

OLEANDER SCALE (PHENACASPIS COCKERELLI (COOLEY))<sup>1</sup>  
(HOMOPTERA: COCCIDAE)  
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**INTRODUCTION:** OLEANDER SCALE, AN ARMORED SCALE, WAS FIRST FOUND IN FLORIDA AT MEADE GARDENS, WINTER PARK, ORANGE COUNTY, BY J. R. SPRINGER ON SWEETBAY (MAGNOLIA VIRGINIANA L.) IN 1942. THIS SCALE FORMERLY WAS REFERRED TO AS MAGNOLIA WHITE SCALE (PHENACASPIS NATALENSIS CKLL.). IN 1953 G. B. MERRILL REPORTED THE DISTRIBUTION IN FLORIDA AS ORANGE AND LEON COUNTIES AND THE KNOWN HOSTS AS: BANANA SHRUB (MICHELIA FUSCATA (ANDR.) BLUME), BIRD-OF-PARADISE (STRELITZIA SPP.), OLEANDER (NERIUM OLEANDER L.), A PALMETTO (SABAL MEXICANA MART.), AND SWEETBAY (MAGNOLIA VIRGINIANA L.).

**DESCRIPTION:** THE FEMALE ARMOR IS PEAR SHAPED, SHINY WHITE, AND 2-3 MM IN LENGTH. THE EXUVIAE IS TERMINAL AND YELLOWISH BROWN (FIGS. 1, 2, & 3). THE MALE ARMOR IS ELONGATE, SNOW-WHITE, FEEBLY TRICARINATE, AND ABOUT 1 MM IN LENGTH. THE MALE EXUVIAE IS TERMINAL WITH A FAINT YELLOWISH TINGE. THE MALES USUALLY OCCUR IN CLUSTERS ON THE LEAF.

**ECONOMIC IMPORTANCE:** OLEANDER SCALE HAS BECOME AN ECONOMIC PEST TO ORNAMENTAL NURSERIES IN FLORIDA. THE RAPID DISTRIBUTION THROUGHOUT FLORIDA CAN BE ATTRIBUTED TO THE MOVEMENT OF INFESTED NURSERY STOCK. THE KNOWN HOSTS IN FLORIDA TODAY INCLUDE MANY OF THE MAJOR ORNAMENTAL PLANTS FOUND IN COMMERCIAL NURSERIES.

**CONTROL:** DIMETHOATE (CYGON) 25% EC AT 1/4 PINT TO 12 1/2 GALLONS OF WATER, OR ETHION 46% EC AT 1/8 PINT PLUS 1/2 PINT OIL EMULSION 80-90% TO 12 1/2 GALLONS OF WATER, OR MALATHION 57% EC AT 1/4 PINT TO 12 1/2 GALLONS OF WATER. CYGON HAS CAUSED INJURY TO SOME OF THE ORNAMENTALS LISTED, ESPECIALLY BURFORD HOLLY. IF CONTROL IS NEEDED FOR FRUIT TREES, CONTACT YOUR COUNTY AGENT. READ AND HEED LIMITATIONS AND PRECAUTIONS GIVEN ON MANUFACTURERS' LABELS.



FIG. 1: PEAR SHAPED FEMALE OLEANDER SCALE ON LEAF OF BIRD-OF-PARADISE WITH MALE SCALE (X10).

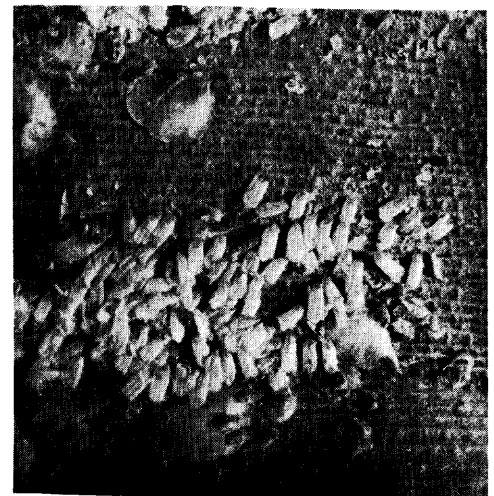


FIG. 2: CLUSTER OF MALE OLEANDER SCALES ON LEAF OF BIRD-OF-PARADISE. A FEW FEMALE SCALE ARE PRESENT (X6).

<sup>1</sup> CONTRIBUTION No. 49, ENTOMOLOGY SECTION

**HOSTS:** ARCHONTOPHOENIX ALEXANDRAE (MUELL.) WENDL. & DRUDE (KING PALM), ARECASTRUM ROMANZOFFIANUM BECC. (QUEEN PALM), ACORUS GRAMINEUS SOLAND. (JAPANESE SWEETFLAG), AUCUBA JAPONICA THUNB. (GOLDDUST PLANT), BUTIA CAPITATA (MART.) BECC. (JELLY OR PINDO PALM), BISCHOFIA SP. (BISHOPWOOD), CALLISTEMON SP. (BOTTLEBRUSH), CAMELLIA SPP., CHAMAEROPS HUMILIS L. (EUROPEAN FAN PALM), CYCAS CIRCINALIS L. (A CYCAD), C. REVOLUTA THUNB. (SAGO-"PALM"), DIANELLA TASMANICA (TASMANIAN DIANELLA), DIOSPYROS SP. (PERSIMMON), EURYA JAPONICA THUNB., GARDENIA JASMINOIDES ELLIS (CAPE JASMINE OR GARDENIA), HEDERA CANARIENSIS WILLD. (ALGERIAN IVY), ILEX SPP. (HOLLIES), IRIS SP. (FLAG), MAGNOLIA DENUDATA DESR., M. GRANDIFLORA L. (BULL BAY OR SOUTHERN MAGNOLIA), M. SOULANGEANA SOUL., MICHELIA FUSCATA (ANDR.) BLUME (BANANA SHRUB), NERIUM OLEANDER L. (OLEANDER), NOLINA SP. (PONY TAIL PLANT), OSMANTHUS FRAGRANS LOUR. (SWEET OLIVE OR TEA OLIVE), PHORMIUM TENAX FORST. ("CALIFORNIA" FLAX), PODOCARPUS NAGI MAKINO (PODOCARPUS), RAVENALA MADAGASCARIENSIS SONN. (TRAVELERS-TREE), RHODODENDRON SP. (AZALEA), SABAL MEXICANA MART. (A PALMETTO), SAPIUM SEBIFERUM (L.) ROXB. (TALLOW TREE), SCHAEFFERIA SP. (BOXWOOD), SERENOA REPENS (BART.) SMALL (A PALM), STRELITZIA NICOLAI R. & K. AND S. REGINAE BANKS (BIRD-OF-PARADISE), THEVETIA PERUVIANA SCHUM. (LUCKYNUOT OR TRUMPET FLOWER), TORREYA SP., YUCCA SP., AND ZAMIA FLORIDANA DC. (COONTIE "FERN", COMPTIE, OR SEMINOLE BREAD).

**DISTRIBUTION IN FLORIDA:** ALACHUA, BREVARD, BROWARD, CITRUS, CLAY, DADE, DE SOTO, DUVAL, GADSDEN, HILLSBOROUGH, INDIAN RIVER, JACKSON, JEFFERSON, LAKE, LEE, LEON, MANATEE, MARION, ORANGE, OSCEOLA, PALM BEACH, PASCO, POLK, ST. LUCIE, SANTA ROSA, SEMINOLE, AND VOLUSIA COUNTIES (FIG. 4).



FIG. 3: OLEANDER SCALE ON BIRD-OF-PARADISE. SLIGHTLY REDUCED.

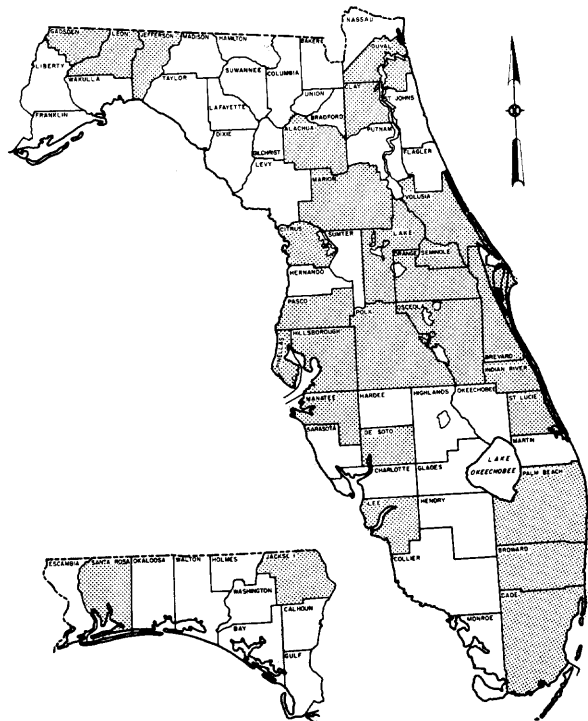


FIG. 4: FLORIDA DISTRIBUTION PHENACASPIS COCKERELLI (COOLEY) OLEANDER SCALE