

ORCHID INSECT CONTROL AND FOUR MAJOR PESTS.^{1/}

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INTRODUCTION: THE NUMBER OF INSECTS AND OTHER PESTS KNOWN TO BE ASSOCIATED WITH ORCHIDS IN FLORIDA EXCEEDS 100 SPECIES. THE NUMBER OF SERIOUS PESTS IS RELATIVELY SMALL. FOUR OF THE MAJOR PESTS ARE SHOWN BELOW: BOISDUVAL SCALE (FIG. 1), BROWN SOFT SCALE (FIG. 2), ORCHID MEALYBUG (FIG. 3) AND PHALAENOPSIS MITE (FIG. 4). USUALLY, WHEN GOOD CONTROL OF THESE PESTS IS MAINTAINED, THE OTHER PESTS SHOULD NOT DEVELOP INTO A SERIOUS PROBLEM ON ORCHIDS.

CONTROL: CONTROL RECOMMENDATIONS ARE PRESENTED IN THE CHART ON THE REVERSE SIDE. MOST GARDEN SUPPLY DEALERS CARRY SMALL PACKAGES OF METALDEHYDE BAIT BUT NOT THE WETTABLE POWDERS.



FIG. 1. BOISDUVAL SCALE (DIASPIS BOISDUVALII SIGN.), AN ARMORED SCALE ON LEAF (X15).



FIG. 2. BROWN SOFT SCALE (COCCUS HESPERIDUM LINN.), A SOFT SCALE ON LEAF (X8).



FIG. 3. ORCHID MEALYBUG (PSEUDOCOCCUS MICROCIRCULUS MCKENZIE) (X2). INSET (X4)



FIG. 4. PHALAENOPSIS MITE (TENUIPALPUS PACIFICUS BAKER) (X4). WHITE SPECKS ON LEAF ARE CAST SKINS (X4).

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SPRAY CHART FOR ORCHID INSECTS

INSECT	INSECTICIDE AND FORMULATION	DOSAGE	
		1 GAL	100 GAL
ARMORED SCALES, SOFT SCALES & MEALYBUGS	*DIMETHOATE (CYGON) 23.4% EC	2 TSP	2 PT
	**ETHION 23-25% EC	2 TSP	2 PT
	PLUS OIL EMULSION 97%	3 TBS	3 QT
	MALATHION 25% WP	6 TBS	6 LB
	MALATHION 50-57% EC	1 TBS	3 PT
	META-SYSTOX-R 25.4% EC	2 TSP	2 PT
	DIAZINON 25% EC	2 TSP	2 PT
MITES	CHLOROBEZILATE 25% WP	1 TBS	1 LB
	DIMITE	1 TSP	1 PT
	ETHION 23-25% EC	2 TSP	2 PT
	KELTHANE EC 18½%	2 TSP	2 PT
	KELTHANE WP 18½%	2 TBS	2 LB
META-SYSTOX-R 25.4% EC	2 TSP	2 PT	
APHIDS	*DIMETHOATE (CYGON) 23.4% EC	2 TSP	2 PT
	LINDANE 20% EC	1 TSP	1 PT
	LINDANE 25% WP	1 TBS	1 LB
	MALATHION 25% WP	4 TBS	4 LB
	MALATHION 50-57% EC	2 TSP	2 PT
	META-SYSTOX-R 25.4% EC	1 TSP	1 PT
	DIAZINON 25% EC	2 TSP	2 PT
SPRINGTAILS & THRIPS	DDT 50% WP	2 TBS	2 LB
	*DIMETHOATE (CYGON) 23.4% EC	2 TSP	2 PT
	LINDANE 25% WP	1½ TBS	1½ LB
	MALATHION 25% WP	4 TBS	4 LB
	MALATHION 50-57% EC	2 TSP	2 PT
BEETLES & WEEVILS	DDT 50% WP	2 TBS	2 LB
	LINDANE 25% WP	1½ TBS	1½ LB
	DIAZINON 25% EC	2 TSP	2 PT
ANTS & COCKROACHES	CHLORDANE 40% WP	2½ TBS	2½ LB
	CHLORDANE 42-46%	2 TSP	2 PT
	DIAZINON 25% EC	2 TSP	2 PT
	(SPRAY BENCHES, INTERIOR AND EXTERIOR WALLS)		
SNAILS & SLUGS	METALDEHYDE 15% D (DUST IN AND AROUND POTS AND BENCHES)		
	METALDEHYDE WP OR BAITS (FOLLOW LABEL DIRECTIONS)		

ABBREVIATIONS: TBS=TABLESPOONS, TSP=TEASPOONS, PT=PINT, LB=POUND, EC=EMULSIFIABLE CONCENTRATE, WP=WETTABLE POWDER AND D=DUST

*DIMETHOATE (CYGON): THIS MATERIAL IS REPORTED TO CAUSE INJURY TO THE FOLLOWING ORCHID PLANTS: CALANTHE SP., CYCNOCHES DENTRICOSUM BATEMAN (= C. VENTRICOSUM BATEMAN VAR. WARSCEWICZII (REICHB. F.) P. H. ALLEN) WHICH IS ERRONEOUSLY ADVERTISED IN ORCHID TRADE LISTS IN THE UNITED STATES AS CYCNOCHES CHLOROCHILON KLOTZSCH., DENDROBIUM MOSCHATUM LINDL., D. PULCHELLUM ROXBURGH (= D. DALHOUSIEANUM WALL.), D. PHALENOPSIS (TYPE) AND NEOMOOREA IRRORATA ROLFE.

**ETHION + OIL: NOT RECOMMENDED FOR COMMUNITY POTS. ETHION IS AVAILABLE WITH OIL IN PREPARED FORMULATIONS; FOLLOW LABEL DIRECTIONS FOR SCALE CONTROL