## THE LIFE HISTORY AND HABITS OF THE RED-LEGGED HAM BEETLE "NECROBIA RUFIPES" (De GEER)

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The life-history of Necrobia rufipes (De Geer) varies considerably according to climatic conditions, but in its more favoured habitats, De Geer (1) records its description as follows:—"The adult beetle is 4.5 mm. long, iridescent peacock green or steel blue, with the bases of the antennae and the legs red. The head and prothorax are covered with fine hairs with the elytra finely striate. The eggs are a dirty white. (I was not able to get any at this season to include in the mount shown.) The larvae are a pale brownish yellow, with the head and thorax darker, somewhat hairy and approximately 10 mm. long."

L. O. Howard <sup>(2)</sup> says the average life cycle lasts from 30 to 45 days. Temperatures would be responsible for the variations in time. He also states that the adults may last as long as 14 months and lay as many as 2100 eggs.

During the course of our inspection duties covering imported plant products, probably no insect makes its appearance more often than the red-legged ham beetle. As a cosmopolitan feeder it has few equals. This will account for its wide distribution. From reports in "The Review of Applied Entomology," from Germany we have records of this insect infesting egg-yolk, tapioca, and the raw cassava root which is used in the manufacture of tapioca; in Ceylon and Samoa, infesting copra, cocoa beans, coffee, nut meats, hides, etc.; in Java, dried bananas, and in the Southern States we have records where considerable damage has been done to cured hams and bacon. De Geer records the fact that the larvae died when fed on Chinese egg yolk. (I am not at all surprised at that). But strange to say the adults thrive on it, although no pairing occurred and no eggs were laid while feeding on this product.

In the warmer climates this insect could become one of economic importance, but probably will never be considered any more than a storage pest in Canada, and, provided we see that imported products so infested are fumigated before being placed in storage, that phase may also be obviated.

It is interesting to note that both the adult and the larvae are considered somewhat predaceous. De Geer (Rev. Applied Ent.) reports the adults as attacking the Cheese Skipper, **Prophila casei** (Linn.) However, I believe I should just as soon have the cheese skippers on my cheese as **Necrobia rufipes**.

In Samoa this beetle is known as the copra beetle, probably due to the fact that wherever copra is stored, and particularly where it has become slightly rancid, these beetles may be found feeding.

Just recently, we examined three cargoes of copra which were docked here for trans-shipping, and all these were badly infested with the **Necrobia** beetle. It might interest the meeting to know how we handle situations of this nature.

In warm weather this beetle is quite active and will crawl for considerable distances. However, weather conditions were quite cold when these consignments arrived, and this drove most of the beetles into the sacks of copra. By having all other products removed to a safe distance, and after the copra had been re-shipped, by sweeping and spraying the space carefully, practically all danger of spreading this pest to other products was obviated. In regard to these clean-up measures, we generally receive very good co-operation from the transportation companies.

## References

- (1) De Geer. Insect Pests of Western North America—"Essig," p. 389.
- (2) L. O. Howard. U.S.D.A. Review of Applied Entomology, 1926, vol. 14, pp. 387-437 and 525. 1927, vol. 15, p. 325. 1928, vol. 16, pp. 100-1 and 541-42. 1929, vol. 17, p. 600. 1931, vol. 19, pp. 21-230-585.