

US EPA ARCHIVE DOCUMENT

EEE BRANCH REVIEW

DATE: IN \_\_\_\_\_ OUT \_\_\_\_\_ IN 10/5/76 OUT 10/15/76 IN \_\_\_\_\_ OUT \_\_\_\_\_  
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. 677-EUP-12

PETITION OR EXP. PERMIT NO. 661871

DATE DIV. RECEIVED \_\_\_\_\_

DATE OF SUBMISSION \_\_\_\_\_

DATE SUBMISSION ACCEPTED \_\_\_\_\_

TYPE PRODUCT(S): I, D, H, (F), N, R, S Abcission Aid

PRODUCT MGR. NO. Stobbs

PRODUCT NAME(S) SNEEP

COMPANY NAME Diamond Shamrock

SUBMISSION PURPOSE EUP on Citrus as an abcission aid

CHEMICAL & FORMULATION Chlorothalonil

(Tetrachloroisophthalonitrile)

- 1.0 Introduction
- 1.1 Bravo, Daconil, Forturf
- 1.2 Percent Active: 39% ai  
4 lbs ai/gallon
- 1.3 Citrus fruits as an abscission aid.
- 1.4 Other environmental reviews:

677-313            6/22/76, 4/27/76  
 677-EUP           3/04/76  
 1F1024            5/04/71

2.0 Directions for Use

- 2.1 Do not reuse empty container. Bury it or triple rinse and incinerate it.
- 2.2 Sweep alone does not cause abscission. Sweep exerts a synergistic effect when used with Release and/or Acti-Aid.
- 2.3 Specific Use Directions

Read and follow all label directions for SWEEP, RELEASE and ACTI-AID. Use only in Florida on oranges for processing.

	Application Rate* (See note below.)		
	<u>Sweep</u>	<u>Release</u> (Quarts/500 gal.)	<u>Acti-Aid</u>
Early and Mid-season varieties	1/2 to 2 (1/2 to 2 lbs ai)	plus 1/4 to 1	plus 1/8 to 1/2
Valencia	1 (1 lb ai)	plus 1 to 2	plus 1/4

	<u>Sweep</u> (Quarts/500 gallons)		<u>Acti-Aid</u>
Early and Midseason Varieties	2 (2 lbs ai)	plus	1/2 to 3/4
Valencia	NOT RECOMMENDED		

	<u>Sweep</u> (Quarts/500 gallons)		<u>Release</u>
Early and Midseason Varieties	1	plus	3/4 to 1-1/4
Valencia	1 (1 lb. ai)	plus	2 to 2-1/2

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\*Note: Important considerations for maximum fruit loosening:

- A. Apply all treatments with 2 quarts of Ortho X-77 per 500 gallons.
- B. Use SWEEP with the lower concentrations of the indicated rate range of abscission chemical(s) when temperatures are above 50°F with early and midseason varieties and during the early and late part of the Valencia harvest. Also use when harvesting by hand or with shaker-catch frame or limb shaker mechanical harvesting.
- C. Use SWEEP with the higher concentrations of the indicated rate range of abscission chemical(s) when temperatures are below 50°F, and during the middle of the Valencia harvest when fruit are less responsive to abscission chemicals. Also use when air harvesting or harvesting when preharvest fruit drop is desirable.
- D. Keep the ratio of quarts of ACTI-AID (Component A) to quarts of SWEEP at 1 to 4 when the two are used in combination with RELEASE for maximum fruit loosening.

#### 2.4 Application Volume and Equipment

Make application 4 to 7 days prior to anticipated harvest. Apply 500-1000 gallons per acre with equipment that has been properly calibrated and nozzles properly arranged to obtain uniform fruit coverage. Coverage of leaves and fruit is important for maximum effectiveness, especially in the tops of tall trees. Gallonage per tree varies from 5 to 10 gallons depending on tree shape, size, foliage and spacing.

2.5 When to Harvest

Fruit will begin to loosen two to three days after application. The desired fruit removal force of about 6 pounds or less will be reached 4 to 7 days after application depending on the variety and the environmental conditions. More rapid loosening is obtained under high temperature and humidity conditions.

2.6 General Use Precautions

DO NOT APPLY:

1. On fresh market oranges.
2. When rain is predicted within 24 hours, although a light, misty rain 6 to 8 hours after application should not greatly reduce effectiveness.
3. On trees following heavy dew until the moisture has dried from the fruit and leaves.
4. Within 2 weeks following a freeze.
5. In wind conditions that favor drift.
6. In combination with ACTI-AID alone on Valencias.
7. More than once per season.

Trees under stress conditions such as drought, insect or disease infestations, etc., produce more ethylene in the absence of abscission chemical treatment. Application of abscission chemicals containing SWEEP to trees under stress may cause additional leaf drop.

3.0 Summary

For an experimental use permit, only hydrolysis and aerobic soil metabolism studies are needed. There is adequate data on file to concur with the proposed use under the EUP.

4.0 Recommendations

We concur with the proposed use under the EUP.

*R. E. Ney 10/26/76*

*Nancy Dodd 10/26/76*

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