

Kuwania quercus (Kuwana).

Fig. 18

1903. Fernald, Cat. Coccidæ, p. 30..

1917. Ferris, Can. Ent., vol. 49, p. 377, fig. 39b.

The general characteristics of the adult female have been described by Kuwana, but there remain certain points of interest. The mouth-parts appear really to be lacking as they are absent in all of numerous preparations examined. It is not impossible, however, that further examination would reveal a condition similar to that found in *Xylococcus macrocarpæ*.

There are four pairs of abdominal spiracles (not noted by Kuwana), these of the type shown in Fig. 18. D.

Penultimate stage. Oval in form (Fig. 18C). Antennæ reduced to mere chitinized points. Spiracles arranged as in the adult but of a quite different

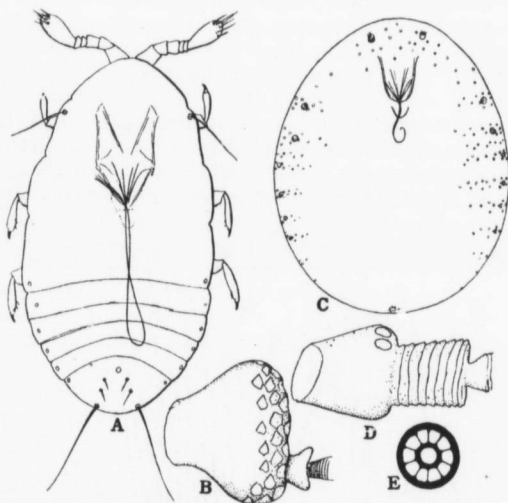


Fig. 18.—*Kuwania quercus* (Kuwana). A, larva; B, spiracle of apodous stage; C, apodous stage; D, spiracle of adult; E, pore of apodous stage.

form (Fig. 18B). Margins of the body with large, circular pores (Fig. 18E), these most numerous toward the head. Anal opening simple, without an anal tube.

First stage larva. (Fig. 18A). The description given by Kuwana appears to be accurate except for the statement, "Margins of the body with capitate hairs." These hairs do not appear in my specimens. The larva is so minute that I have been unable to detect the arrangement of the spiracles, or, indeed, whether or not they are present. Each abdominal segment bears at the margin a small object that may be either a pore or a spiracle.

Material examined. Preparations from the type material.