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TWO COMMON APHIDS OF SHASTA DAISIES IN FLORIDA[1] (HOMOPTERA: APHIDIDAE)

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INTRODUCTION: THE COTTON APHID, APHIS GOSSYPII GLOVER, AND THE SPIREA APHID, APHIS SPIRAECOLA PATCH, ARE COMMONLY FOUND ON SHASTA DAISY, CHRYSANTHEMUM MAXIMUM RAMOND, IN FLORIDA (FIG. 1). APHIDS APPEAR JUST BEFORE OR ABOUT THE TIME FLOWER BUDS ARE FORMING (FIG. 2).

DISTRIBUTION: WHEREVER SHASTA DAISIES ARE GROWN IN FLORIDA. MOST PLANTS ARE FOUND FROM CENTRAL FLORIDA TO THE NORTH AND THE PANHANDLE AREAS.

HOST: CHRYSANTHEMUM MAXIMUM RAMOND.

ECONOMIC IMPORTANCE: THESE APHIDS DEVELOP LARGE COLONIES IN THE SPRING AND EARLY SUMMER. THEIR FEEDING WEAKENS THE FLOWER STEMS, AND THEY SECRETE HONEYDEW OVER MUCH OF THE LEAVES BELOW THEIR FEEDING AREA (FIG. 3).

DESCRIPTION AND LIFE HISTORY: BOTH SPECIES HAVE A DARK GREEN BODY, AND THEY ARE APPROXIMATELY THE SAME SIZE. HOWEVER, A. SPIRAECOLA HAS A BLACK CAUDA WITH 5 OR 6 PAIRS OF SETAE (FIG. 4), AND A. GOSSYPII HAS A DUSKY CAUDA WITH 2 OR 3 PAIRS OF SETAE (FIG. 5). BOTH SPECIES REPRODUCE PARTHENOGENETICALLY AS EGGS ARE SELDOM OR NEVER LAID BY MOST SPECIES OF APHIDS IN FLORIDA. BOTH SPECIES GIVE BIRTH TO LIVING NYMPHS (VIVIPAROUS). IT REQUIRES ABOUT A WEEK TO 10 DAYS TO COMPLETE A LIFE CYCLE DURING THE SPRING AND SUMMER MONTHS.

CONTROLS: SHASTA DAISIES ARE CONSIDERED A MINOR CROP IN FLORIDA AND NO RESEARCH FOR CONTROLS OF INSECTS HAS BEEN REPORTED BY THE DEPARTMENT OF ENTOMOLOGY AND NEMATOLOGY, IFAS, UNIVERSITY OF FLORIDA. IN AN EFFORT TO DETERMINE AN EFFECTIVE CONTROL MEASURE, I SPRAYED ONE BED OF SINGLE AND TWO BEDS OF DOUBLE TYPE FLOWER BLOOMS WITH META-SYSTOX-R AT THE RATE OF 1/2 OZ OF 25% EC PER GAL OF WATER. AN APPLICATION WAS MADE WHEN APHIDS FIRST APPEARED, AND A SECOND APPLICATION 30 DAYS LATER KEPT PLANTS FREE OF APHIDS DURING THE BLOOMING SEASON.

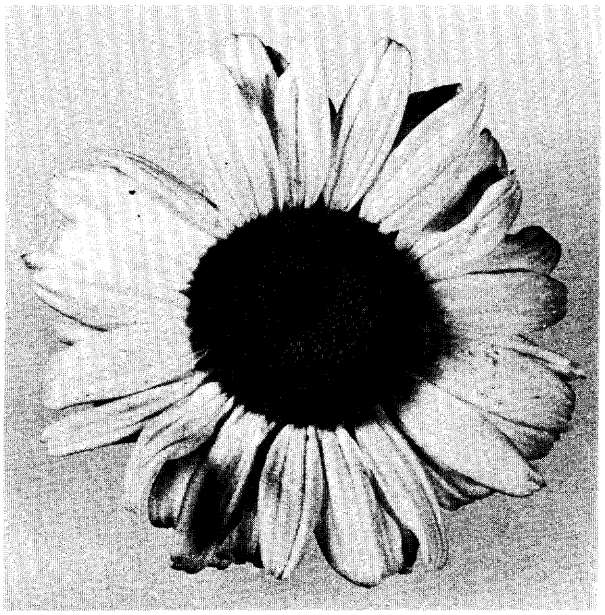

FIG. 1. SHASTA DAISY, CHRYSANTHEMUM MAXIMUM.

FIG. 2. SHASTA DAISY INFESTED WITH APHIS GOSSYPII GLOVER AND A. SPIRAECOLA PATCH.

FIG. 3. APHIDS FEEDING ON FLOWER STEM OF SHASTA DAISY.

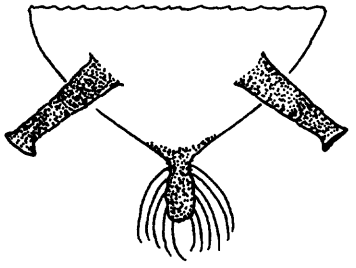

FIG. 4. CORNICALS AND CAUDA OF A. SPIRAECOLA.

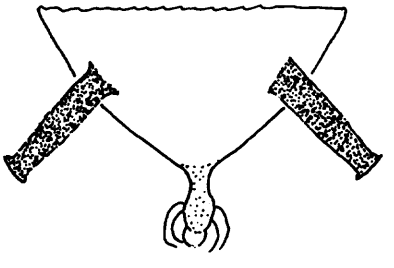

FIG. 5. CORNICALS AND CAUDA OF A. GOSSYPII.

[1] CONTRIBUTION NO. 279, BUREAU OF ENTOMOLOGY