

ORMENARIA RUFIFASCIA (WALKER), A PLANTHOPPER PEST OF PALMS
(HOMOPTERA:FLATIDAE) ^{1/}

F. W. MEAD

INTRODUCTION: THIS PLANTHOPPER IS COMMON ON PALMS AND OFTEN ATTRACTS THE ATTENTION OF PLANT INSPECTORS AND OTHER INTERESTED PERSONS, BUT ACTUAL INJURY TO THE PALMS IS SLIGHT AND NOT APPARENT. THE NYMPHS PRODUCE A COTTONY, WAXY MATERIAL WHICH IS UNSIGHTLY AND MAY BE OBJECTIONABLE TO THE GROWER.

DISTRIBUTION: THIS SPECIES HAS BEEN REPORTED FROM SOUTHEASTERN GEORGIA (JEKYLL ISLAND AND MARLOW, GEORGIA), FLORIDA, AND CUBA (PINAR DEL RIO PROVINCE AND ISLE OF PINES). IN FLORIDA THIS PLANTHOPPER INHABITS THE PENINSULAR SECTION. FOR THE PANHANDLE SECTION THERE IS ONLY ONE UNCONFIRMED REPORT (LYNN HAVEN, BAY COUNTY, ON ROSA SP.), WHICH IS AVAILABLE IN THE FILES OF THE DIVISION OF PLANT INDUSTRY (DPI).

HOSTS: PALMS OF THE FAN-LEAVED SPECIES SEEM TO BE THE PREFERRED HOSTS. IN FLORIDA O. RUFIFASCIA HAS BEEN TAKEN ON CABBAGE PALM, SABAL PALMETTO; SCRUB PALMETTO, SABAL ETONIA; SAW PALMETTO, SERENOA REPENS; CHINESE FAN PALM, LIVISTONA CHINENSIS; WASHINGTON PALM, WASHINGTONIA ROBUSTA; A FAN PALM, PRITCHARDIA SP.; SILVER LATANIA, LATANIA LODDIGESI; CANARY ISLANDS DATE PALM, PHOENIX CANARIENSIS; AND PROBABLY OTHER PALMS. THE DPI FILES CONTAIN UNCONFIRMED RECORDS OF O. RUFIFASCIA ON ROSE, ROSA SP.; A CATTLEYA ORCHID, CATTLEYA SP.; AN EPIPHYTIC ORCHID, DENDROBIUM SP.; AND A FIG, FICUS SP.

IDENTIFICATION: LENGTH 11 MM, WIDTH 3 MM, HEIGHT 5 MM. THE OUTSTANDING FEATURE OF THIS SPECIES IS THE COLORATION OF THE HEAD AND THORAX. TWO LONGITUDINAL REDDISH STRIPES ALTERNATING WITH BLUE-GREEN STRIPES ARE FOUND ON THE TOP OF THE PROTHORAX AND MESOTHORAX. A COLOR ILLUSTRATION OF THE DORSAL ASPECT OF THE HEAD AND THORAX CAN BE SEEN IN METCALF (1923). THE HEAD HAS TWO CONSPICUOUS ORANGE PATCHES ON THE FACE NEAR THE MEDIAN RIDGE, AND ORANGE-RED IS PROMINENT ON THE DORSO-LATERAL MARGINS, WITH BLUE-GREEN AGAIN PROVIDING THE GROUND COLOR. THE FOREWINGS (TEGMINA) ARE ORANGE-YELLOW ALONG THE COMMISSURE AND THE POSTERIOR MARGIN. TWO OTHER FLATID PLANTHOPPERS, ORMENOIDES VENUSTA (MELICHAR) AND ANORMENIS SEPTENTRIONALIS (SPINOLA), AND TWO ACANALONIID PLANTHOPPERS, ACANALONIA LATIFRONS (WLK.) AND A. CONICA (SAY), SUPERFICIALLY RESEMBLE ORMENARIA RUFIFASCIA. ALL THESE SPECIES ARE GENERALLY PALE GREEN AND LATERALLY COMPRESSED, BUT ONLY O. RUFIFASCIA HAS THE DIAGNOSTIC RUFUS MARKINGS. ORMENOIDES VENUSTA SOMETIMES HAS VAGUE ORANGE MARKINGS, BUT USUALLY IS 2-4 MM SHORTER AND LACKS THE VIVID COLORS AND PATTERN OF RUFIFASCIA.

FLATIDS HAVE THE CLAVUS GRANULATED (FIG. 1,A) THE COSTA DILATED AND CROSS-VEINED, AND HIND TIBIAE WITH LATERAL SPINES; ACANALONIIDS DO NOT. THE NYMPH OF ORMENARIA RUFIFASCIA (FIG. 2) IS GREEN, HAS SILKY FILAMENTS



FIG. 1
ADULT ORMENARIA RUFIFASCIA
A. CLAVUS

^{1/}CONTRIBUTION No. 59, ENTOMOLOGY SECTION.

EXTRUDED FROM THE ABDOMEN (UNLESS BROKEN OFF), AND HAS FAINT ORANGE STRIPES THAT ARE DIAGNOSTIC. FULGOROID NYMPHS, IN GENERAL, OFFER A FERTILE FIELD OF STUDY BECAUSE VERY LITTLE IS KNOWN ABOUT THEM.

LIFE HISTORY: THERE MAY BE MORE THAN ONE BROOD PER YEAR, BUT PRECISE INFORMATION IS LACKING. USUALLY NYMPHS APPEAR DURING LATE APRIL AND MAY. ADULTS BECOME COMMON BY MID OR LATE MAY AND SEEM TO BE ABUNDANT THROUGH JUNE AND MOST OF JULY. RECORDS LATER THAN THIS ARE SCARCE. NYMPHS MAY BE SCATTERED ON A LEAF OR IN SMALL GROUPS PARTIALLY SCREENED BY THEIR FLOCCULENT, WHITE, WAXY MATERIAL. THE NYMPHS DEFINITELY PREFER TO FEED IN THE "VALLEYS" OF THE RIDGE-AND-VALLEYS OF THE FAN PALMS. ADULTS CLING TO THE "RIDGES" AND THE TOUGH PETIOLES WHERE IT IS PRESUMED THEY PROBE INTO THE VASCULAR BUNDLES. BOTH NYMPHS AND ADULTS PREFER THE UNDERSIDE OF A LEAF. IN MIAMI, C. F. DOWLING, JR. OBSERVED 50 ADULTS ON ONE LEAF OF PRITCHARDIA SP. THERE IS A TENDENCY FOR INDIVIDUALS OF THIS SPECIES TO CONGREGATE. HAVING DONE SO, A CERTAIN AMOUNT OF COMMUNICATION TAKES PLACE THROUGH SOUNDS. MOORE (1961) REPORTED THAT THIS SPECIES PRODUCES SOFT SOUNDS. HE RECORDED AND ANALYZED TIMBAL VIBRATIONS IN SPECIMENS COLLECTED FROM PALM IN MIAMI, FLORIDA. ALTHOUGH THEY ARE RETICENT TO FLY, THE ADULTS WILL JUMP WHEN DISTURBED AND FLY IN A SWIFT, ERRATIC MANNER, USUALLY RETURNING TO THE SAME OR NEARBY LEAF.

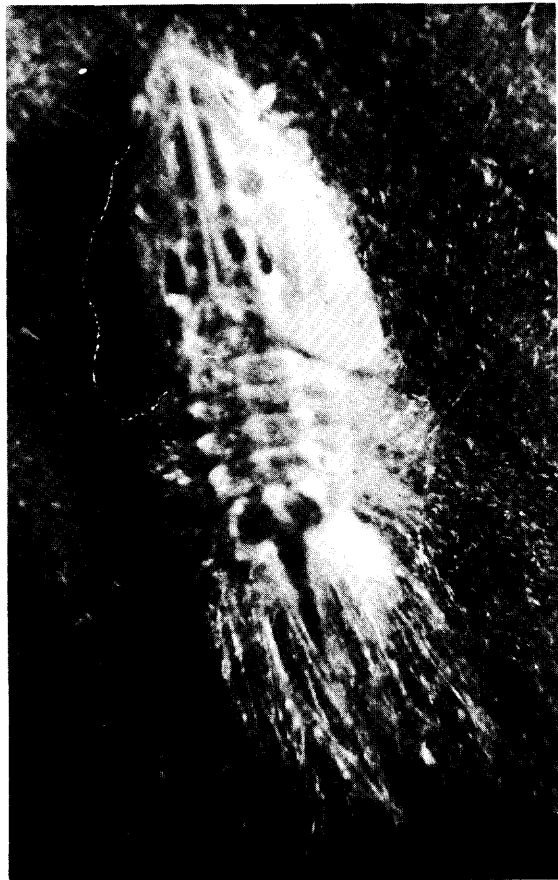


FIG. 2
NYMPH OF ORMENARIA RUFIFASCIA

CONTROL: CONTROL USUALLY IS NOT NECESSARY, BUT MALATHION SHOULD PROVIDE SATISFACTORY PROTECTION WHEN CONTROL IS DESIRED. DIRECTIONS ON THE CONTAINER SHOULD BE FOLLOWED CLOSELY. ON MOST ORNAMENTALS, 4 TO 6 TBSP/GAL OF 25% WETTABLE POWDER OR 2 TO 3 TSP/GAL OF 57% EMULSIFIABLE CONCENTRATE IS SATISFACTORY.

REFERENCES:

- DOZIER, H. L. 1928. THE FULGORIDAE OR PLANTHOPPERS OF MISSISSIPPI, INCLUDING THOSE OF POSSIBLE OCCURRENCE. A TAXONOMIC, BIOLOGICAL, ECOLOGICAL, AND ECONOMIC STUDY. TECH. BULL. MISSISSIPPI AGR. EXP. STA. 14, 152 P., 35 FIGS.
- METCALF, Z. P. 1923. A KEY TO THE FULGORIDAE OF EASTERN NORTH AMERICA WITH DESCRIPTIONS OF NEW SPECIES. J. ELISHA MITCHELL Soc. 38(3, 4):139-230; PLS. 38-70.
- METCALF, Z. P. 1957. GENERAL CATALOGUE OF THE HOMOPTERA, FASC. IV FULGOROIDEA, PART 13 FLATIDAE AND HYPOCHTHONELLIDAE, 565 P.
- METCALF, Z. P., AND BRUNER, S. C. 1948. CUBAN FLATIDAE WITH NEW SPECIES FROM ADJACENT REGIONS. ANN. ENT. SOC. AMER. 41(1):63-118; PLS. 1-17.
- MOORE, T. E. 1961. AUDIOSPECTROGRAPHIC ANALYSIS OF SOUNDS OF HEMIPTERA AND HOMOPTERA. ANN. ENT. SOC. AMER. 54(2):273-291; 30 FIGS.