

## **SOYBEANS - WEEDS CONTROLLED**

### General Information

#### GENERAL INFORMATION

PHOENIX HERBICIDE HAS AN ADJUVANT/SURFACTANT SYSTEM BUILT INTO THE FORMULATION.

BECAUSE OF THIS BUILT-IN ADJUVANT SYSTEM WEED CONTROL CAN BE ACHIEVED WITH MINIMAL ADDITIONAL ADJUVANTS.

Phoenix Herbicide is a selective, broad spectrum herbicide for preemergence and postemergence control of susceptible broadleaf weeds. Phoenix Herbicide is formulated as an emulsifiable concentrate containing 2 lbs. of active ingredient per gal. In the upper North Central region of the midwest, postemergence applications of Phoenix Herbicide to soybeans (at or just before 1st bloom) have resulted in suppression of the soybean disease white mold caused by *Sclerotinia sclerotiorum*.

Phoenix Herbicide works primarily through contact action. Good coverage of young, actively growing weeds is essential for maximum weed control. The use of a non-ionic surfactant adjuvant containing a minimum of 80% surfactant is usually required. Refer to the label section on ADJUVANTS AND ADDITIVES for specific recommendations.

When Phoenix Herbicide is applied post emergence, a portion of the spray solution may contact the soil surface. If soil moisture conditions are favorable for preemergence activity following the application, suppressed germination of small-seeded broadleaf weeds, such as nightshade species, pigweed species, and prickly sida may be expected for a 2 to 3 week period. The presence of excessive crop or weed foliage at the time of application will reduce the amount of herbicide spray contacting the soil surface and will reduce the level of soil activity.

A temporary crop response should be expected following a postemergence application of Phoenix Herbicide. Soybean leaves which are open at the time of application will show some burn, bronzing and speckling. Trifoliate soybean leaves which have emerged but are unopened at the time of application may appear cupped at the tip and/or crinkled along the edges of the leaf. Soybeans quickly

outgrow all initial herbicide effects. When Phoenix Herbicide is used as directed, under commercial conditions soybean yields will not be adversely affected. Under conditions of normal weed growth Phoenix Herbicide is rainfast 2 hours after application.

## PRECAUTIONS

Apply Phoenix Herbicide preplant, preemergence, and/ or postemergence, but do not apply later than 45 days before harvest or after growth stage R6 (full seed).

Do not exceed a total of 25 fl. oz. (0.4 lb. ai) per acre per season.

NOTE: New York State Only - Apply Phoenix Herbicide only as a postemergence herbicide once per growing season, at a maximum seasonal application rate not to exceed 1 2.5 fl. oz. (0.2 lb. ai) per acre, and not later than 90 days before harvest.

Do not graze animals on green forage or stubble. Do not feed treated soybean silage (ensiled soybeans) to cattle.

Do not utilize hay or straw for animal feed or bedding.

## APPLICATION

### CONVENTIONAL ROW APPLICATION TIMING

For best results, Phoenix Herbicide and Phoenix Herbicide tank mixes should be applied to small actively growing weeds that are not larger than indicated in Table 2S. Normally this occurs 1 4 to 21 days after planting or after last field preparation, when soybeans are at the first to second trifoliolate leaf stage. Soybeans at or larger than the third trifoliolate stage may interfere with the spray pattern and reduce coverage of the weed leaves. Do not apply Phoenix Herbicide when the soybeans or weeds are under conditions that do not promote active growth. These conditions include drought, excessive water, extremes in temperature, and low humidity.

Applying Phoenix Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. Weeds under stress tend to “harden off” and become less susceptible to herbicidal action. Do not cultivate prior to or during application. Do not generate excessive dust while spraying. Excessively dusty conditions may interfere with the coverage of the weed leaf surface by the spray solution. A timely cultivation approximately one week after application will assist in

weed control.

#### DRILLED/SOLID SEEDED APPLICATION TIMING

Under drilled/solid-seeded soybean cropping systems, a dense crop canopy develops more rapidly than conventional row spacings. The crop canopy may restrict penetration of the herbicide spray pattern and reduce coverage of the weed foliage. Applications should be made when soybeans are at the first trifoliolate leaf stage, usually 10 to 14 days after planting. Delaying application beyond the first trifoliolate leaf stage may result in unsatisfactory weed control. For improved weed coverage and canopy penetration in drilled or solid seeded soybeans, the higher range of spray volume and pressure is required. See the BROADCAST GROUND APPLICATIONS section of the label for application information.

#### EARLY APPLICATION TIMING

For early control of Pigweeds, Eastern Black Nightshade, Common Ragweed, Giant Ragweed, Copperleaf, Common Purslane, Cutleaf Groundcherry, and Jimsonweed, apply Phoenix Herbicide when soybeans have emerged and are in the cotyledon to unifoliolate stage, normally 5 to 7 days after planting. Weed growth may not be visible or may be in the cotyledon stage of growth at early application.

#### BROADCAST GROUND APPLICATION

Phoenix Herbicide and Phoenix Herbicide tank mixes can be applied by ground equipment using standard commercial sprayers. Phoenix Herbicide is a contact herbicide. Therefore, special attention should be given to preparing and operating the sprayer to assure proper coverage of the weed leaf surface. Use Phoenix Herbicide on a broadcast basis in 15 to 20 gals. of water per acre at a spray pressure of 40 to 60 PSI measured at the boom. Apply Phoenix Herbicide using a flat fan or hollow cone nozzle designed to deliver the desired spray pressure and spray volume. Avoid use of flat fan nozzles larger than 8006 (or equivalent) because they do not break up spray patterns into small enough droplets to provide adequate weed coverage for foliar herbicides. Spray nozzles should be centered at a 20 inch spacing to provide adequate coverage. Ground speed should not exceed 10 mph to provide proper spray coverage. Boom height, ground speed, and pressure recommendations should not exceed those recommended by the spray nozzle manufacturer for the type and size of nozzle being used. Improper use of the selected spray nozzle will adversely affect the spray pattern, prevent proper

coverage of weed leaf surface, and reduce weed control. Refer to the manufacturer's spray chart for nozzle selection and operating information.

REFER TO THE AERIAL APPLICATION SECTION FOR SPECIFIC INSTRUCTIONS FOR AERIAL APPLICATION.

#### BAND APPLICATION

Row banding equipment should be adjusted to provide maximum coverage of weeds in the row. Base the band use of Phoenix Herbicide and Phoenix Herbicide tank mixes on a broadcast use rate of 1.5 to 20 gals. of water per acre by reducing the spray gals. in proportion to the area actually treated. The spray pressure should be 40 to 60 PSI measured at the boom. A minimum of two nozzles per row is required to provide optimum coverage of the weed foliage. DO NOT make band applications while cultivating or create excessive dust while spraying. Excessively dusty conditions will interfere with proper coverage of the weed leaf surface, thereby reducing contact activity.

#### LOW VOLUME GROUND APPLICATION

Application of Phoenix Herbicide and Phoenix Herbicide tank mixes using a low volume application require a minimum of 1.0 gals. of spray solution per acre. Applications at less than 1.0 gals. per acre will provide inconsistent weed control. The spray pressure at the boom should be between 40 to 60 PSI. Flat fan nozzles are recommended at 20 inch spacing for proper spray coverage. To provide adequate coverage flat fan nozzles larger than 8006 (or equivalent) should not be used. Height of the spray boom should be adjusted so as not to exceed the manufacturer's recommendation for proper coverage by the spray nozzle being used. Maximum speed of operation should not exceed 1.0 mph as spray coverage of weed foliage may be adversely affected.

#### AERIAL APPLICATION

To obtain satisfactory weed control with aerial applications of Phoenix Herbicide, and Phoenix Herbicide tank mixes, except 2,4-DB, uniform coverage must be obtained. Do not spray when drift is possible or when wind velocity is more than 5 mph. Avoid spraying Phoenix Herbicide within 200 ft. of dwellings, or adjacent sensitive crops such as ornamentals, cotton, tobacco, or sorghum. To obtain satisfactory application and minimize drift, the following directions must be

observed:

**Volume and Pressure:** Use Phoenix Herbicide in 5 to 10 gals. water per acre and a maximum spray pressure of 40 PSI. Applications at less than 5 gals. per acre will provide inadequate control. Higher volume applications generally afford more consistent weed control.

**Nozzle and Nozzle Orientation:** Use nozzles which produce flat or hollow cone spray patterns. Use non-drip type nozzles such as diaphragm-type nozzles to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15 downward. Do not place nozzles on the outer 25% of wings or rotors.

Limitations, Restrictions, and Exceptions

#### WEEDS CONTROLLED BY PHOENIX HERBICIDE

Identify your weed species as early as possible and determine the stage of growth by measuring the weed height in inches.

Use Table 2S of the label to determine the recommended growth stage before you apply Phoenix Herbicide for effective weed control of the species desired.

#### GENERAL INFORMATION

For best results, Phoenix should be applied to actively growing weeds. Do not apply Phoenix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Phoenix soybean label for application timing.

Refer to table 2 in the label for details regarding weeds heights.

When Palmer Amaranth pressure is severe, a preemergence program with activity on Palmer Amaranth, such as Valor Herbicide, is recommended. Applications of Phoenix Herbicide should be made 1-4 days after planting to less than 2 inch Palmer Amaranth. A second application of Phoenix Herbicide is required 14 to 21 days after the initial application if regrowth occurs.

When Waterhemp pressure is severe, a preemergence herbicide with activity on Waterhemp species, such as Valor Herbicide, is recommended followed by Phoenix

Herbicide to control escaped weeds is a Valent recommended program.

Crop oil concentrate is recommended when weeds are stressed due to hot and dry conditions. Under those conditions COC at 1 pt./A can be added. In place of COC alone the following combination can be added; COC at 0.125 to 0.5% v/v in combination with NIS at 0.125 to 0.25% v/v.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

45 days

Rates

[field\\_rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[Postemergence \(Weed\)](#)