

"this, which, when once established, is indeed a mill or flour scourge, as being an all-the-year-round pest." The full-grown caterpillar is a little more than half an inch in length, of a greenish white or sometimes of a decidedly pinkish tinge. The head is reddish-brown and bears a few long bristles. The thoracic and anal shields as well as the thoracic feet are honey yellow. The spiracles are yellowish and inconspicuous. Along the sides are four series of dark piliferous tubercles. (i.) Sub-dorsal, consisting of an anterior and posterior tubercle on each segment from 5 to 12. (ii.) Lateral. (iii.) Sub-stigmatal and (iv.) supra-ventral. The sub-stigmatal series is double throughout, i.e., each tubercle bears two bristles, separated a little at the base. On segments 3, 4, and 13, the sub-dorsal and lateral series are represented by a single large double tubercle instead of two separate tubercles as on the other segments. These three tubercles are the most conspicuous marks on the larvæ. The lateral series consists of double tubercles on segments 2, 3, 4, and 13, and of two bristles on the remaining segments, one of these, above and slightly anterior to the spiracle, is very small. The tubercles are small but distinct, the dark colouring is in the form of a cloud round the bases of the bristles, which in the lateral series on segments 3 and 12 takes the form of a black ring round the white base of the larger bristle and the smaller bristle is placed on this ring. On the anterior section of segment 13 the two sub-dorsal rows of tubercles are joined by a dark cloud and there is a large double conspicuous tubercle in the lateral area.

The *chrysalis* is of the shape shown at figure *b*, $\frac{3}{8}$ of an inch in length of a honey yellow colour. This stage lasts about three weeks in September.

Prof. Riley has figured for comparison with *E. kühniella* the native species of the same genus *E. interpunctella* shown at Fig. 50, with its larvæ and chrysalis.

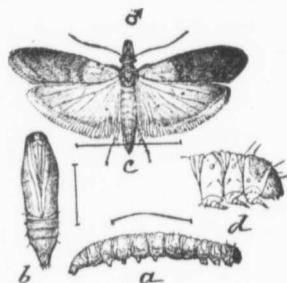


FIG. 50.

This species was found associated with *E. kühneilla* in the infested mill. The moths are quite different in appearance, *interpunctella* having the bases of the wings of a yellowish drab tinge and the tips reddish mottled with purple.

"The early states are quite similar in appearance, but the larvæ may be distinguished by the following characters: the larvæ of *kühniella* are more slender and of a more uniform diameter than those of the other species. The abdominal legs are longer, cylindrical, with a circular fringe of hooklets at the crown. In *interpunctella* the legs are short, conical, with the fringe of hooklets at the crown oval. All piliferous warts in *kühniella*, most of which are rather minute, are still rather prominent, readily observed, and of a black or brown colour. Those most conspicuous are the lateral ones, in front of the first spiracle; the sub-dorsal one each side of the meso-thorax, almost completely encircled by a narrow black ring interrupted only at its upper margin, Fig. 50, *d*. In *interpunctella* all the warts, while present, are concolourous with the rest of the body, and can be dis-