

Pamphila, and bears a somewhat close resemblance to *P. Manitoba*, for which reason we call it "*Manitoboides*." It occurs, however, six weeks sooner at Nepigon than an insect I take to be true *Manitoba*. As I do not wish to cause confusion by naming what may prove to be a described species, I refrain from further describing the perfect insect, but give below some notes on the egg and the larvæ after the third moult, and on the appearance of the young larva in the first two stages. Five eggs were obtained upon the grass, *Danthonia spicata*. These were laid upon the green leaves and were large and showy, of a dull, dead white, and of the same shape as those of *P. Hobomok*. Under the microscope the shell presents a surprising appearance, for it is covered all over with threads and much resembles a piece of ordinary printing paper under a magnifying glass. The shell of the empty egg is very thick, and it is with difficulty that the pentagonal and hexagonal cells on the surface can be made out. Eggs laid 10th July hatched upon 25th. There was no mottling with pink as in *P. Cernes*, and the only indication that the eggs were good was the gradually darkening head of the young larva which showed through the thick shell. The newly-hatched caterpillar is of a much yellowish shade of cream colour than either *P. Cernes*, *Mystic* or *Hobomok*. The head, thoracic shield and first thoracic foot, black. The whole body covered with knobbed hairs. Unluckily at the time the young caterpillars hatched I was moving into a new house, and my furniture and instruments all being packed up, my microscope was inaccessible, and the only observations I could make then were made with a Codrington lens. The shape of the young larvæ was sack-shaped, somewhat like the grubs of the Scarabæidæ; but not having the anal segments curved under the body. From the very beginning, when the young larvæ were placed upon a tuft of growing grass, they worked their way down to the bases of the leaves and kept out of sight. About four days after they hatched I lost sight of them, and it was not until 4th August that I found them again. They had evidently moulted, for instead of a yellowish white they had now assumed a delicate glaucous tint. By glaucous I mean an opaque white, with a faint bluish-green shade on the surface. The head, and spiracles, as well as the thoracic shield and first pair of thoracic feet were black as at first, making a continuous collar from the tip of one foot to the other. Down the centre of the back there was a green line, from the dorsal vessel showing through the skin. At this time they were transferred to a smaller tuft of grass consisting of small roots of *Agrostis vulgaris* and *Carex varia*. They seemed to eat either of these indiscriminately, and eating their way down into the heart of a shoot, would nibble the edges of the leaves all round them. Leaving home to attend the meeting of the American Association for the Advancement of Science, no note was taken of the date of the next moult. Indeed, I supposed that this, like some others, had died during my absence. One morning in the month of September, however, to my great pleasure, I found one of these larvæ snugly ensconced, head upwards, in a den it had eaten out of the centre of one of the shoots of sedge. When it emerged to feed I found it had quite changed its colour. In the beginning of October it came out of this den, and for some reason it did not return to it again, but climbed about on the grass and sedge, and before it had constructed another winter quarters the cold weather set in. In November it had spun together a few leaves of grass, but this seems to have been insufficient. Some warm weather in December caused a mould to spread all over the plant, and having decided that the caterpillar was dead, I placed it in alcohol. The following is a description of this larva after what I consider was its third moult:—

Length, 7 lines. General colour, greenish-brown, with head, thoracic shield and thoracic feet black. Head round, larger than either of the first three segments, very coarsely punctured and thickly invested with short pointed bristles. About the mouth-parts a few long bristles. Thoracic shield black on a pale collar, and having two longitudinal furrows and bearing some truncate bristles just above the large spiracle on segment 2. The shield is divided by a transverse line which cuts off a small triangular piece of which the apex points downwards just over the spiracle. This triangle bears one long setaceous bristle similar to those on *Chionobas Jutta* and *Macounii* and also one concave disk of the same nature as those on *C. Mandan*. The whole surface of the body is minutely shagreened and has the raised portions darkened. Besides this the whole of the body but the head is covered with small black tubercles, each of which bears a short white trumpet-shaped