

FOLLOWING SEASON EFFECTS

Alar may increase apple set the year following treatment. Where a heavy or excessive fruit set is observed, thinning should be utilized prior to any Alar application.

If excessive fruit set is observed accompanied by size reduction, short thickened stems, shallow stem cavities, and misshaped fruit, do not treat with Alar.

Leave some untreated trees in each orchard for comparison with treated trees.

Earlier application dates and lower recommended rates minimize the possibility of following season effects.

sweet cherries

TO HASTEN RIPENING

Mix at the rate of 1 to 2 pounds per 100 gallons of water. Apply 400 gallons per acre (4.8 pounds of ALAR per acre) on mature bearing trees two weeks after full bloom.

Apply only one spray during each growing season.

Do not spray low vigor trees as fruit size reduction may occur.

sour cherries

To hasten ripening, concentrate maturity and decrease force required to remove fruit:

Apply Alar two weeks after full bloom as a dilute spray (250 to 400 gallons per acre) at the rate of 4 pounds per 100 gallons of spray.

peaches

TO HASTEN RIPENING AND CONCENTRATE MATURITY

Mix at the rate of 1 to 2 pounds per 100 gallons of water. Apply 400 gallons per acre (4.8 pounds of ALAR per acre) on mature bearing trees between style abscission (3 weeks post-bloom) and pit hardening.

Apply only one spray during each growing season.

Do not spray low vigor trees as fruit size reduction may occur.

Leaf injury may occur appearing as "shot holing" and possible leaf drop.

grapes

FOR CONCORD, NIAGARA, AURORA (Seibel 5279), CHANCELLOR (Seibel 7053) and DE CHAUNAC (Seibel 9549) VARIETIES ONLY.

To Increase Fruit Set and Yield—
To Reduce Rate of Vine Growth

Apply during the period first bloom to full bloom at the following rates:

Vine Growth	Annual Pruning Weight per Vine (8 x 9 foot spacing)	Pounds ALAR per 100 gallons water	Pounds ALAR per acre
Low vigor	Do Not Use	—	—
Medium vigor	About 2-3 pounds	1/2 - 1	1 1/2 - 2
High vigor	3 pounds or more	1	2 - 2 1/2

March 16, 1976

400-179

CAUTION! KEEP OUT OF REACH OF CHILDREN.

Avoid contact with eyes and skin. Avoid breathing dust or spray mist. May be harmful if swallowed.

ALAR[®]-85

A PLANT GROWTH
REGULANT

NET WT. FIVE POUNDS

COMPOSITION

Active ingredient: 85% ALAR (2,4-Dichlorophenoxyacetic acid) as the potassium salt.
Inert ingredients: 15%
Total weight: 5.00 pounds



*U.S. Patent Numbers 3,240,799 — 3,334,991

E P A Reg. No. 400 79AA



nectarines

CONTAINER GROWING AND CONCENTRATE MATURITY

Use only on healthy, vigorous trees. Under no conditions should Alar 85 be used on low vigor trees or on trees under stress conditions as excessive reduction in fruit size and vegetative growth may result (see application note #2). The effects of Alar 85 will vary depending on time and rate of application. The higher the rate the greater the magnitude of effect during the year of treatment and the greater the possibility for following season effects (see following season effects).

Depending on time and rate of application, Alar 85 will produce multiple desirable effects (see table 1).



tomato transplants

Do not use in California or Texas

Use only on healthy, vigorous trees. Under no conditions should Alar 85 be used on low vigor trees or on trees under stress conditions as excessive reduction in fruit size and vegetative growth may result (see application note #2). The effects of Alar 85 will vary depending on time and rate of application. The higher the rate the greater the magnitude of effect during the year of treatment and the greater the possibility for following season effects (see following season effects).

Depending on time and rate of application, Alar 85 will produce multiple desirable effects (see table 1).

GENERAL INSTRUCTIONS

Alar 85 is a water soluble plant growth regulator. It should be applied as a foliar spray in a manner that insures uniform and complete coverage. Since Alar 85 must be absorbed by the plant to be effective it is necessary that the spray be followed by a 12 hour rain-free period.

APPLICATION NOTES AND PRECAUTIONS

1. Alar 85 should be applied and then, after the rain-free period, the spray should be followed by a 12 hour rain-free period.
2. Do not spray on low vigor trees or trees under stress conditions as excessive reduction in fruit size and vegetative growth may result (see application note #2).
3. Do not spray on trees with fruit. Spraying should be done before fruiting.
4. Do not use Alar 85 with other pesticides. When Alar 85 is used with water, for safety, use the mature fruit of the variety.
5. Do not spray on trees with fruit. Spraying should be done before fruiting.
6. Do not spray on trees with fruit. Spraying should be done before fruiting.

CONTAINER DISPOSAL

Do not use Alar 85 on trees with fruit. Spraying should be done before fruiting.

AND WILDLIFE

Do not use Alar 85 on trees with fruit. Spraying should be done before fruiting.



apples

Use only on healthy, vigorous trees. Under no conditions should Alar 85 be used on low vigor trees or on trees under stress conditions as excessive reduction in fruit size and vegetative growth may result (see application note #2). The effects of Alar 85 will vary depending on time and rate of application. The higher the rate the greater the magnitude of effect during the year of treatment and the greater the possibility for following season effects (see following season effects).

Depending on time and rate of application, Alar 85 will produce multiple desirable effects (see table 1).

TABLE 1 DESIRABLE EFFECTS

1. Apple maturity is delayed and the harvest period is extended.
2. Increased red color may result on red varieties.
3. Aids in fruit drop control.
4. Increases firmness of fruit.
5. Reduces incidence of scald on some varieties.
6. Delays occurrence of water core.
7. Controls fruit size.
8. Reduces vegetative growth.
9. Promotes flower bud initiation, increasing return bloom.

TIMING OF ALAR-85 APPLICATIONS

Alar 85 can be sprayed on apple trees beginning 10 days after petal fall to 60 days before normal harvest (Northwest U. S. 10-80 days after full bloom). Alar 85 should be used only on apple varieties which have a bloom to harvest day count of over 100 days. Alar 85 should be applied only once during the growing season at times based on bloom, petal fall, or anticipated harvest date.

IMPORTANT NOTE: Do not spray on trees with fruit. Spraying should be done before fruiting.

A. 60-70 DAYS BEFORE NORMAL HARVEST DATE (NORTHWEST U. S. 70-80 DAYS PAST FULL BLOOM)

Desirable effects 1 through 6 listed in Table 1 are obtained.

The effects on fruit size reduction will usually be only slight. No significant effect on vegetative growth will result and little or no return bloom effects will be noted.

SEE DOSAGE TABLE FOR RATE RECOMMENDATION.

B. 21 DAYS AFTER PETAL FALL TO 70 DAYS PRIOR TO NORMAL HARVEST (NORTHWEST U. S. 14 DAYS TO 70 DAYS AFTER FULL BLOOM)

Desirable effects 1 through 6 listed in Table 1 are obtained.

In addition, fruit size control, vegetative growth control and return bloom (7-9 listed in Table 1) effects may be obtained. These effects are pronounced when application of Alar 85 is made early in this time period. Effects are reduced with applications made during the later portion of this period. SEE DOSAGE TABLE FOR RATE RECOMMENDATIONS.

C. 10 TO 21 DAYS AFTER PETAL FALL (NORTHWEST U. S. 10-14 DAYS AFTER FULL BLOOM)

Desirable effects 1 through 9 listed in Table 1 are obtained.

This timing will cause a significant reduction in fruit size. It is recommended only where fruit size reduction is desired.

Where vegetative growth control and increased return bloom are primary objectives this timing should be used. Where maximum vegetative growth control is desired apply Alar 85 when terminal growth is approximately 2-3 inches long. SEE SPECIAL INSTRUCTIONS BELOW.

For young non-bearing trees. Use this timing to promote flower bud initiation and for vegetative growth control.

SEE DOSAGE TABLE FOR RATE RECOMMENDATIONS.

*VEGETATIVE GROWTH CONTROL ON HEAVILY TOPPED TREES:

Apply 2 to 4 pounds Alar 85 per acre in 100 gallons of water directed to the terminal growth area. Sprays should be made when vegetative growth is approximately 2 to 3 inches long. Use a high volume spray nozzle. Do not exceed 4 pounds Alar 85 per acre.

Do not use Alar 85 on trees with fruit. Spraying should be done before fruiting.

TABLE 2 - EFFECTS TIMING SUMMARY

EFFECTS	A	B	C
1. Delayed maturity	YES	YES	YES
2. Increased red color	YES	YES	YES
3. Decreased Fruit Drop	YES	YES	YES
4. Increased firmness	YES	YES	YES
5. Reduced Scald	YES	YES	YES
6. Delayed water core	YES	YES	YES
7. Controls fruit size	Least	Moderate	Greatest
8. Reduced vegetative growth	None	Some to None	Greatest
9. Return Bloom	Some to None	Some to None	Greatest

TABLE 3 - DOSAGE TABLE APPLICATION TIMING

TREE VIGOR	A	B	C
	lbs. 100 gal. / lbs. acre	lbs. 100 gal. / lbs. acre	lbs. 100 gal. / lbs. acre
LOW	1.0	1.0	1.0
MODERATE	1.0	1.0	1.0
GOOD TO HIGH	1.0	1.0	1.0
VERY HIGH	1.0	1.0	1.0
YOUNG NON-BEARING TREES	1.0	1.0	1.0

FOOTNOTE

1. Maintenance of vigorous trees is essential for best results. Annual pruning resulting in removal of weak wood, proper fertilization and other cultural practices which contribute to tree vigor should be used. Use leaf analysis services where available to assess the degree of tree vigor.
2. This dosage is based on average application of 4.0 lbs. per acre to drip point on mature bearing trees. Most leaf sprays have been with late sprays but late sprays can be used if care is taken to get uniform coverage. Use age to determine the proper recommended rate.
3. In areas with strong growth, trees should be sprayed at 1.0 lb. per acre as moderate.
4. In the Northwest U. S. Alar 85 should be applied 14 days after full bloom at 2.0 lbs. per acre.
5. Do not use Alar 85 on trees with fruit. Spraying should be done before fruiting.

ICATION NOTES RECAUTIONS

les, the earlier Alar-85 is applied and the higher
sed, the greater the reduction in fruit size. Less
reduction occurs on high vigor trees.

t spray on any low vigor trees or trees under
ditions such as drought, low fertility, winter
., since excessive reduction in both fruit size
growth may result.

only once during a year. Split applications are
mended.

mix Alar-85 with other pesticides. When Alar-85
with water for spraying, use the mixture on the

imum rain-free period of 12 hours is needed
cation of the water spray solution of Alar-85 to
adequate absorption into plants.

t graze animals on cover crops grown among
d on this label.

AINER DISPOSAL

ury eighteen inches below soil surface at safe
te. When burning pesticide containers, keep out
Never reuse for food or water.

AND WILDLIFE

Keep out of lakes, streams
Do not contaminate water by cleaning equip-
posal of waste.

under normal conditions of use, but neither this
warranty nor any other warranty of merchant-
ability or fitness for a particular purpose, ex-
press or implied extends to the use of this
product contrary to label instructions or under
abnormal conditions, or under conditions not
reasonably foreseeable to seller, and buyer as-
sumes the risk of any such use.

of trees, when regrowth (terminal or sucker) is
approximately 2 to 3 inches long. Use enough
spray solution to insure adequate coverage of new
growth. **DO NOT EXCEED 8 POUNDS ALAR-85
PER ACRE.**

Where excessive tree vigor and associated pruning
practices make it desirable to control regrowth
throughout the entire tree use an overall spray at
a dosage of 1 to 2 pounds per 100 gallons of water.
DO NOT EXCEED 8 POUNDS ALAR-85 PER ACRE.

TABLE 2 EFFECTS-TIMING SUMMARY

EFFECTS	A	B	C
1. Delayed maturity	YES	YES	YES
2. Increased red color	YES	YES	YES
3. Decreased Fruit Drop	YES	YES	YES
4. Increased firmness	YES	YES	YES
5. Reduced Scald	YES	YES	YES
6. Delayed water core	YES	YES	YES
7. Controls fruit size	Least	Moderate	Greatest
8. Reduced vegetative growth	None	Some to None	Greatest
9. Return Bloom	Some to None	Some to None	Greatest

TABLE 3 DOSAGE TABLE-APPLICATION TIMING

TREE VIGOR ⁽¹⁾	A		B		C	
	lbs/100 gals. ⁽²⁾	lbs/acre	lbs/100 gals. ⁽²⁾	lbs/acre	lbs/100 gals. ⁽²⁾	lbs/acre
LOW	—	—	DO NOT USE	—	—	—
MODERATE	3/4	3	3/4-1 1/2	3-6	1-1 1/2	4-6 ⁽⁴⁾
GOOD TO HIGH ⁽³⁾	1	4	1-1 1/2	4-6	1-1 1/2	4-6 ⁽⁴⁾
VERY HIGH ⁽³⁾	1 1/2	6 ⁽⁴⁾	1-1 1/2	4-6	2	8 ⁽⁴⁾
YOUNG, NON-BEARING TREES	—	—	—	—	1 1/2-2	—

FOOTNOTE

1. Maintenance of vigorous trees is essential for best results. Annual pruning resulting in removal of weak wood, proper fertilization, and other cultural practices which contribute to high tree vigor should be used. Use leaf analysis services where available to assist in determining degree of tree vigor.
2. This dilution rate is based on average applications of 400 gallons per acre (to drip point) on mature bearing trees. Most field experience has been with dilute sprays but concentrate sprays can be used if care is taken to get uniform and complete coverage. Do not exceed the per acre recommended rate.
3. In areas with short growing seasons, treat good to very high vigor trees as moderate.
4. On Golden Delicious in Northwest apply 10-14 days after full bloom at 2 lbs./100 gallons. (8 lbs./acre)
5. Do not use more than 4 lbs. acre in Northwestern U. S.

UNIROYAL CHEMICAL DIVISION OF UNIROYAL, INC. Naugatuck, Conn. 06770
Lot No.