GROUP 14 HERBICIDE



Active Ingredient	By Wt.
*Lactofen	23.2%
Other Ingredients	76.8%
Total	100.0%

\*1-(carboethoxy) ethyl 5-[2-chloro-4-(tri-fluoromethyl) phenoxy]-2-nitrobenzoate

Contains petroleum distillates.

Contains 2 lbs. active ingredient per gallon

EPA Reg. No. 59639-34

Do not apply this product through any type of irrigation system.

# DANGER — PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

## **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS & DOMESTIC ANIMALS DANGER

Corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes or on skin or clothing. Avoid breathing vapor or spray mist.

This product contains lactofen, which has been determined to cause tumors in laboratory animals (mouse, rat). Risks can be reduced by closely following use directions and precautions, and by wearing the protective clothing specified elsewhere on this label.

### **FIRST AID**

If in eyes: Hold eye open and rinse slowly and gently

with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing

eye.

Call a poison control center or doctor for

treatment advice.

If swallowed: Immediately call a poison control center or

doctor.

Do not induce vomiting unless told to do so by a poison control center or doctor.

Do not give any liquid to the person.

Do not give anything by mouth to an

unconscious person.

If on skin Take off contaminated clothing.

or clothing: Rinse skin immediately with plenty of

water for 15-20 minutes.

Call a poison control center or doctor for

treatment advice.

(Continued)

### FIRST AID (Continued)

If inhaled: Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

### **NOTE TO PHYSICIAN**

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or viton ≥ 14 mils, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure, and chemical-resistant apron when cleaning equipment, mixing or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside.
   Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of waste. Do not apply when weather conditions favor drift from target area.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or viton ≥14 mils, chemical-resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

### DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

## **RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

(Continued)

### RISKS OF USING THIS PRODUCT. Continued

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

### LIMITED WARRANTY

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

### LIMITATION OF LIABILITY

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF **VALENT OR SELLER, THE REPLACEMENT OF THIS** PRODUCT.

### PROMPT NOTICE OF CLAIM

Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

If Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

## **NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer**, **Risks of Using This Product**, **Limited Warranty** and **Limitation of Liability**, which may not be modified by any oral or written agreement.

### **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

### RESISTANCE MANAGEMENT

Cobra® Herbicide is a Group 14 herbicide (PPO inhibitor). Any weed population may contain or develop plants naturally resistant to herbicides in various mode of action classes. Resistant biotypes, such as waterhemp, may eventually dominate the weed population if the same class of chemistry/mode of action herbicides are used repeatedly in the same field or in successive years. These resistant biotypes may not be adequately controlled by herbicides in a mode of action class for which resistance has developed. A gradual or total loss of weed control may occur over time. Other resistance mechanisms that are not linked to site of action, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

### TO DELAY HERBICIDE RESISTANCE

- Avoid the use of herbicides that have a similar target site mode of action in consecutive years. Other Group 14 herbicides (PPO inhibitors) include acifluorfen (Ultra Blazer®) and fomesafen (Flexstar®, Reflex®). If resistant weed biotypes such as waterhemp are suspected or known to be present, use a tank mix partner with Cobra to help control these biotypes or use a planned herbicide rotation program where other residual broadleaf herbicides having different modes of action are
- Herbicide use should be based on an IPM program that includes scouting, record keeping and consideration of cultivation practices, water management, weed-free crop seed, crop rotation and other chemical or cultural control practices.
- Monitor treated weed population for resistance development and report suspected resistance.
- Contact your local extension or crop expert (advisor) for any additional pesticide resistance management and/or IPM recommendations for specific crops and weed biotypes.
- For further information contact Valent U.S.A. Corporation at the following toll-free number: 1-800-682-5368.

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**Emergency Telephone Number 1-800-892-0099** 

### **DIRECTIONS FOR USE IN SOYBEANS**

#### **GENERAL INFORMATION**

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

Cobra works primarily through contact action. Good coverage of young, actively growing weeds is essential for maximum weed control. The use of a spray adjuvant is usually required. Refer to the label section on ADJUVANTS AND ADDITIVES for specific recommendations.

When *Cobra* is applied post emergent, 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 *Cobra*. 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 *Cobra* is used as directed, under commercial conditions soybean yields will not be adversely affected. Under conditions of normal weed growth *Cobra* is rainfast 30 minutes after application.

### **PRECAUTIONS**

Apply *Cobra* 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 *Cobra* only as a postemergence herbicide once per growing season, at a maximum seasonal application rate not to exceed 12.5 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, *Cobra* and *Cobra* tank mixes should be applied to small actively growing weeds that are not larger than indicated in Table 2S or Tank Mix Tables of this label. Normally this occurs 14 to 21 days after planting or after last field preparation, when soybeans are at the first to second trifoliate leaf stage.

Soybeans at or larger than the third trifoliate stage may interfere with the spray pattern and reduce coverage of the weed leaves. Do not apply *Cobra* when the soybeans or the weeds are under stress.

Applying *Cobra* under conditions that do not promote active weed growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature and low humidity. 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 trifoliate leaf stage, usually 7 to 10 days after planting. Delaying application beyond the first trifoliate 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 this label for application information.

### **EARLY APPLICATION TIMING**

For early control of pigweeds, Eastern black nightshade, common ragweed, giant ragweed, common lambsquarters, copperleaf, common purslane, hairy galinsoga, cutleaf groundcherry and jimsonweed, apply *Cobra* when soybeans have emerged and are in the cotyledon to unifoliate 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**

Cobra and Cobra tank mixes can be applied by ground equipment using standard commercial sprayers equipped with flat fan or hollow cone nozzles. Cobra is a contact herbicide. Special attention should be given to preparing and operating the sprayer to assure proper coverage of the weed leaf surface.

Use Cobra on a broadcast basis in 20 to 30 gals. of water per acre and a spray pressure of 40 to 60 PSI measured at the boom. Apply Cobra 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.

# DO NOT USE THE FOLLOWING DELIVERY SYSTEMS TO APPLY COBRA:

- 1 Flood Nozzles
- 2 Control Droplet Applicators (CDA)
- 3 Flat Fan Nozzles Larger than 8006
- 4 Spray rigs which utilize wheel driven pumps

### **BAND APPLICATION**

Row banding equipment should be adjusted to provide maximum coverage of weeds in the row. Base the band use of *Cobra* and *Cobra* tank mixes on a broadcast use rate of 20 to 30 gals. of water per acre by reducing the spray gallons 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 *Cobra* and *Cobra* tank mixes using a low volume application requires a minimum of 10 gals. of spray solution per acre.

A minimum of 20 gals. of spray solution per acre is required in North Dakota, South Dakota and Minnesota.

Applications at less than 10 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 10 mph as spray coverage of weed foliage may be adversely affected.

Crop oil concentrate is required at the rate of 2% v/v to achieve optimum control with low volume applications.

## **AERIAL APPLICATION**

To obtain satisfactory weed control with aerial applications of *Cobra*, and *Cobra* 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 *Cobra* 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 *Cobra* 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. The higher gallonage 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.

**CROP OIL CONCENTRATE**: With aerial applications the use of crop oil concentrate at the rate of 1% v/v in the spray solution is recommended.

**IMPORTANT**: In dry conditions, the use of less than 2% v/v of crop oil concentrate or use of an adjuvant other than crop oil concentrate will result in unsatisfactory weed control.

**SOUTHERN STATES**: In low-lying areas of Southern states which typically experience excessive soil moisture in the spring, the state recommendation for adjuvants may call for either a non-ionic surfactant or reduced rate of crop oil concentrate. Where this situation exists, use the adjuvant recommendations of the state extension service.

## **ADJUVANTS AND ADDITIVES**

Control of weeds by *Cobra* at or near the maximum growth stage indicated in Table 2S of this label is enhanced by the addition of an adjuvant to the spray mixture. Use of a crop oil concentrate containing at least 15% emulsifier or nonionic surfactant containing at least 80% surfactant is recommended (see Table 1S). The addition of liquid nitrogen (28, 30 or 32%) or ammonium sulfate in combination with COC or surfactant may enhance weed control. Mixing and compatibility qualities should be verified by a jar test. The addition of a spray adjuvant may intensify the initial crop response.

**Crop Oil Concentrate:** Crop oil concentrate is the preferred adjuvant for *Cobra* for weed control over a wide spectrum of application conditions. Higher levels of crop response are also generally observed with the use of a crop oil concentrate; however soybeans quickly outgrow all initial herbicide effects. The rate of crop oil concentrate will depend on the environmental conditions preceding the application and the weed species and weed size at the time of application. If environmental conditions are good and weeds are growing vigorously, use of the low rate of crop oil concentrate is recommended. The higher rate is required when the weeds are under environmental stress such as low temperature, low humidity or low soil moisture. Refer to Table 1S for the recommended rate of crop oil concentrate by state and environmental conditions.

**Surfactant:** When soil moisture is good and weeds are actively growing, the addition of a non-ionic surfactant will improve the wetting and contact activity of *Cobra*. Refer to Table 1S for the recommended rate of non-ionic surfactant by state and environmental conditions.

**AMMONIUM SULFATE**: Refer to Table 1S for the recommended rate of AMMONIUM SULFATE fertilizer and additives by environmental conditions.

Table 1S.

### RELATIVE HUMIDITY ADJUVANT RECOMMENDATIONS Percent Relative Humidity

	100% > 80% (High)	80% > 60% (Medium)	60% > Less (Low)
NON-IONIC SURFACTANT	0.25% v/v	Not Recommen- ded	Not Recommen- ded
CROP OIL CONCENTRATE/ ACRE (AL, DE, FL, GA, MD, NC, PA, SC, VA)	0.125 to 0.25% v/v	0.25% v/v	0.25% v/v
(ALL OTHER STATES)	0.25% v/v	0.5% v/v	0.5 to 1% v/v
28, 30, 32% NITROGEN liquid fertilizer		4% v/v + Non-ionic Surfactant at 0.25% v/v	4% v/v + Crop Oil Concentrate at 0.5% v/v
AMMONIUM SULFATE spray grade		2 to 4 lbs. + Non-ionic Surfactant at 0.25% v/v	4 lbs. + Crop Oil Concentrate at 0.5% v/v

v/v is volume surfactant or COC / volume of the tank solution.

### MIXING INSTRUCTIONS

Add about I/2 of the required amount of water to the spray tank and begin agitation. Add the required amount of *Cobra* and mix thoroughly. Then add the correct amount of adjuvant and the remaining water. Maintain agitation during filling and spraying to ensure a uniform spray mixture.

### WEEDS CONTROLLED BY COBRA

Identify your weed species as early as possible and determine the stage of growth by counting the true leaves. Ignore the cotyledon (seed leaves) when you count.

Use Table 2S of the label to determine the maximum weed leaf stage before which you must apply *Cobra* for effective weed control of the species desired.

Table 2S.

### WEEDS CONTROLLED BY COBRA IN SOYBEANS Weed Growth Stages - 12.5 fl. oz./Acre

Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages
Balloonvine	4	Jimsonweed	4	Poorjoe	6
Beggarticks	6	Kochia	8	Prickly Sida (Teaweed)	4
Bristly Starbur	4	Lanceleaf Sage	1	Puncturevine	1.5" diameter
Buffalobur	4	Mexicanweed	4	Ragweeds	1.5 diameter
Burcucumber	4		4	Common	8
Carpetweed	8" diameter	Morningglories Cypressvine	1	Giant	6
Common Cocklebur	6 diameter	Entireleaf*	4 2		4
Common Purslane	8" diameter		2	Showy Crotalaria Smell Melon	4
	o diameter	lvyleaf* Palmleaf*	2		6
Copperleafs	0		4	Spurge	4" diamentar
Hophornbeam	6	Pitted*	4	Prostrate	1" diameter
Virginia	4	Purple Moonflower*	4	Spotted	4
Croton .		Smallflower*	4	Toothed	4
Tropic	4	Tall*	4	Venice Mallow	4
Woolly	4	Nightshades		Waterhemp**	
Devilsclaw	4	Black	6	Common	6
Eclipta	6	Eastern Black	6	Tall	6
Florida Beggarweed	2 6	Hairy	4	Wild Mustard	6
Florida Pusley	6	Pigweeds		Wild Poinsettia	4
Groundcherry		Palmer Amaranth**	6	Wild Sunflower*	2
Cutleaf	6	Prostrate	6	Witchweed	6 to 8" prior to
Lanceleaf	6	Redroot	6		bloom
Hairy Galinsoga	4	Smooth	6		
Hemp Sesbania	6	Spiny Amaranth	6		

<sup>\*</sup> Crop oil concentrate is required at the rate of 0.5% v/v for control.

Table 3S.

WEEDS SUPPRESSED BY COBRA

Weed Growth Stages - 12.5 fl. oz./Acre

Common Name	Maximum Leaf Stages
Coffee Senna*	2
Pennsylvania Smartweed	4
Sicklepod*	2
Spurred Anoda	2
Velvetleaf**	4

<sup>\*</sup> Suppression may be improved when Cobra is applied following a preemergence application of Lasso® or Dual® at the recommended rates.

Suppression of growth, not acceptable commercial control, may be expected when these weeds are treated with *Cobra*.

The addition of crop oil concentrate at 0.5% v/v is required for suppression of these weeds.

Cultivation 1 week to 10 days after treatment will usually aid in obtaining satisfactory suppression of these weeds.

Table 4S.

PERENNIAL WEEDS SUPPRESSED BY COBRA

Weed Growth Stages - 12.5 fl. oz./Acre

Common Name	Maximum Leaf Stages
Canada Thistle	6
Milkweeds	
Climbing	6
Common	6
Morningglory	
Bigroot (Wild Sweet Potato)	6
Redvine	6
Swamp Smartweed	6
Trumpetcreeper	6

The addition of crop oil concentrate at 0.5% v/v is required to burn back existing above-ground vegetation and may retard the growth of new foliage.

Table 5S.

TALL WEEDS SUPPRESSED BY COBRA
Weed Growth Stages - 12.5 fl. oz./Acre

Common Name	Weed Height - Inches*
Burcucumber	15 to 36
Jimsonweed	15 to 36
Ragweeds	
Common	15 to 36
Giant	15 to 36
Velvetleaf	15 to 36

<sup>\*</sup> When *Cobra* is applied at this height, complete control should not be expected.

The addition of crop oil concentrate at 0.5% v/v is required for suppression of these weeds.

DO NOT APPLY LATER THAN 45 DAYS BEFORE HARVEST OR AFTER GROWTH STAGE R6 (FULL SEED).

<sup>\*\*</sup> When Palmer Amaranth or Waterhemp pressure is severe, a preemergence program with activity on Amaranthus species is recommended to control the early flush. Follow with *Cobra* to control the escaped weeds.

<sup>\*\*</sup> Crop oil concentrate at 0.5% v/v or 28% N liquid fertilizer at 4% v/v plus non-ionic surfactant at 0.25% v/v of solution or ammonium sulfate (spray grade) at 2 to 4 lbs./acre plus non-ionic surfactant at 0.25% v/v of solution is required for control.

Table 6S.

WHITE MOLD\* SUPPRESSION BY COBRA
Soybean Growth Stage - 6 to 8 fl. oz./Acre\*\*

Common Name	Soybean Growth Stage	Adjuvant Recommendation
White Mold	Applications of	Crop Oil
(Sclerotinia	Cobra for white mold	Concentrate or
stem rot)	suppression in	Methylated Seed
Suppression	soybeans must be	Oil
	made at or just	0.5 to 1.0 pt./A
	before 1st bloom.	
	Generally this	Non-ionic
	occurs after the 4th	Surfactant
	trifoliate is fully	0.25% v/v
	expanded.	

- \* The soybean disease white mold is caused by Sclerotinia sclerotiorum.
- \*\* Rates higher than 8 oz./A will not increase the level of white mold suppression. In cases where rates higher than 8 oz./A are desired for weed control, please refer to Table 8S or Table 2S.

**NOTE:** It has been shown that the effects of *Cobra* on white mold is not a fungicidal response but one that may involve Systemic Acquired Resistance (SAR).

PRECAUTION: DO NOT APPLY COBRA AFTER WHITE MOLD INFECTION HAS OCCURRED.

# COBRA PREEMERGENCE FOLLOWED BY REDUCED RATES OF COBRA POSTEMERGENCE

### **GENERAL INFORMATION**

Cobra may be utilized as a preemergence soil applied herbicide for control of annual broadleaf weeds in soybeans. Following a preemergence application of Cobra, a postemergence application of Cobra may be applied in combination with other broadleaf herbicides for the control of escaped weeds.

Best results will be obtained when soybeans are planted and preemergence applications of *Cobra* are made in warm, moist soils which promote rapid emergence of target weeds.

Do not apply *Cobra* during periods when soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Do not apply more than  $0.3\ \mathrm{lb.}$  ai preemergence per acre per season.

Table 7S.

Cobra Preemergence Control Followed by
Postemergence Application to Control Escaped
Weeds - Soybeans Rates and Time of Application Table - Preemergence
Application of Cobra

Product	Product Rates	Weeds Controlled	Adjuvant
Cobra	12.5 to 15fl. oz./A	Black Nightshade Pigweed Smooth	None
		Redroot	(Continued)

### Table 7S. (Continued)

Cobra Preemergence Control Followed by Postemergence Application to Control Escaped Weeds - Soybeans - Rates and Time of Application Table - Preemergence Application of Cobra

Product	Product Rates	Weeds Controlled	Adjuvant
Cobra	15 to 19 fl. oz./A	Copperleaf Jimsonweed Common Lambsquarters Common Ragweed Prickly Sida (Teaweed)	None

# FOLLOWED BY POSTEMERGENCE APPLICATION OF COBRA

Tall Waterhemp

Product	Product Rates	Weeds Controlled	Adjuvant
Cobra	12.5 fl. oz./ A	Refer to Table 2S for Postemergence Control of Escaped Weeds	Refer to Table 1S
Cobra	4 to 12.5 fl. oz./A	Refer to Tables 9S to 20S when tank mixing with other broadleaf herbicides	

# Use Restrictions for *Cobra* Applied Preemergence Followed by *Cobra* Applied Postemergence:

- Always read and follow all label directions when using any pesticide alone or sequentially. The most restrictive labeling applies when using a tank mix.
- For preemergence control of grasses, tank mix Cobra with appropriate grass herbicide.
- Do not apply Cobra less than 45 days before harvesting soybeans or after growth stage R6 (full seed).
- 4. Do not graze treated fields or harvest forage or hay.
- Do not apply Cobra postemergence if rain is expected within 30 minutes of application or unsatisfactory weed control may result.
- Do not apply more than 25 fl. oz./A of Cobra per season.
- Do not apply to soils containing more than 3.5% organic matter.
- New York State Only Apply Cobra only as a
  postemergence herbicide once per growing season,
  at a maximum seasonal application rate not to exceed
  12.5 fl. oz. (0.2 lb. ai) per acre, and not later than
  90days before harvest.

# COBRA REDUCED RATES TO CONTROL SMALL BROADLEAF WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* should be applied to actively growing weeds. Do not apply *Cobra* during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth. Refer to the *Cobra* soybean label for application timing.

Select 2 EC Herbicide at 6 to 8 fl. oz./A may be tank mixed with Cobra to control annual and perennial grasses. Refer to Select 2 EC label for grasses controlled.

Table 8S.

Cobra Tank Mix - Soybeans Rates and Time of Application Table

up to 3
up to 6
up to 4
up to 6
up to 6
•
up to 6
up to 4
up to 6
up to 5
up to 4
up to 5
up to 6
up to 6
•
up to 8
up to 6
up to 6

Adjuvant: Cobra must be applied with 1 pt./A crop oil concentrate or methylated seed oil. The addition of liquid nitrogen (28, 30 or 32%) up to 4% v/v or ammonium sulfate at 2 to 4 lbs./A in combination with COC may enhance weed control.

# BROADLEAF HERBICIDE TANK MIXES WITH COBRA

## TANK MIX WITH BASAGRAN HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results the *Cobra* plus Basagran tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

Table 9S.

Cobra & Basagran Tank Mix - Soybeans Rates and Time of Application Table

Product	Product Rates	Weeds Controlled/ Leaf Stage	Adjuvant
Cobra	6 to 12.5 fl. oz./A	Refer to Table 2S for weeds controlled at 12.5 fl. oz./A	Refer to Table 1S (Continued)

Table 9S. (Continued)

Cobra & Basagran Tank Mix - Soybeans -

F	Rates an	d Time of Applicat	ion Ta	ble	
	c	Cobra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
	plus Ba	sagran			
				imum Stage	
Basagran	1 pt./A	Black Nightshade	6	4	3
J	·	Common Cocklebur	6	4	4
		Common Lambsquarters	4	4	4
		Pennsylvania Smartweed Pigweeds	4	4	4
		Smooth	6	6	C**
		Redroot Ragweeds	6	6	Č**
		Čommon	8	6	6
		Giant	6	4	2
		Tall Waterhemp	6	6	4
		Velvetleaf*	6	4	3
		Wild Sunflower	4	2	2
		Yellow Nutsedge	6 in.	6 in.	6 in.
Refer to B	asagrar	n label for other we	eds cla	aimed	
	C	Cobra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
	or plus	Basagran			
			Max	imum Stage	
Basagran	2 pt./A	Common Cocklebur	10	10	10
		Common Lambsquarters	8	8	8
		Pennsylvania Smartweed Pigweeds	10	10	10
		Smooth	6	6	C**
		Redroot	6	6	C**
		Ragweeds	J	J	0
		Common	8	6	6
		Giant	6	4	2
			_	_	

# Wild Sunflower 6 6 Refer to Basagran label for other weeds claimed.

\* Add 4% v/v nitrogen liquid fertilizer or 4 lbs./A ammonium sulfate (spray grade) plus 0.25% v/v nonionic surfactant for best control.

Tall Waterhemp

4

6

6

\*\* C is the cotyledon leaf stage.

### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Basagran Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Basagran and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate, non-ionic surfactant and/or the nitrogen fertilizer and the remaining water.

### Use Restrictions for Cobra Plus Basagran Tank Mix:

 Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.

- 2. Do not apply the *Cobra* plus Basagran tank mix less than 60 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hav.
- Do not apply the Cobra plus Basagran tank mix if rain is expected within 8 hours of application or unsatisfactory weed control may result.

# TANK MIX WITH CLASSIC HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus Classic tank mix should be applied to actively growing weeds.

**Do not** apply the *Cobra* and Classic tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

Table 10S.

Cobra & Classic Tank Mix - SoybeansRates and Time of Application Table

Product	Product Rates	Weeds Controlled/ Leaf Stage	A	djuva	nt
Cobra	6 to 12.5 fl. oz./A	Refer to Table 2S for weeds controlled at 12.5 fl. oz./A	Refer	to Tab	ole 1S
	Co	obra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
	plus Cla	ssic			
				imum Stage	
Classic	0.38 oz./ A	Black Nightshade Common Cocklebur	6 8	4 6	3 C**
		Florida Beggarweed	6	2	C**
		Florida Pusley Pennsylvania Smartweed Pigweeds	4	6 2	C** C**
		Smooth	6	6	C**
		Redroot	6	6	C** C**
		Prickly Sida Ragweeds	4	2	C**
		Common	8	6	6
		Giant	6	4	C**
		Tall Waterhemp	6	6	4
		Velvetleaf*	4	C**	0++
		Wild Mustard Wild Sunflower	6 6	4 4	C** C**
		vviid Suriilower	O	4 (Conti	Ū

Table 10S. (Continued)

Cobra & Classic Tank Mix - Soybeans Rates and Time of Application Table

Cobra Rate/A	10 fl. oz.	8 fl. oz.	-
or plus Classic			

			Max	imum Stage	Leaf
Classic	0.5 oz./ A	Black Nightshade Copperleafs	6	4	3
		Hophornbeam	6	4	C**
		Virginia	4	2	C**
		Prickly Sida	4	2	Č**
		Ragweeds			
		Common	8	6	4
		Giant	6	4	C**
		Sicklepod	3	3	C**
		Smooth Pigweed	6	4	3
		Tall Waterhemp	6	6	4
		Velvetleaf*	5	C**	
		Yellow Nutsedge	6		

### Refer to Classic label for other weeds claimed.

- \* Add 4% v/v nitrogen liquid fertilizer or 4 lbs./A ammonium sulfate (spray grade) plus 0.25% v/v nonionic surfactant for best control.
- \*\* C is the cotyledon leaf stage.

### **MIXING INSTRUCTIONS**

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Classic Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Classic and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate, non-ionic surfactant and/or the nitrogen fertilizer and the remaining water.

### Use Restrictions for Cobra Plus Classic Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus Classic tank mix less than 60 days before harvesting soybeans.
- Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- Do not apply the Cobra plus Classic tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the Classic label for restrictions on soil pH, minimum recropping interval and rotational guidelines.

## TANK MIX WITH CLASSIC PLUS PINNACLE HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN SOYBEANS

## **GENERAL INFORMATION**

For best results, the *Cobra* plus Classic plus Pinnacle tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* and Classic plus Pinnacle tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

Table 11S.

Cobra & Classic Plus Pinnacle Tank Mix - Soybeans Rates and Time of Application Table

	Product	Weeds Controlled/			
Product	Rates	Leaf Stage	A	djuvar	nt
Cobra	4 to 8 fl. oz./A		0.129 ionic plus 4 N Do N Oil Co Veg	5% v/v c Surface or 5% v/v c Surface l% v/v Nitroger ot Use concentrice concentrice concentrice concentrice concentrice concentrice	Non- ctant Liquid n Crop rate or
	Cobr	a Rate/A	8 fl. oz.	6 fl. oz.	4 fl. oz.
plus	Classic plu	us Pinnacle			
			Max	imum Stage	
Classic + Pinnacle	0.25 oz./A + 0.25 oz./A	Nightshade	4	2	C**
ασισ	5.25 <i>62.17</i> t	Common Giant	6 2	4 C**	C**

# Refer to Classic plus Pinnacle labels for weeds claimed.

### **MIXING INSTRUCTIONS**

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Classic Plus Pinnacle Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Classic and Pinnacle and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate, non-ionic surfactant and/or the nitrogen fertilizer and the remaining water.

# Use Restrictions for *Cobra* plus Classic plus Pinnacle Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra plus Classic plus Pinnacle tank mix less than 60 days before harvesting soybeans.
- Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- Do not apply the Cobra plus Classic plus Pinnacle tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the Classic label for restrictions on soil pH, minimum recropping interval and rotational guidelines.

## TANK MIX WITH BASAGRAN PLUS PINNACLE FOR CONTROL OF EMERGED WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus Basagran plus Pinnacle tank mix should be applied to actively growing weeds. Do

not apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

To control annual grasses, add *Select* 2 EC at 8 to 10 fl. oz./acre to the tank mix. (Refer to the *Select* 2 EC label for grasses controlled).

Table 12S.

Tank Mix with Basagran & Pinnacle for Control of Emerged Weeds in Soybeans

	_	-	
Product	Product Rates	Broadleaf Weeds Controlled	Leaf Size
Cobra	8 to 10 fl. oz./ A	Cocklebur, Common	4 to 6 leaf
+	+	Lambsquarters, Common	1 to 4 inch
Basagran	1 pt./A	Nightshade, Black Pigweeds	4 to 6 leaf
+	+	Redroot	4 to 6 leaf
Pinnacle	0.125 oz./A	Smooth Ragweeds	4 to 6 leaf
		Common	6 to 8 leaf
		Giant	4 to 6 leaf
		Smartweed (Pennsylvania)	4 leaf
		Velvetleaf	4 to 6 leaf
		Waterhemp, Tall	4 to 6 leaf

# Refer to Basagran and Pinnacle labels for additional weeds claimed.

**Adjuvant:** The *Cobra* plus Basagran plus Pinnacle tank mix must be applied with 1 pt./A crop oil concentrate or MSO. Liquid fertilizer (such as 28% N or 32% N) at 1 to 2qts./A or 2.5 to 4.0 lbs./A of ammonium sulfate may be included, where desired, to increase broadleaf weed control.

# Use Restrictions for *Cobra* plus Basagran plus Pinnacle Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra plus Basagran plus Pinnacle tank mix less than 60 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hav.
- Do not apply the Cobra plus Basagran plus Pinnacle tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.

# TANK MIX WITH 2,4-DB PRODUCTS FOR CONTROL OF BROADLEAF WEEDS IN SOYBEANS

## **GENERAL INFORMATION**

Use only the amine formulations of 2,4-DB registered for use on soybeans. For best results, the *Cobra* plus 2,4-DB tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* and 2,4-DB product tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

The use of a 2,4-DB tank mix may cause crop injury.

<sup>\*\*</sup> C is the cotyledon leaf stage.

Table 13S.

Cobra & 2,4-DB Tank Mix - Soybeans Rates and Time of Application Table

Product	Product Rates	Weeds Controlled/ Leaf Stage	Adjuvant
Cobra	12.5 fl. oz./A	Refer to Table 2S	0.25% v/v Non-ionic Surfactant
			Do Not Use Crop Oil Concentrate or Vegetable Oil Concentrate
	plus 2,4	-DB	
			Maximum Leaf Stage
2,4-DB	2 oz./A	Morningglories Sicklepod	6 2

### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus 2,4-DB Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of 2,4-DB and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of non-ionic surfactant and the remaining water.

### Use Restrictions for Cobra plus 2,4-DB Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus 2,4-DB tank mix by air.
- 3. Do not apply the *Cobra* plus 2,4-DB tank mix less than 60 days before harvesting soybeans.
- Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- Do not apply the Cobra plus 2,4-DB tank mix if rain is expected within 2 hours of application or unsatisfactory weed control may result.
- 6. Do not allow 2,4-DB to come into contact with cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants. Do not permit spray mist to drift onto susceptible plants since very small quantities of 2,4-DB can cause severe injury during growing or dormant periods.

# TANK MIX WITH PINNACLE FOR CONTROL OF BROADLEAF WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus Pinnacle tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

Table 14S.

Cobra & Pinnacle Tank Mix - Soybeans Rates and Time of Application Table

	vales all	Weeds		
Product	Product Rates		Adju	vant
Cobra	6 to 8 fl. oz./A			v/v Non- rfactant
			0.125% ionic Su	
			Vegeta	Jse Crop entrate or able Oil entrate
	С	obra Rate/A	8 fl. oz.	6 fl. oz.
	plus Pir	nnacle		
			Maximu Sta	ım Leaf ıge
Pinnacle	0.25	Black	4	2
	oz./A	Nightshade		
		Common Cocklebur	6	4
		Cocklebur Copperleafs	-	4 C**
		Cocklebur Copperleafs Hophornbeam	4	C**
		Cocklebur Copperleafs Hophornbeam Virginia Prickly Sida	-	4 C** C** C**
		Cocklebur Copperleafs Hophornbeam Virginia Prickly Sida Ragweeds Common	4 2 2	C** C** C**
		Cocklebur Copperleafs Hophornbeam Virginia Prickly Sida Ragweeds	4 2 2	C** C** C**

<sup>\*\*</sup> C is the cotyledon leaf stage.

## MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Pinnacle Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Pinnacle and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of non-ionic surfactant and the 28%N liquid fertilizer and the remaining water.

### Use Restrictions for the Cobra plus Pinnacle Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra plus Pinnacle tank mix less than 60 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hav
- Do not apply the Cobra plus Pinnacle tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.

## TANK MIX WITH PURSUIT HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN **SOYBEANS**

### **GENERAL INFORMATION**

For best results the *Cobra* plus Pursuit tank mix should be applied to actively growing weeds.

Do not apply Cobra tank mixtures during periods when the sovbeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

Table 15S. Cobra & Pursuit Tank Mix - Soybeans -

آ	Rates and Time of Application Table				
Product	Product Rates	Weeds Controlled/ Leaf Stage	A	djuva	nt
Cobra	6 to 12.5 fl. oz./A	Refer to Table 2S for weeds controlled at 12.5 fl. oz./A	Ref	er to T 1S*	able
	Co	obra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
	plus Pur	suit			
			Max	imum Stage	
Pursuit	4 oz./ A	Common Lambsquarters Copperleafs	4	4	2
Pursuit DG	1.44 oz./A	Hophornbeam Virginia	6 4	4 2 2	C** C** C**
		Prickly Sida	4	_	

### Refer to Pursuit label for weeds claimed.

Tall Waterhemp

8

6

6

4

6

4

4

Ragweeds Common

Giant

Table 15.1S. Cobra & Pursuit Tank Mix -Sovbeans - Rates and Time of Application Table

Soybean	Soybeans - Rates and Time of Application Table					
Product	Product Rates	Weeds Controlled/Leaf Stage	Adjuvant			
Cobra		Common 4 leaf Ragweed	Refer to Table 1S*			
	plus Purs	uit				
Pursuit	4 oz./A	Refer to Pursuit weeds claimed.	label for			
Pursuit DG	1.44 oz./A					

<sup>\*</sup> Sun-IT II may be substituted for crop oil concentrate, and liquid nitrogen fertilizer may be used at 1 to 2% v/v.

## MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

Cobra Plus Pursuit Tank Mix: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Pursuit and mix thoroughly. Then add

the required amount of Cobra and continue mixing. Finally, add the required amount of surfactant or the 28% N liquid fertilizer or ammonium sulfate (spray grade) or crop oil concentrate or Sun-IT and the remaining water.

### Use Restrictions for Cobra Plus Pursuit Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a
- Do not apply the Cobra plus Pursuit tank mix less than 85 days before harvesting soybeans.
- 3. Do not graze treated fields or harvest for forage or
- Do not apply the Cobra plus Pursuit tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the crop rotational restrictions stated on the Pursuit label.

## TANK MIX WITH SCEPTER HERBICIDE FOR **CONTROL OF BROADLEAF WEEDS IN** SOYBEANS

#### **GENERAL INFORMATION**

For best results, the Cobra plus Scepter tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* and Scepter tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the *Cobra* soybean label for application timing.

Table 16S. Cobra & Scepter Tank Mix - Soybeans -Rates and Time of Application Table

Product	Product Rate	Weeds Controlled/ Leaf Stage	Adjuvant
Cobra	12.5 fl. oz./A	Refer to Table 2S	0.25% v/v Non-ionic Surfactant
			Do Not Use Crop Oil Concentrate or Vegetable Oil Concentrate
	plus Scep	ter	
			Maximum Leaf Stage

#### 4 oz./A Cocklebur 12 Scepter 70 DG 1 oz./A Pigweed 12

### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

Cobra Plus Scepter Tank Mix: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Scepter and mix thoroughly. Then add the required amount of Cobra and continue mixing. Finally, add the required amount of non-ionic surfactant and the remaining water.

### Use Restrictions for Cobra plus Scepter Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a
- Do not apply the Cobra plus Scepter tank mix less than 90 days before harvesting soybeans.

<sup>\*</sup> Sun-IT II'm may be substituted for crop oil concentrate, and liquid nitrogen fertilizer may be used at 1 to 2% v/v.

<sup>\*\*</sup> C is the cotyledon leaf stage.

- 3. Do not apply the Cobra plus Scepter tank mix by air.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- Do not apply the Cobra plus Scepter tank mix if rain is expected within 2 hours of application or unsatisfactory weed control may result.
- Refer to the Scepter label for regional use and rotational crop restrictions.

## TANK MIX WITH RELIANCE STS HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN STS SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus Reliance STS tank mix should be applied to actively growing weeds.

**Do not** apply the *Cobra* and Reliance STS tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

To control annual grasses, add *Select* 2 EC at 8 to 10 fl. oz./acre to the tank mix. (Refer to *Select* 2 EC label for grasses controlled.)

Table 17S.

Cobra & Reliance STS Tank Mix - Soybeans Rates and Time of Application Table

Nates and Time of Application Table					
Product	Product Rates	Weeds Controlled/ Leaf Stage	А	djuva	nt
Cobra	4 to 8 fl. oz./A		0.5% v/v Crop Oil Concentrate/A		
		obra Rate/A	8 fl. oz.	6 fl. oz.	4 fl. oz.
	•		Max	imum Stage	
Reliance STS	0.5 oz./A	Nightshade (Black or Eastern Black) Waterhemp (Tall or Common)	6	3	2
		Common)			

### Refer to Reliance STS label for weeds claimed.

### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Reliance STS Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Reliance STS and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate, non-ionic surfactant and/or the nitrogen fertilizer and the remaining water.

# Use Restrictions for *Cobra* plus Reliance STS Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus Reliance STS tank mix less than 60 days before harvesting soybeans.
- Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.

- Do not apply the Cobra plus Reliance STS tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the Reliance STS label for restrictions on soil pH, minimum recropping interval and rotational guidelines.

# TANK MIX WITH SYNCHRONY STS HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN STS SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus Synchrony STS tank mix should be applied to actively growing weeds.

**Do not** apply the *Cobra* and Synchrony STS tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

To control annual grasses, add *Select* 2 EC at 8 to 10 fl. oz./acre to the tank mix. (Refer to the *Select* 2 EC label for grasses controlled).

Table 18S.

Cobra & Synchrony STS Tank Mix- Soybeans Rates and Time of Application Table

Product	Product Rates	Weeds Controlled/ Leaf Stage	A	djuva	ınt
Cobra	4 to 8 fl. oz./A			% v/v Oil centra	
	Cobra Rate/A			6 fl. oz.	4 fl. oz.
	plus Sync	hrony STS			
				aximi af Sta	
Synchrony STS	0.5 oz./A	Nightshade (Black or Eastern Black) Waterhemp (Tall or Common)	6	3	2

# Refer to Synchrony STS label for weeds claimed. MIXING INSTRUCTIONS

# Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

Cobra Plus Synchrony STS Tank Mix: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Synchrony STS and mix thoroughly. Then add the required amount of Cobra and continue mixing. Finally, add the required amount of crop oil concentrate, non-ionic surfactant and/or the nitrogen fertilizer and the remaining water.

# Use Restrictions for *Cobra* Plus Synchrony STS Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra plus Synchrony STS tank mix less than 60 days before harvesting soybeans.
- Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.

- Do not apply the Cobra plus Synchrony STS tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the Synchrony STS label for restrictions on soil pH, minimum recropping interval and rotational guidelines.

# TANK MIX WITH ROUNDUPULTRA HERBICIDE FOR CONTROL OF BROADLEAF WEEDS IN ROUNDUP READY® SOYBEANS

Tank mix with Roundup Ultra on Roundup Ready soybeans for broadleaf weed control.

Table 19S.

Cobra & Roundup Ultra Tank Mix\* - Soybeans Rates and Time of Application Table

Product Rates** Weed Size	Weeds Controlled	Maximum Leaf Size
Refer to Roundup Ultra label for rates.	Refer to Roundup Ult weeds controlled and	
+		
6 to 8 fl. oz.	Annual Morningglory Species	4 leaf
	Nightshade, Black Ragweeds	4 leaf
	Čommon	6 leaf
	Giant	4 leaf
	Velvetleaf	4 leaf
	Waterhemp	6 leaf
	Rates** Weed Size  Refer to Roundup Ultra label for rates. +	Rates** Weed Size  Refer to Roundup Ultra label for rates.  +  6 to 8 fl. oz. Annual Morningglory Species Nightshade, Black Ragweeds Common Giant Velvetleaf

### Refer to Cobra label for additional weeds controlled.

- \* This tank mix may be antagonistic to some grasses when stress conditions exist.
- \*\* Spray grade ammonium sulfate (AMS) at 2.5 to 4.0 lbs./ A is required.

**Note**: The tank mix of *Cobra* and Roundup Ultra plus AMS as recommended above will also provide white mold suppression when applied at the proper timing. Refer to *Cobra* white mold suppression (Table 6S) for further use directions.

# Use Restrictions for *Cobra* plus Roundup Ultra Tank Mix<sup>-</sup>

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- This tank mix may be applied postemeregence to Roundup Ready soybeans up through the full flowering stage. Do not apply later than 45 days before harvest or after growth stage R6 (full seed).
- Avoid contact with foliage, green stems or fruit crops, or any desirable plants and trees other than soybeans with the Roundup Ready gene as severe injury or destruction will result.
- 4. Do not allow the Cobra plus Roundup Ultra to mist, drip, drift or splash onto desirable vegetation as minute quantities of the tank mix can cause severe damage or destruction to the crops, plants or other areas on which treatment was not intended. The likelihood of injury occurring from drift of this product is greatest when winds are gusty or in excess of 5 miles per hour. Even under lesser wind velocities, avoid conditions that allow spray drift to occur, such as combinations of spray pressure and nozzle type

- that will result in fine particles (mist) that are likely to drift
- Do not apply this tank mix to soybeans already infected with white mold when white mold suppression is a reason for use.

## TANK MIX WITH FIRSTRATE HERBICIDE FOR CONTROL OF EMERGED WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results, the *Cobra* plus FirstRate tank mix should be applied to actively growing weeds.

**Do not** apply the *Cobra* and FirstRate tank mix during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

To control annual and perennial grasses, add *Select* 2 EC at 6 to 10 fl. oz./acre to the tank mix. (Refer to *Select* 2 EC label for grasses controlled and more specific rate recommendations.) A minimum of 6 fl. oz./A of *Select* 2 EC is recommended for the control of annual grasses and a minimum of 8 fl. oz./A of *Select* 2 EC for the control of perennial grasses.

Table 20S.

Cobra & FirstRate Tank Mix - Soybeans Rates and Time of Application Table

Product Rates*	Broadleaf Weeds Controlled	Maximum Leaf Size
6 to 8 fl.	Annual Morningglory	4 leaf
oz./A	Cocklebur, Common	8 leaf
	Jimsonweed	4 leaf
+	Mallow, Venice	4 leaf
	Nightshade, Black	3 to 4 leaf
0.3 oz./A	Pigweeds	
	Redroot	6 leaf
	Smooth	6 leaf
	Ragweeds	
	Čommon	8 leaf
	Giant	6 leaf
	Sunflower, Common	8 leaf
	Velvetleaf	4 leaf
	Waterhemp	
	Common	4 to 6 leaf
	Tall	4 to 6 leaf
	Rates* 6 to 8 fl. oz./A +	Rates* Controlled  6 to 8 fl. Annual Morningglory Oz./A Cocklebur, Common Jimsonweed + Mallow, Venice Nightshade, Black 0.3 oz./A Pigweeds Redroot Smooth Ragweeds Common Giant Sunflower, Common Velvetleaf Waterhemp Common

Adjuvant: The Cobra plus FirstRate tank mix must be applied with crop oil concentrate or methylated seed oil containing at least 15% emulsifier at 0.5 to 1.0% v/v (but not less than 1 pt./A) plus 2.5% v/v UAN (28% N or 32% N). AMS at 2.0 lb./A may be substituted for UAN.

- \* Use the higher rate of *Cobra* when weeds are near maximum height or when weed pressure is moderate to high.
- \*\* Cobra at rates of 10 to 12.5 fl. oz./A can also be tank mixed with FirstRate (0.3 oz./A). Refer to Tables 2S and 8S on the Cobra label for weeds controlled. When Cobra at 10 to 12.5 fl. oz./A is tank mixed with FirstRate, the minimum Select 2 EC rate to be tank mixed is 8 to 10 fl. oz./A.

### Use Restrictions for Cobra plus FirstRate Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus FirstRate tank mix less than 65 days before harvesting soybeans.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.

- Do not apply the Cobra plus FirstRate tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Refer to the FirstRate label for instructions on premixing (slurry) of water soluble packets and mixing order for tank mixes.
- 6. Observe all rotation restrictions on the FirstRate label.
- 7. Apply on a broadcast basis in 10 to 20 gals. water per acre and at a spray pressure of 30 to 40 PSI at the nozzle. A minimum of 20 gals. water per acre and 40PSI should be used when one or more of the following conditions exist: a) weeds are approaching the upper height limit; or b) weed populations are moderate to heavy. Apply using flat fan (including split nozzle systems which spray in opposite directions) or hollow cone nozzles designed to deliver the desired spray pressure and spray volume. Do not use flood nozzles.

# GRASS HERBICIDE TANK MIXES WITH COBRA

# TANK MIX WITH SELECT 2 EC FOR CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results the *Cobra* plus *Select* 2 EC tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

### TANK MIX GEOGRAPHIC USE AREA

Refer to the *Select2* EC label for defined application areas and rates. *Cobra* does not have application area restrictions.

Table 21S.

Cobra & Select 2 EC Tank Mix - Soybeans -Rate and Time of Application Table Weeds

Product	Product Rate	Controlled/ Weed Size	Adjuvant	
Cobra	12.5 fl. oz./A	Refer to Table 2S	0.5 to 1% v/v Crop Oil Concentrate/A for	
			ground applications 1% v/v Crop Oil Concentrate for	
			aerial applications	
	plus	Select 2 EC		
Select 2 EC*	Refer to the Select 2 EC label for ANNUAL and PERENNIAL grasses			

<sup>\*</sup> If regrowth of grasses occurs, make a second application of Select 2 EC timed to grass weed size noted on the Select 2 EC label.

controlled and use rate.

# SEQUENTIAL APPLICATION WITH COBRA AND SELECT 2 EC

## Sequential Applications with Cobra

Some reduction in grass control is possible when *Select 2* EC is sequentially applied immediately prior to or after an application of *Cobra*.

 After an application of Select 2 EC wait a minimum of 24 hours before applying Cobra.

- In fields treated with Cobra, do not apply Select 2 EC until grass plants are again developing new leaves (generally 7 days after the Cobra application).
- Refer to the Select 2 EC label for application areas and rates.

### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Select 2 EC Tank Mix**: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of *Select* 2 EC and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate and the remaining water.

### Use Restrictions for Cobra Plus Select 2 EC Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus *Select* 2 EC tank mix less than 60 days before harvesting soybeans.
- 3. Do not graze treated fields or harvest for forage hay.
- Do not apply the Cobra plus Select 2 EC tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Do not apply Cobra plus Select 2 EC to plants stressed due to insufficient moisture. Weeds under this condition frequently become less sensitive to herbicide activity.
- Do not cultivate within 7 days before or 7 days after an application of Select 2 EC as control may be unsatisfactory.
- Do not apply Cobra plus Select 2 EC when environmental conditions are such that drift to other crops and non-target areas is possible.

# TANK MIX WITH ASSURE/ASSURE II HERBICIDE FOR CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results the *Cobra* plus Assure/Assure II tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

## TANK MIX GEOGRAPHIC USE AREA

Refer to the Assure/Assure II label for defined application areas and rates. *Cobra* does not have application area restrictions.

Table 22S.

Cobra & Assure/Assure II Tank Mix - Soybeans -Rate and Time of Application Table

Product	Product Rate	Weeds Controlled/ Leaf Stage	Adjuvant
Cobra	12.5 fl. oz./	Refer to	0.5% v/v Crop Oil
	Α	Table 2S	Concentrate/A
	plus	Assure/Ass	ure II
Assure*			el for ANNUAL es controlled and
			(Continued)

### Table 22S.

### Cobra & Assure/Assure II Tank Mix - Soybeans -Rate and Time of Application Table

Product	Product Rate	Weeds Controlled/ Leaf Stage	Adjuvant
Assure II**			el for ANNUAL controlled and

- \* The Cobra and Assure tank mix may show some reduction in grass control over application of Assure alone
- \*\* The Cobra and Assure II tank mix may show some reduction in grass control over application of Assure II alone.

# SEQUENTIAL APPLICATION WITH COBRA AND ASSURE/ASSURE II

### Sequential Applications with Cobra

Some reduction in grass control is possible when Assure/ Assure II is sequentially applied immediately prior to or after an application of *Cobra*.

- After an application of Assure/Assure II wait a minimum of 24 hours before applying Cobra.
- In fields treated with Cobra, do not apply Assure/ Assure II until grass plants are again developing new leaves (generally 7 days after the Cobra application).
- Refer to the Assure/Assure II label for application areas and rates.

#### MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

Cobra Plus Assure/Assure II Tank Mix: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Assure/Assure II and mix thoroughly. Then add the required amount of Cobra and continue mixing. Finally, add the required amount of crop oil concentrate and the remaining water.

# Use Restrictions for *Cobra* Plus Assure/Assure II Tank

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra plus Assure/Assure II tank mix less than 80 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hay.
- Do not apply the Cobra plus Assure/Assure II tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Do not use vegetable (crop origin) oils as spray adjuvant or carrier.
- Do not apply Assure/Assure II to plants stressed due to insufficient moisture. Grass weeds under this condition frequently become less sensitive to herbicide activity.
- Do not cultivate within 7 days before or 7 days after an application of Assure/Assure II as control may be unsatisfactory.
- Do not apply Assure/Assure II when environmental conditions are such that drift to other crops and nontarget areas is possible. Grass crops such as corn, sorghum, wheat, rice, etc. are highly sensitive to Assure/Assure II.

9. Do not apply after pod set.

## TANK MIX WITH FUSILADE DX HERBICIDE FOR CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results the *Cobra* plus Fusilade DX tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

### TANK MIX GEOGRAPHIC USE AREA

Refer to the Fusilade DX label for defined application areas and rates. *Cobra* does not have application area restrictions.

### Table 23S.

## Cobra & Fusilade DX Tank Mix - Soybeans -Rate and Time of Application Table

Product	Product Rate	Weeds Controlled/ Weed Size	Adjuvant		
Cobra	12.5 fl. oz./A	Refer to Table 2S	0.5% v/v Crop Oil Concentrate/A		
	plus	Fusilade DX			
Fusilade DX	Refer to the Fusilade DX label for ANNUAL and PERENNIAL grasses controlled and use rate.				

# SEQUENTIAL APPLICATION WITH COBRA AND FUSILADE DX

## Sequential Applications with Cobra

Some reduction in grass control is possible when Fusilade DX is sequentially applied immediately prior to or after an application of *Cobra*.

- After an application of Fusilade DX wait a minimum of 24 hours before applying Cobra.
- In fields treated with Cobra, do not apply Fusilade DX until grass plants are again developing new leaves (generally 7 days after the Cobra application).
- Refer to the Fusilade DX label for application areas and rates.

### **MIXING INSTRUCTIONS**

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Fusilade DX Tank Mix**: Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Fusilade DX and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate and the remaining water.

### Use Restrictions for Cobra Plus Fusilade DX Tank Mix:

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the *Cobra* plus Fusilade DX tank mix less than 90 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hav.

- Do not apply the Cobra plus Fusilade DX tank mix if rain is expected within 1 hour of application or unsatisfactory weed control may result.
- Make the last Fusilade DX application to soybeans before bloom.
- Do not plant rotational grass crops such as corn, sorghum and cereals within 60 days of last application of Fusilade DX.
- Avoid drift to all other crops and nontarget areas. Grass crops are highly susceptible to Fusilade DX.

## TANK MIX WITH OPTION HERBICIDE FOR CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

### **GENERAL INFORMATION**

For best results the *Cobra* plus Option tank mix should be applied to actively growing weeds.

**Do not** apply *Cobra* tank mixtures during periods when the soybeans and the weeds are under stress or when conditions do not favor active weed growth.

Refer to the Cobra soybean label for application timing.

### TANK MIX GEOGRAPHIC USE AREA

Refer to the Option label for defined application areas and rates. *Cobra* does not have area restrictions.

Table 24S.

Cobra & Option Tank Mix - Soybeans Rate and Time of Application Table

Product	Product Rate	Weeds Controlled/ Weed Size	Adjuvant
Cobra	12.5 fl. oz./A	Refer to Table 2S	0.5% v/v Crop Oil Concentrate/A
	plus	Option	
Option			el for ANNUAL es controlled and

# SEQUENTIAL APPLICATION WITH COBRA AND OPTION Sequential Applications with Cobra

Some reduction in grass control is possible when Option is sequentially applied immediately prior to or after an application of *Cobra*.

- After an application of Option, wait a minimum of 24hours before applying Cobra.
- In fields treated with Cobra, do not apply Option until grass plants are again developing new leaves (generally 7 days after the Cobra application).
- Refer to the Option label for application areas and rates.

## MIXING INSTRUCTIONS

Maintain agitation throughout the spray application. Failure to agitate the spray volume may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

**Cobra Plus Option Tank Mix:** Add 1/2 of the required water to the spray tank and begin agitation. Add the required amount of Option and mix thoroughly. Then add the required amount of *Cobra* and continue mixing. Finally, add the required amount of crop oil concentrate and the remaining water.

## Use Restrictions for Cobra Plus Option Tank Mix:

 Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.

- Do not apply the Cobra plus Option tank mix less than 90 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hay.
- Do not apply the Cobra plus Option tank mix if rain is expected within 4 hours of application or unsatisfactory weed control may result.

# COBRA SEQUENTIAL AFTER SOIL APPLIED HERBICIDE

# PURSUIT PLUS HERBICIDE FOLLOWED BY REDUCED RATES OF COBRA

### **GENERAL INFORMATION**

**Do not** apply *Cobra* during periods when soybeans and the weeds are under stress or when conditions do not favor active weed growth. *Cobra* should be applied to small, actively growing weeds (normally 14 to 21 days after planting). A timely cultivation approximately one week to ten days after the application of *Cobra* will assist in weed control.

### **IMPORTANT**

Read and carefully observe all the precautionary statements, instructions, rotational restrictions and other information appearing on each product's package label.

Table 25S.

# Pursuit Plus & Cobra Sequential - Soybeans - Rates and Time of Application Table

	rtates an	a Time of Application	,,, , a		
Product	Product Rates	Weeds Controlled/ Weed Size	A	djuva	nt
Pursuit Plus		Refer to Pursuit Plus label for weeds claimed	None		
	post em	erge			
Cobra		Refer to Table 2S for weeds controlled at 12.5 fl. oz./A	Refe	er to T 1S	able
	C	Cobra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
				mum Stage	
		Common Cocklebur	6	4	2
		Common Ragweed			6

# Use Restrictions for Pursuit Plus followed by Cobra:

- Always read and follow all label directions when using any pesticide alone or sequentially. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra less than 90 days before harvesting soybeans.
- 3. Do not graze treated fields or harvest for forage or
- Do not apply the Cobra if rain is expected within 30 minutes of application or unsatisfactory weed control may result.

# PASSPORT HERBICIDE FOLLOWED BY REDUCED RATES OF COBRA

### **GENERAL INFORMATION**

Following an application of Passport, a postemergence application with *Cobra* may be applied for control of additional broadleaf weed species at lower rates than possible following other preemergence herbicides.

**Do not** apply *Cobra* during periods when soybeans and the weeds are under stress or when conditions do not favor active weed growth. *Cobra* should be applied to small, actively growing weeds (normally 14 to 21 days after planting). A timely cultivation approximately one week to ten days after application of *Cobra* will assist in weed control.

### **IMPORTANT**

Read and carefully observe all the precautionary statements, instructions, rotational restrictions and all other information appearing on each product's package label.

Table 26S.

Passport & Cobra Sequential - SoybeansRates and Time of Application Table

Nates and Time of Application Table					
Product	Product Rates	Weeds Controlled/ Weed Size	Adjuvant		
Passport		Refer to Passport None label for weeds controlled			
	post em	erge			
Cobra	6 to 12.5fl. oz./A	Refer to Table 2S for weeds controlled at 12.5 fl. oz./A	Refer to Table 1S		
	C	Cobra Rate/A	10 fl. oz.	8 fl. oz.	6 fl. oz.
			Maxi	mum Stage	
		Common Cocklebur Common Ragweed	6 8	4 6	2 6

### Use Restrictions for Passport followed by Cobra:

- Always read and follow all label directions when using any pesticide alone or sequentially. The most restrictive labeling applies when using a tank mix.
- Do not apply the Cobra less than 85 days before harvesting soybeans.
- Do not graze treated fields or harvest for forage or hay.
- Do not apply the Cobra if rain is expected within 30 minutes of application or unsatisfactory weed control may result.

# COBRA FOR POST DIRECTED APPLICATION IN COTTON

### **GENERAL INFORMATION**

Cobra is a broad spectrum contact herbicide for postemergence directed control of broadleaf weeds in cotton. The postemergence directed applications of Cobra or Cobra tank mixes should use equipment designed to minimize spray solution contacting the cotton plant. This equipment would include spray nozzles positioned a minimum of 3 inches above the soil surface and angled backward so that the spray solution discharges to the rear and underneath the row canopy, nozzles as described above with leaf lifters or shields and/or plastic preformed hooded sprayers positioned to run between the cotton rows, all of which are designed to help reduce spray contact with the cotton plant.

Apply *Cobra* postemergence as a directed spray application following a preplant incorporated or preemergence herbicide(s) for early season control of grasses and broadleaf weeds. Use *Cobra* as a postemergence directed application when the cotton plant has reached a minimum height of 6 inches and a height difference of 3 to 5 inches has been established between

the lower leaves of the cotton plant and the top of the broadleaf weeds.

Cobra may also be applied as a layby application after cotton has reached a height of 12 inches or more. Layby applications of Cobra will control broadleaf weeds that do not exceed leaf stage recommendations listed in Table 6C of the label. For enhanced control of large mid to late season problem broadleaf weeds, a tank mix of Cobra with Bladex, Karmex or MSMA is required. Refer to the label section on TANK MIXES for specific recommendations. Use of a crop oil concentrate or a non-ionic surfactant is required. Refer to the label section on ADJUVANTS for specific recommendation.

Under conditions of normal weed growth, *Cobra* may be applied up to 30 minutes before rainfall without reducing weed control.

### **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 12.5 fl. oz./A (0.20 lb. ai/A) of Cobra per application.
- Do not exceed a combined rate of 25 fl. oz./A (0.40 lb. ai/A) of Cobra per season.
- Do not make a sequential application of Cobra within 14 days of the first application.
- Do not make more than two (2) Cobra applications per season.
- Do not apply to cotton later than 70 days before harvest.
- · Do not graze animals on green forage or stubble.
- Do not utilize hay or straw for animal feed or bedding.

### **Groundwater Advisory**

This chemical (lactofen) has properties and characteristics associated with chemicals detected in groundwater. Acifluorfen, a degradate of this chemical, is known to leach through soil into groundwater under certain conditions as a result of labeled use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

### **COTTON TOLERANCE**

Apply *Cobra* to cotton **ONLY** as a **DIRECTED SPRAY** application with nozzles set to deliver the spray mixture toward the base of the cotton plant, as specified in the "Timing" and "Application" sections of the label. Lower leaves which are contacted by the spray mixture will appear spotted or light brown to bronze in color. This response will have no effect on the growth or development of the cotton crop, and all growth following application will be normal.

It is essential to establish a height differential of 3 to 5 inches between the crop and the target weeds prior to application to ensure full coverage of the weed leaf surfaces while minimizing direct contact of the spray mixture with the upper leaves and terminal area of the cotton plant.

*Cobra* is a contact herbicide. It does not move throughout the cotton plant and it will not vaporize off the soil surface.

DO NOT apply Cobra OVER-THE-TOP of cotton.

### **TIMING**

### Post-Directed: COTTON 6" or More

For best results, *Cobra* should be applied to small, actively growing weeds. Nozzles should be set to spray no higher than the bottom 2 to 3 inches of the cotton stalk (or the top of the bark formation) and still fully cover the target weeds. A properly timed directed spray application will provide control of labeled weeds not larger than indicated in Table 6 C.

### Layby: COTTON 12" or More

When weed heights are larger than those listed in Table 6C, a tank mix of *Cobra* plus Bladex, Karmex or MSMA is required. Nozzles should be set to spray no higher than the bottom 1/3 of the cotton stalk (up to the first fruiting node) and still fully cover the target weeds. Use of tank mix combinations will provide better control of larger late season troublesome weeds in cotton. See Table 7C for weed size recommendations for *Cobra* tank mix combinations. Refer to the label section on **TANK MIXES** for specific use directions.

Apply Cobra under conditions that promote active weed growth. **DO NOT** apply Cobra when weeds are under stress. Weeds under stress tend to "harden off" and become less susceptible to herbicide activity. **DO NOT** apply Cobra under conditions of drought or when rainfall has been less than 1 inch in a consecutive 2-week period, when excessive water has saturated the field for 3 or more consecutive days or when high temperatures are in combination with low soil moisture or in combination with low humidity. Applying Cobra under these conditions may result in unsatisfactory weed control.

Conditions such as those described above which precede or immediately follow a *Cobra* application may adversely affect the performance of the herbicide.

### **DIRECTED BAND APPLICATION**

Directed row banding is required for use of *Cobra* in cotton. Two nozzles per row, one on each side, are required for postemergence directed application. Tractor ground speed should not exceed 5 mph. The spray equipment used should accurately direct the spray pattern to the base of the cotton plant to minimize contact with the cotton plant and provide good coverage of the target weeds. Spray nozzles should be positioned a minimum of 3 inches above the soil surface and angled backward so that the spray solution discharges to the rear and under the row canopy. The use of leaf lifters or shields on application equipment is recommended to help reduce spray contact with the cotton plant. Row banding equipment should be adjusted to provide maximum coverage of weeds in the banding area.

### **SPRAYER CALIBRATION**

FIELD CALIBRATE YOUR SPRAYER: Improper calibration will adversely affect the spray pattern and reduce weed control. Delivery rates shown in equipment catalogs may not accurately reflect your actual delivery rate. When calibrating, spray pressure should be measured at the spray nozzle to assure accurate delivery rates. Refer to manufacturer's chart for recommended spray volume, spray pressure and ground speed for the nozzles and the directed spray system you are using.

HERBICIDE RATES, ADJUVANT RATES AND SPRAY VOLUME RECOMMENDATIONS are presented as BROADCAST EQUIVALENTS, and must be reduced in proportion to the area actually treated. Use the following

formulas to calculate the correct rate and volume per planted (field) acre:

Band Width (inches) Row Width (inches)	X	Broadcast Rate/Acre	=	Amount of Herbicide Needed per Field Acre
Band Width (inches) Row Width (inches)	Х	Broadcast Volume/ Acre	=	Amount of Water Needed per Field Acre

### **CULTIVATION**

When postemergence directing *Cobra* at the same time as cultivation, the spray nozzles must be positioned in front of the cultivation equipment. Applying *Cobra* at the time of cultivation under dry soil conditions will cause excessive dust which will prevent proper contact between *Cobra* and the weed surface. This reduced contact will decrease weed control activity. In addition, applying *Cobra* while cultivating at ground speeds greater than 5 mph will prevent good coverage of the weed surface by the spray solution and reduce weed control activity.

### **APPLICATION RATES**

**COBRA APPLIED ALONE**: Apply *Cobra* at a rate of 12.5 fl. oz. per acre on a broadcast basis. The sprayer must be equipped with flat fan or off-center fan nozzles designed to deliver 10 to 30 gals. of water per acre when operated at a spray pressure of 20 to 30 PSI measured at the nozzle. Pressures greater than 30 PSI may cause the spray mist to move upward into the cotton canopy resulting in severe crop injury.

Table 1C.

APPLICATION RATES
Post-Directed: Cotton 6" or More <u>OR</u>
Layby: Cotton 12" or More - *Cobra* 

Application Timing	Broadcast Rate/Acre	Comments
Post-Directed: COTTON 6" or more OR	12.5 fl. oz.	Reduce broadcast rate in proportion to band area actually treated (See
Layby: COTTON 12" or more		SPRAYER CALIBRATION).

### **ADJUVANTS**

The use of recommended adjuvants has consistently enhanced weed control over a wide range of application conditions.

For post-directed application of *Cobra* to cotton at least 6" tall, use either a non-ionic surfactant at 2 pts. per 100 gals. spray solution **OR** crop oil concentrate at 0.5 to 1 pt. per acre (broadcast basis), if bark formation has begun.

For layby application of *Cobra* to cotton 12" tall (or more), use a crop oil concentrate at 1 to 2 pts. per acre (broadcast basis).

Table 2C.

ADJUVANT RECOMMENDATONS				
Application Timing	Adjuvant	Broadcast Rate/Acre	Comments	
Post- directed: COTTON 6" or more	Crop Oil Concentrate	0.5 to 1 pt. (8 to 16 fl. oz.)	Reduce broadcast rate in proportion to band area actually treated (See SPRAYER CALIBRATION). (Continued)	

Table 2C. (Continued)

ADJUVANT RECOMMENDATONS

Application Timing	Adjuvant	Broadcast Rate/Acre	Comments
OR	Non-ionic Surfactant	2 pts. per 100 gals. spray solution	Use prior to bark formation to minimize stalk discoloration.
Layby: COTTON 12" or more	Crop Oil Concentrate	1 to 2 pts. (16 to 32 fl. oz.)	Reduce broadcast rate in proportion to band area actually treated (See SPRAYER CALIBRATION).

### **TANK MIXES**

Cobra plus Bladex: Apply a tank mix combination of Cobra plus Bladex 90DF, 80W or 4L at layby after cotton has attained a minimum height of 12 inches and before weeds are larger than listed in Table 7C. Apply Cobra at a rate of 12.5 fl. oz. per acre plus Bladex at a rate of 0.66 to 1.11 lbs. of 90DF, 0.75 to 1.25 lbs. of 80W or 0.7 to 1.0 qt. of 4L per acre on a broadcast basis. The sprayer must be equipped with flat fan or off-center fan nozzles designed to deliver 10 to 30 gals. of water per acre when operated at a spray pressure of 20 to 30 PSI measured at the nozzle. Pressures greater than 30 PSI may cause the spray mist to move upward into the cotton canopy resulting in crop injury. Use of a crop oil concentrate spray additive is required at the rate of 1 to 2 pts. per acre.

Table 3C.

COBRA + BLADEX (90DF, 80W OR 4L) TANK MIX

APPLICATION RATES

Application Timing	Prod Formu		Broadcast Rate/Acre	Comments
Layby: COTTON	Cobra +		12.5 fl. oz.	Reduce broadcast rate
12" or more	Bladex	90D	0.66 to 1.11 lbs. (10.5 to 17.5 oz.)	actually treated
	OR	80W	0.75 to 1.25 lbs. (12 to 20 oz.)	(See SPRAYER CALIBRATION).
	OR	4L	0.7 to 1 qt. (22 to 32 oz.)	

Cobra plus Karmex: Apply a tank mix combination of Cobra plus Karmex 80W at layby after cotton has attained a minimum height of 12 inches but before weeds are larger than listed in Table 7C. Apply Cobra at a rate of 12.5 fl. oz. per acre plus Karmex at a rate of 8.0 to 12.0 oz. per acre on a broadcast basis. The sprayer must be equipped with flat fan or off-center fan nozzles designed to deliver 10 to 30 gals. of water per acre when operated at a spray pressure of 20 to 30 PSI measured at the nozzle.

Pressures greater than 30 PSI may cause the spray mist to move upward into the cotton canopy resulting in crop injury. Use of a crop oil concentrate spray additive is required at the rate of 1 to 2 pts. per acre.

Table 4C.

COBRA + KARMEX 80W TANK MIX APPLICATION RATES

Application Timing	Product / Fo	ormulation	Broadcast Rate/Acre
Layby: COTTON 12" or more	Cobra + Karmex 80W	12.5 fl. oz. 0.5 to 0.75 lbs. (8 to 12 oz.)	Reduce broadcast rate in proportion to the band area actually treated (See SPRAYER CALIBRATION)

Cobra plus MSMA (COTTON 6" or more): Apply a tank mix combination of Cobra plus MSMA after cotton has attained a minimum height of 6 inches but before cotton reaches the bloom stage. Apply to weeds no larger than listed in Table 6C. Apply Cobra at a rate of 12.5 fl. oz. per acre plus MSMA at a rate of 4 pts. per acre of a 4 lbs./gal. or 2.4 pts. per acre of a 6.6 lbs./gal. MSMA on a broadcast basis. The sprayer must be equipped with flat fan or offcenter fan nozzles designed to deliver 10 to 30 gals. of water per acre when operated at 20 to 30 PSI measured at the nozzle. Pressure greater than 30 PSI may cause the spray mist to move upward into the cotton canopy resulting in crop injury. While some formulations of MSMA contain added surfactant and provide enough wetting action to enhance Cobra activity, the use of either a non-ionic surfactant at 2 pts. per 100 gals. of spray solution OR a crop oil concentrate at 0.5 to 1 pt. per acre (broadcast basis) may further enhance control of larger weeds.

Cobra plus MSMA (COTTON 12" or more): Apply a tank mix combination of Cobra plus MSMA after cotton has attained a minimum height of 12 inches but before cotton reaches the bloom stage. Apply to weeds no larger than listed in Table 6C. Apply Cobra at a rate of 12.5 fl. oz. per acre plus MSMA at a rate of 4 pts. per acre of a 4 lbs./gal. or 2.4 pts. per acre of a 6.6 lbs./gal. MSMA on a broadcast basis. The sprayer must be equipped with flat fan or offcenter fan nozzles designed to deliver 10 to 30 gals. of water per acre when operated at 20 to 30 PSI measured at the nozzle. Pressures greater than 30 PSI may cause the spray mist to move upward into the cotton canopy resulting in crop injury. While some formulations of MSMA contain added surfactant and provide enough wetting action to enhance Cobra activity, the use of a crop oil concentrate at 1 to 2 pts. per acre (broadcast basis) may further enhance control of larger weeds.

Select 2 EC at 6 to 8 fl. oz. per acre can be tank mixed with Cobra and MSMA at both application timings to control annual and perennial grasses. Refer to Select 2 EC label for grasses and grass height to be controlled.

Table 5C.

COBRA + MSMA TANK MIX
Post-Directed: Cotton 6" or More OR Layby: Cotton 12" or More
Application Rates

Application Timing	Product /	Formulation	Broadcast Rate/Acre	Comments
USE BEFORE BLOOM	Cobra		12.5 fl. oz.	Reduce broadcast rate in proportion to
Post-Directed:	+			the band area actually treated (See
COTTON 6" or more <b>OR</b>	MSMA <b>OR</b>	4 lbs./gal.	4 pts. (64 oz.)	SPRAYER CALIBRATION).
Layby: COTTON 12" or more	MSMA	6.6 lbs./gal.	2.4 pts. (38.4 oz.)	

### WEEDS CONTROLLED BY COBRA AND COBRA + MSMA TANK MIX Cotton 6" to 8" Tall - Directed Postemergence OR Cotton 12" (or More) - Layby Cobra Rate 12.5 fl. oz./Acre

Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages
Balloonvine	4	Jimsonweed	4	Poorjoe	6
Beggarticks	6	Lanceleaf Sage	4	Prickly Sida (Teaweed)	4
Bristly Starbur	4	Mexicanweed	4	Puncturevine	1.5" diameter
Buffalobur	4	Morningglory		Ragweed	
Burcucumber	4	Cypressvine	4	Čommon	6
Carpetweed	8" diameter	Entireleaf	2	Giant	4
Common Cocklebur	6	lvyleaf	2	Showy Crotalaria	4
Common Purslane	8" diameter	Palmleaf	4	Smell Melon	6
Copperleaf		Pitted	4	Spurge	
Hophornbeam	4	Purple Moonflower	4	Prostrate	1" diameter
Virginia	4	Smallflower	4	Spotted	4
Croton		Tall	2	Tall Waterhemp	4
Tropic	4	Nightshade		Velvetleaf	4
Woolly	4	Black	6	Venice Mallow	4
Devilsclaw	4	Eastern Black	6	Wild Mustard	6
Eclipta	6	Hairy	4	Wild Poinsettia	4
Florida Beggarweed	2	Pigweed		Wild Sunflower	2
Florida Pusley	6	Palmer Amaranth	6	Witchweed	6 to 8" prior to
Groundcherry		Prostrate	6		bloom
Cutleaf	6	Redroot	6		
Lanceleaf	6	Smooth	6		
Hairy Galinsoga	4	Spiny Amaranth	6		
Hemp Sesbania	6	, ,			

### Table 7C.

### COBRA + BLADEX TANK MIX / COBRA + KARMEX TANK MIX Weeds Controlled By Cobra Tank Mixes Layby: 12" (or More) Cotton - Cobra Rate 12.5 fl. oz./Acre

Common Name	Maximum Growth Stages	Common Name	Maximum Growth Stages
Common Cocklebur	up to 8 inches	Spurge	4 in diameter
Eclipta Pigweed	up to 8 inches	Prostrate Spotted	4 in. diameter up to 6 inches
Palmer Amaranth	up to 8 inches	Tall Waterhemp	up to 6 inches
Prostrate	up to 8 inches		
Redroot	up to 8 inches		
Smooth	up to 8 inches		
Spiny Amaranth	up to 8 inches		

## **DIRECTIONS FOR USE IN PEANUTS**

## (Not for Use in NY)

### **GENERAL INFROMATION**

Cobra effectively controls a wide spectrum of important broadleaf weeds in peanuts. Weeds can be controlled by applying Cobra postemergence to actively growing weeds no larger than sizes indicated in Table 1P below.

When *Cobra* is applied postemergence, 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 side may be expected for a 2 to 3 week period. Factors which reduce the amount of spray solution contacting the soil surface, such as excessive weed foliage, will reduce the level of soil activity.

## **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 12.5 fl. oz./A (0.20 lb. ai/A) of Cobra per application.
- Do not exceed a combined rate of 25 fl. oz./A (0.40 lb. ai/A) of Cobra per season.
- Do not make a sequential application of Cobra within 14 days of the first application.

- Do not make more than two (2) Cobra applications per season.
- Do not apply Cobra to peanuts later than 90 days before harvest.
- Do not allow livestock to graze treated foliage.
- Do not use treated vines for feed or forage.
- · Do not apply to peanuts by air.

## **EARLY POSTEMERGENCE TREATMENT**

A single early postemergence treatment of *Cobra* at 12.5 fl. oz. per acre may be made to control emerged broadleaf weeds. Apply after the peanuts have at least 6 true leaves. See table below for weeds controlled and the maximum stage of weed growth for postemergence applications. A second postemergence application of *Cobra* at 12.5 fl. oz. per acre may be made to control later emerging weeds or weeds escaping the first application as long a they are still within the labeled growth stage.

# ADJUVANT RECOMMENDATIONS FOR POSTEMERGENCE APPLICATION

For control of weeds given in Table 1P, either an EPA approved non-ionic surfactant or an EPA approved petroleum or vegetable oil based crop oil concentrate must be used. Since adjuvant recommendations may vary depending on location, please check with your local Valent representative for recommendations. Under ideal growing

conditions targeting weeds at the lower end of the height range, non-ionic surfactant at 0.25% v/v (1 quart per 100 gallons of water) may be used. Under ideal growing conditions targeting weeds at or near the top of the height range, crop oil concentrate at 1 to 2 pints per acre should

be used. Under less than ideal growing conditions only crop oil concentrate is recommended. Applications of *Cobra* with crop oil concentrate to peanuts with less than 6 true leaves may result in unacceptable crop injury.

Table 1P.

### WEEDS CONTROLLED BY COBRA IN PEANUTS Weed Growth Stages - 12.5 fl. oz./Acre

	Troca Crown clagos 1210 in Caprolo					
Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages	Common Name	Maximum Leaf Stages	
Balloonvine	4	Jimsonweed	4	Poorjoe	6	
Beggarticks	6	Kochia	8	Prickly Sida (Teaweed)	4	
Bristly Starbur	4	Lanceleaf Sage	4	Puncturevine	1.5" diameter	
Buffalobur	4	Mexicanweed	4	Ragweeds		
Burcucumber	4	Morningglories		Čommon	8	
Carpetweed	8" diameter	Cypressvine	4	Giant	6	
Common Cocklebur	6	Entireleaf*	2	Showy Crotalaria	4	
Common Purslane	8" diameter	lvyleaf*	2	Smell Melon	6	
Copperleafs		Palmleaf*	4	Spurge		
Hophornbeam	6	Pitted*	4	Prostrate	1" diameter	
Virginia	4	Purple Moonflower*	4	Spotted	4	
Croton		Smallflower*	4	Toothed	4	
Tropic	4	Tall*	4	Venice Mallow	4	
Woolly	4	Nightshades		Waterhemp		
Devilsclaw	4	Black	6	Common	6	
Eclipta	6	Eastern Black	6	Tall	6	
Florida Beggarweed	2	Hairy	4	Wild Mustard	6	
Florida Pusley	6	Pigweeds		Wild Poinsettia	4	
Groundcherry		Palmer Amaranth	6	Wild Sunflower*	2	
Cutleaf	6	Prostrate	6	Witchweed	6 to 8" prior to	
Lanceleaf	6	Redroot	6		bloom	
Hairy Galinsoga	4	Smooth	6			
Hemp Sesbania	6	Spiny Amaranth	6			

<sup>\*</sup> Crop oil concentrate is required at the rate of 0.5% v/v for control.

### **CROP TOLERANCE**

Peanuts with 6 or more emerged true leaves are very tolerant to postemergence *Cobra* applications. Mature peanut leaves treated with *Cobra* will show some brown speckling and bronzing. Growth of the next 2 true leaves may show some cupping or crinkling of the leaf margins. Subsequent growth will be normal and peanuts quickly outgrow this temporary condition.

If peanuts are treated at the 2 to 4 leaf stage, growth will be temporarily delayed. This period of growth reduction may be prolonged if the application is made during periods when the peanuts are under stress or under conditions that do not promote active growth. These conditions may include periods of drought, excess soil moisture, unusually cold temperatures or injury from preemergence herbicides. Peanuts quickly outgrow this temporary condition under good growing conditions.

### RAINFALL OR OVERHEAD IRRIGATION

Under conditions of normal weed and peanut growth, *Cobra* may be applied up to 30 minutes before rainfall or overhead irrigation without reduced weed control effectiveness. Do not apply *Cobra* if rainfall is expected within 30 minutes. This rainfall period may be longer when *Cobra* is tank mixed with other products and/or when weeds are under stress at the time of application.

## **EQUIPMENT RECOMMENDATIONS FOR APPLICATION**

Cobra can be applied using standard commercial ground spraying equipment. Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20 inches apart. Do not use flood, whirl chamber or controlled droplet applicator nozzles as erratic coverage can cause inconsistent weed control.

Use 10 to 20 gals. of spray solution per broadcast acre for optimum performance. Increase water volume up to 50 gals. if crop or weed foliage is dense. Apply using a minimum spray pressure of 40 to 60 PSI as measured at the boom. Weeds must be thoroughly covered with spray for satisfactory control. Always use an adequate volume of spray solution to ensure thorough coverage. Dense leaf canopies shield smaller weeds and can prevent adequate coverage.

When row banding equipment is used, it should be adjusted to provide maximum coverage of weeds in the row. Thorough coverage of weeds in the row is best achieved when 2 nozzles are directed from either side of the crop row toward the weeds in the middle. The recommended minimum band width is 15 inches with a minimum spray volume of 15 gals. per acre on the band. Band application using a single nozzle over the row is not recommended.

## TANK MIX PARTNERS FOR USE IN PEANUTS

The following herbicide partners may be tank mixed with *Cobra* for postemergence use in peanuts.

Table 2P.

Basagran	Cadre	Pursuit
Select 2 EC	2,4-DB**	

Use only 2,4-DB formulations approved for postemergence use in peanuts. Do not use crop oil concentrate to this mixture, use only non-ionic surfactant at 0.125% v/v. Follow all 2,4-DB label restrictions relative to drift onto sensitive crops.

Physical incompatibility, reduced weed control or crop injury may result from mixing *Cobra* with other pesticide products (fungicides, herbicides, insecticides, miticides),

additives or fertilizers. Valent does not recommend using tank mixes other than those listed on this or other Valent labeling.

### **MIXING INSTRUCTIONS**

Before mixing components, always perform a compatibility jar test. Add components in the sequence indicated below. Always start with a thoroughly clean sprayer tank three-quarters full of clean water with agitation running. Maintain agitation throughout mixing.

Begin by adding products in water soluble bags (allow to fully dissolve), followed by water dispersible granular or powder products (allow to fully dissolve), water soluble products, emulsifiable concentrates such as *Cobra* (allow to fully mix), water soluble additives, then the remaining quantity of water.

# APPENDIX The following are scientific names for the weeds listed on this table:

Common Name	Scientific Name	Common Name	Scientific Name
Balloonvine	Cardiospermum halicacabum	Nightshades	
Beggarticks	Bidens frondosa	Black	Solanum nigrum
Bristly Starbur	Acanthospernum hispidum	Eastern Black	Solanum ptycanthum
Buffalobur	Solanum rostratum	Hairy	Solanum sarrachoides
Burcucumber	Sicyos angulatur	Pigweed	
Canada Thistle	Cirsium arvense	Palmer Amaranth	Amaranthus palmeri
Carpetweed	Mollugo verticillata	Prostrate	Amaranthus blitoides
Coffee Senna	Cassia occidentalis	Redroot	Amaranthus retroflexus
Common Cocklebur	Xanthium strumarium	Smooth	Amaranthus hybridus
Common Lambsquarters	Chenopodium album	Spiny Amaranth	Amaranthus spinosus
Common Purslane	Portulaca oleracea	Poorioe	Diodia teres
Copperleafs		Prickly Sida (Teaweed)	Sida spinosa
Hophornbeam	Acalypha ostryifolia	Puncturevine	Tribulus terrestris
Virginia	Acalypha virginica	Ragweed	Thousand to Tootho
Croton	ricalypha virginica	Common	Ambrosia artemisiifolia
Tropic	Croton glandulosus	Giant	Ambrosia trifida
Woolly	Croton capitatus	Redvine	Brunnichia ovata
Devilsclaw	Proboscidea Iouisianica	Showy Crotalaria	Crotalaria spectabilis
Eclipta	Eclipta prostrata	Sicklepod	Cassia obtusifolia
Florida Beggarweed	Desmodium tortuosum	Smartweed	Oddala Obladii Olia
Florida Pusley	Richardia scabra	Pennsylvania	Polygonum pennsylvanium
Groundcherry	Nichardia Scabra	Swamp	Polygonum coccineum
Cutleaf	Physalis angulata	Smell Melon	Cucumis melo
Lanceleaf	Physalis lanceifolia	Spurge	Cacamis meio
Hairy Galinsoga	Galinsoga ciliata	Prostrate	Euphorbia humistrata
Hemp Sesbania	Sesbania exaltata	Spotted	Euphorbia maculata
Jimsonweed	Datura stramonium	Toothed	Euphorbia serrata
Kochia	Kochia scroparia	Spurred Anoda	Anoda cristata
Lanceleaf Sage	Salvia reflexa	Sunflower	Arioua cristata
Mexicanweed		Common	Helianthus annuus
Milkweeds	Caperonia castaniifolia	Wild	Helianthus annuus Helianthus spp.
	Caracatamma aynanahaidaa		Campsis radicans
Climbing Common	Sarcostemma cynanchoides	Trumpetcreeper Velvetleaf	Abutilon theophrasti
	Asclepias syriaca		Hibiscus trionum
Morningglories	In a manage in a male was to	Venice Mallow	HIDISCUS INONUIN
Bigroot (Wild Sweet Potato)	Ipomoea pandurata	Waterhemp	A man manufactor music
Cypressvine Entireleaf	Ipomoea quamoclit	Common Tall	Amaranthus rudis
Entireleal	Ipomoea hederacea var.		Amaranthus tuberculatos
ll = = <b>f</b>	integriuscula	Wild Mustard	Sinapis arvensis
lvyleaf	Ipomoea hederacea	Wild Poinsettia	Euphorbia heterophylla
Palmleaf	Ipomoea wrightii	Witchweed	Striga asiatica
Pitted	Ipomoea lacunosa	Yellow Nutsedge	Cyperus esculentus
Purple Moonflower	Ipomoea turbinata		
Smallflower	Jacquemontia tamnifolia		
Tall	Ipomoea purpurea		

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### STORAGE AND DISPOSAL

### **PROHIBITIONS**

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

### **STORAGE**

Store in cool, dry place.

Keep pesticide in original container.

Do not put concentrate or dilute into food or drink containers.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material call day or night **1-800-892-0099**.

### **PESTICIDE DISPOSAL**

This product is acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### **CONTAINER DISPOSAL**

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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