

hatching the larva moults; the skin ruptures between the head and the cervical shield and also splits a little ways along the back, and through this opening the larva crawls out of its old skin. Just after moulting the head and tubercles are a pale straw colour, later they become darker, and in the last stages of the larva they are almost black. The observed differences between the stages are a gradual increase in the size and depth of colouring of the tubercles, and a decrease in the relative length of the hairs. Before reaching its full growth the larva probably moults five times. In the fall, as the cold weather advances, the larvæ begin to spin nests in the axils of the leaves, where they retire when not feeding and in which grass is allowed to collect and around which the remains of partially devoured leaves are drawn, making a very complete hiding place. Later the nests in the axils of the leaves are deserted and similar nests are constructed upon the surface of the soil. These nests are lined with a thick layer of silk and are covered with a thick coating of particles of soil or bits of dried grass, making a thick, warm nest in which the larvæ pass the winter.

There seem to be three broods a year. In September of 1892 the simultaneous pupation of a large number of larvæ was very noticeable. The pupa state lasted about ten days, the adults emerged, eggs were laid and the larvæ moulted three or four times before cold weather forced them to retire for the winter. These hibernating larvæ come forth in the spring, complete their growth, pupate and the adults probably emerge in the first half of May. The second brood flies in the latter part of June, and the third brood, as already observed, flies the latter part of September. If the adult stage lasts four weeks or more, it would not be strange if the broods overlapped a little, especially the second and third broods, and this is borne out by a reliable record. During the year of 1889 the Entomological Department of the Agricultural Experiment Station, at Ithaca, N.Y., ran six trap lanterns from May 1 to October 20. *Nomophila noctuella* was picked out, the sexes determined and the results tabulated.

TIME OF FLIGHT OF NOMOPHILA NOCTUELLA, 1889.

MAY.								JUNE.					JULY.											Totals.		
Date.	5	6	7	8	11	19	20	3	5	16	28	30	1	6	11	15	18	19	20	21	24	25	26		27	31
♂	1	3	2	2	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	3	3	2	5	40
♀	1																						2	1		4