2 mm. wide; somewhat quadrate, only slightly depressed at vertex, jet black, shining; hairs on face black. Dorsum and sides of body, above spiracles, dull green, densely mottled with brown; skin on lower portion of sides, enclosing tubercles iv, v and vi, almost wholly orange; venter greenish. An indistinct, dull orange, dorsal stripe is present. Tubercles all black and shining, bristles very faintly barbed. Tubercle i as large as ii, iii and iv, which are all about the same size. Bristles from tubercles i and ii all black, from iii black, with a few white ones intermingled. From lower half of iv, and from v and vi, the bristles are bright rust-red; from vii and viii dark rust-red, spiracles black. Thoracic feet black, shining; plates on prolegs dark shiny brown.

The larva did not feed on May 28th, and before evening it had spun a few threads of silk. By the morning of the 30th it had changed to the pupa. The cocoon was simply a very thin covering of whitish silk. The moth emerged on June 15th.

Pupa.—Length, 21 mm.; width at widest part, 5.5 mm. Colour dark bluish-black; very faintly pruinose; shining, particularly at folds of abdominal segments. Abdomen bears sparsely, very short, thick, reddish hairs. Spiracles black. Cremaster round, dark reddish-brown, shining, terminating in a bunch of about 18-20 reddish bristles of varying lengths, each with a distinct tendril-like curve at the tip.

In the Canadian Entomologist, June, 1891, p. 124, a short description of the larva is given by Mr. Bean. Since this note appeared, Mr. Bean tells us that he found a further larva in the middle of July, 1893, at about 7,000 feet altitude, on Mount St. Piran. This larva produced a male moth on Aug. 20th.

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