

THE PALM APHID, CERATAPHIS VARIABILIS H. R. L.¹

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INTRODUCTION: THE PALM APHID, CERATAPHIS VARIABILIS H. R. L., WAS DESCRIBED BY HILLE RIS LAMBERS FROM PALMS (1953). C. VARIABILIS HAS BEEN CONFUSED WITH TWO OTHER SPECIES, C. LATANIAE (BOISDUVAL) AND C. ORCHIDEARUM (WESTWOOD). FOR 25 YEARS, HILLE RIS LAMBERS (1953) HAS AMASSED MATERIAL OF CERATAPHIS FROM MANY COUNTRIES AND HAS NEVER SEEN ORCHID-INHABITING SPECIES ON ANY OTHER PLANTS NOR PALM-INHABITING SPECIES ON ANYTHING BUT PALMACEAE. SMITH, ET AL. (1963) REPORT C. ORCHIDEARUM ON FOUR SPECIES OF ORCHIDS AND C. VARIABILIS ON VARIOUS PALMS IN PUERTO RICO. PALMER (1952) REPORTS C. LATANIAE ON LEAVES OF PALM. BOISDUVAL ORIGINALLY DESCRIBED C. LATANIAE ON PALMS IN A HOTHOUSE.

HOST: THE PALM APHID, C. VARIABILIS, IS KNOWN ONLY FROM VARIOUS SPECIES OF PALMS.

DISTRIBUTION: THE PALM APHID IS REPORTED FROM AFRICA TO FIJI, PUERTO RICO, PHILIPPINES, INDONESIA, SURINAM, BRITISH SOLOMON ISLANDS, INDIA, FLORIDA, AND CALIFORNIA. IT PROBABLY OCCURS ON PALMS IN MOST TROPICAL AREAS IN THE WORLD. IN FLORIDA, THE PALM APHID IS FOUND IN THE FOLLOWING COUNTIES: BREVARD, BROWARD, DADE, HILLSBOROUGH, LEE, MANATEE, MONROE, ORANGE, PALM BEACH, PINELLAS, POLK, ST. LUCIE, AND SEMINOLE (FIG. 1).

ECONOMIC IMPORTANCE: THE PALM APHID IS A PEST OF MANY PALMS AND OFTEN DEVELOPS HIGH POPULATIONS. THESE APHIDS REDUCE PLANT VIGOR BY SUCKING OUT THE PLANT JUICES AND CAUSES A YELLOWING AROUND THE FEEDING AREAS. SOOTY MOLD ACCOMPANIES AN INFESTATION AS HONEYDEW IS GIVEN OFF BY THE NYMPHS AND ADULTS (FIG. 2). IN SOUTH FLORIDA, THIS APHID DEVELOPES SEVERAL GENERATIONS A YEAR.

DESCRIPTION: THIS APHID APPEARS TO HAVE THREE NYMPHAL STAGES BASED ON THE NUMBER OF MOLT SKINS ASSOCIATED WITH THE WINGLESS ADULTS ON CAGED COCONUT PALMS IN KEY WEST. IT IS ALEYRODIFORM, RESEMBLING WHITEFLY PUPAE (FIG. 3). IT IS SEMI-SEDENTARY, AND THE NYMPHS AND ADULTS RETAIN FUNCTIONAL LEGS. IT DOES NOT RETAIN MOLT SKINS AS EXUVIAE AS IN SCALE INSECTS. THE NYMPHS AND ADULTS CAN ROTATE SEVERAL DEGREES IN EITHER DIRECTION AROUND THEIR INSERTED MOUTH PARTS. THE NYMPHS ARE LIGHT GREEN TO OLIVE IN COLOR. THE WINGLESS ADULT IS A SHINY DARK BROWN COLOR WITH WHITE WAXY THREADS SCATTERED OVER THE DORSAL AREA. A WHITE WAXY FRINGE EXTENDS FROM THE DORSAL EDGE OF THE BODY OF THE NYMPH AND WINGLESS ADULT. THE ABDOMINAL SEGMENTS ARE QUITE EVIDENT, AND A MID-DORSAL RIDGE OCCURS ON THE HEAD AND THORAX OF THE NYMPH. THE ABDOMINAL SEGMENTS ARE LESS EVIDENT IN THE ADULTS, BUT A DISTINCT TRANSVERSE SUTURE, APPROXIMATELY IN THE MIDDLE OF THE DORSUM, DIVIDES THE WINGLESS ADULT BODY. THE CAUDA, A SHORT FREE SEGMENT, OCCURS AT THE ANAL END. THIS OCCASIONALLY IS RAISED AND THE INSECT FORCIBLY EJECTS A DROPLET OF HONEYDEW FROM 1/8 INCH TO 1/2 INCH AWAY. THE EYES APPEAR AS TWO DARK SPOTS THAT ARE FLUSH WITH THE BODY SURFACE, AND THE CORNICALS ARE MERE RIMS PROJECTED SLIGHTLY ABOVE THE BODY WALL.

LITERATURE CITED:

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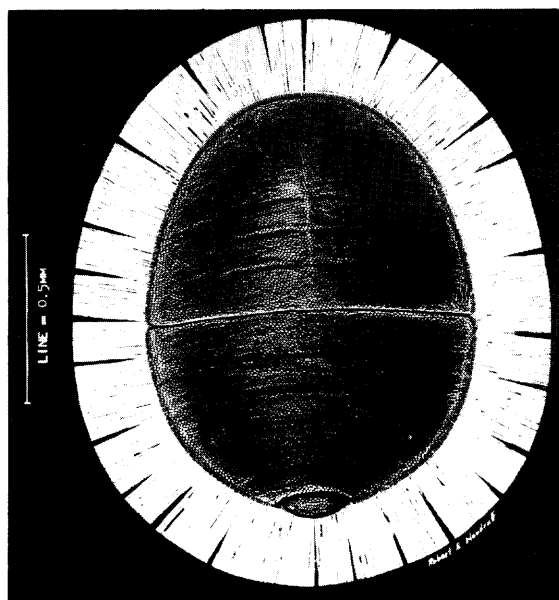


FIG. 3. ADULT. ILLUSTRATED BY R. E. WOODRUFF

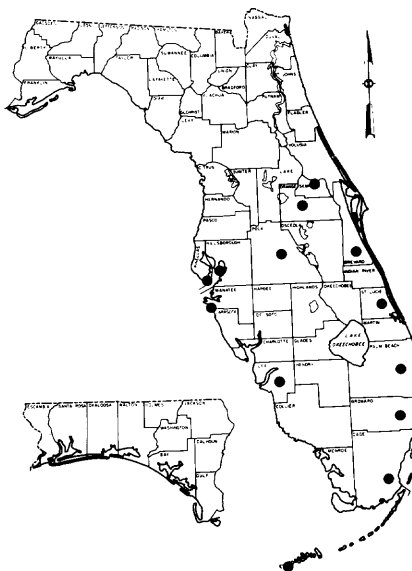


FIG. 1. DISTRIBUTION IN FLORIDA.

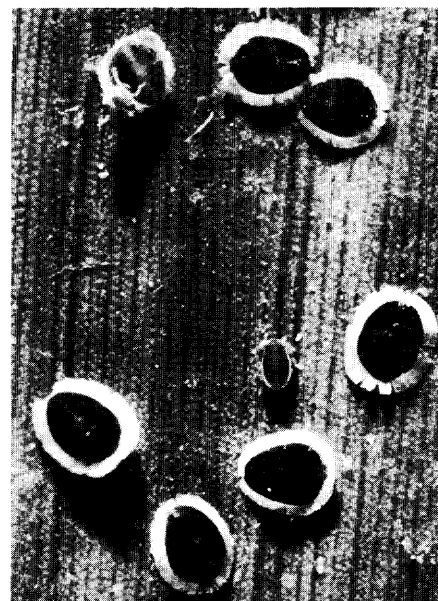


FIG. 2. NYMPHS AND ADULTS.

¹CONTRIBUTION No. 65, ENTOMOLOGY SECTION.