BOOKLET

Envoke®

Herbicide

Group	2	Herbicide

A selective herbicide for control of certain broadleaf, sedge, and grass weeds in almond, citrus, cotton, sugarcane, and transplanted tomato

Active Ingredient:	
2-pyridinesulfonamide, N-[[(4,6-dimethoxy-2-pyrimidinyl)amino] carbonyl]-3-(2,2,2-trifluoroethoxy)-, monosodium salt, monohydrate; trifloxysulfuron-sodium (ISO draft proposal)*:	75.0%
Other Ingredients:	25.0%
Total:	100.0%

*CAS No: 290332-10-4

KEEP OUT OF REACH OF CHILDREN.

CAUTION — PRECAUCIÓN

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.)

See additional precautionary statements and directions for use in attached booklet.

EPA Reg. No. 100-1132

EPA Est.70992-FRA-001

Product of France

ACCEPTED
JAN 13 2005
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended for the pesticide registered under EPA Reg. No. 100-1132

SCP

3 ounces
Net Weight

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
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 inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof materials such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or viton ≥14 mils
- Shoes plus socks

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.

Engineering Control Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsates.

This pesticide is toxic to vascular plants and should be used strictly in accordance with the drift precautions on this label in order to minimize off-site exposures.

Ground Water Advisory

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where the water table is shallow may result in ground water contamination.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND 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 THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

Envoke should be used only in accordance with recommendations on this label or in separately published supplemental labeling recommendations for this product.

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 instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE). 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
- Chemical-resistant gloves made of any waterproof materials such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or viton ≥14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.

STORAGE AND DISPOSAL

Container Disposal

Triple rinse (or equivalent), then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

GENERAL INFORMATION

Envoke is a selective herbicide applied postemergence to both crop and weeds for control of certain emerged weeds in almond, citrus, cotton, sugarcane, and transplanted tomato. Envoke is formulated as a water dispersible granule that must be thoroughly and uniformly mixed in water and applied as a spray.

Weeds controlled by Envoke are listed in **"Target Weeds"** tables provided in each of the crop specific directions for use of this label. The degree of control resulting from application of Envoke is primarily dependent upon rate applied, weed species, weed size at application, environmental conditions, and growing conditions. Weed control is greatly improved if emerged weeds are small, actively growing, and ample soil moisture exists, compared to when the soil is dry and weeds are large or under stress from lack of moisture. Growth of susceptible weeds is inhibited soon after application of Envoke. The leaves of susceptible plants normally turn yellow, red, or purple after several days, followed by necrosis and death of the growing point. Complete plant death generally occurs 1-3 weeks after application, depending upon weed species and growing conditions.

RESISTANCE MANAGEMENT RECOMMENDATIONS

Envoke controls weeds by inhibiting a biochemical process that produces certain essential amino acids necessary for plant growth. The inhibited enzyme system is acetolactate synthase (ALS). These two statements describe Envoke's mode of action (MOA).

Certain weeds species have naturally occurring biotypes within the population that are resistant to ALS-inhibiting herbicides. Applications of ALS-inhibiting herbicides, if used alone in the same area(s) continuously over a number of years, can lead to an increased presence of ALS-resistant biotypes within a weed population. This will reduce the utility of ALS-inhibiting herbicides for controlling target weeds. To prevent or

delay the selection of ALS-resistant weed biotypes, weed management programs should include the use of appropriately registered herbicides within the same or sequential years that: (1) have a different mode of action (MOA), (2) can also provide control of the target weed, and (3) are applied at full labeled rates. Mechanical control by tillage, cultivation, etc., or hand weeding before weeds set seed may also be helpful in reducing the build-up and spread of herbicide resistant weed biotypes.

MIXING INSTRUCTIONS

1. Clean the spray tank before using. If it is contaminated with other materials, mixing problems and/or clogging may occur which could cause injury to the crop or reduced performance. Prepare no more spray mixture than is required for the immediate application.

2. Fill the spray tank 1/4-1/2 full with clean water and begin agitation. Make certain that the agitation system is working properly and creates a rippling or rolling action on the water surface. Maintain agitation throughout the mixing and spraying process.

3. Add any products packaged in water-soluble film to the tank first. Allow the packets to completely dissolve and the contents of the packets to fully disperse into the mix water. **Important: Water-soluble packets must always be the first material put into the spray tank after water.** For products packaged in water-soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been thoroughly cleaned (see **Instructions for Cleaning Spray Equipment After Application).**

4. Add the required amount of Envoke to the spray tank while maintaining agitation. Allow the product to wet and thoroughly disperse into the mix water. *Precaution: Do not apply Envoke using liquid fertilizer as the carrier.*

5. While maintaining agitation, continue filling the spray tank. When the tank is 3/4 full, add any tank mix partners. Add any water-dispersible granule or other dry formulation first, and allow that material to fully and uniformly disperse. Then add any emulsifiable liquid formulation.

6. Maintain agitation while adding adjuvant.

7. Complete filling the tank; maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.

8. An anti-foaming agent may be added to reduce excessive foaming, if it occurs.

9. Make only sufficient spray mixture that can be used in the day it is mixed. It is recommended that continuous agitation be maintained.

APPLICATION PROCEDURES

Ground Application Equipment: Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles that provide medium droplets.

To ensure accuracy, calibrate sprayer at the beginning of the season before use and recalibrate frequently. For ground application, use a minimum of 10 gallons water per acre. Higher volumes (i.e., at least 20 gallons/A) should be used for severe weed infestations to ensure adequate spray coverage. Always include in the spray mixture a nonionic surfactant, approved for application to growing crops (see the **Mixing Instructions** section).

Use a pump with capacity to: (1) maintain the nozzle manufacturer's minimum recommended pressure at the nozzle; and (2) provide sufficient agitation within the tank to keep product in suspension. Lower pressures may be used with extended range or drift reduction flat fan nozzles. A centrifugal pump that provides shear action for dispersing and mixing the product is recommended. The pump should provide a minimum of 20 gallons/minute/100 gallons tank capacity circulated through a correctly positioned sparger tube or jet agitators. If jet agitators are used, at least 2 agitators should be aligned on the bottom of the tank pointing toward each end. Agitation during both mixing and application is essential. Screens or strainers placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the re-circulation line unless a roller or piston pump is used for spraying the solution. Use 50-mesh or coarser screens between the pump and boom, and when required, at the nozzles. Check nozzle manufacturer's recommendations.

Good weed coverage with the spray mixture is essential for optimum weed control. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid large spray overlaps that result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur (see **Instructions to Avoid Spray Drift** section). Boom height for broadcast over-the-top application should be based upon the freestanding height of the crop, not height above the soil surface; and should be at least 15-18 inches above the crop, depending on nozzle type recommendations. The minimum recommended nozzle height should be used to help avoid spray drift (see **Instructions to Avoid Drift**).

If the crop height or crop canopy prevents adequate weed coverage, apply Envoke with drop nozzles post-directed onto the weeds in a way that maximizes coverage of the weeds and minimizes contact with the crop. **Avoid all direct or indirect contact (such as spray drift) of this product with crops other than those recommended for treatment on this label, since injury may occur. Always follow the "Instructions to Avoid Spray Drift" and the "Instructions for Cleaning Spray Equipment after Application" sections of this label.**

Rainfastness: Envoke is rain-fast within 3 hours after application.

Aerial Application: Do not apply Envoke aerially.

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

Instructions to Avoid Spray Drift

Do not apply under circumstances where possible drift to unprotected persons, or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption, can occur. Even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift, such as the following:

- Make applications when the wind velocity favors on-target product deposition. Do not spray if wind speed is 10 mph or greater or if winds are gusty. Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application

- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased drift. Avoid spraying during conditions of low humidity and/or high temperatures.

- Use extreme caution when conditions are favorable for drift (high temperatures and low relative humidity), especially when sensitive plants are located nearby. All plants not listed as target crops on this label should be considered as sensitive plants.

- If sensitive crops or other non-target plants are downwind, extreme caution must be used under all conditions. Drift from applications of this herbicide is likely to result in damage to sensitive non-target plants adjacent to the treatment site. This damage can occur at extremely low concentrations.

- Allow adequate distance between target area and non-target areas (e.g. other crops, neighboring plants, or surface water) to prevent drift onto non-target areas.

- Do not apply when a temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.

- Further reductions in drift potential may be achieved by:

    - Using nozzles that provide a uniform droplet size. Use nozzles that produce medium or coarse droplets (250-400 microns VMD) that are less prone to result in spray drift.
    - Use flat fan nozzles. For example, Turbo TeeJet®, XR TeeJet®, RF Raindrop®, or similar "low pressure" nozzles are preferred.

- Recalibrate sprayer by reducing spray pressure and increasing spray volume to produce larger droplets when conditions favor drift.
- Applying as close to target plants as practical, i.e. a nozzle height that allows a good spray pattern for adequate coverage according to the manufacturer's recommendations, but minimizes drift potential.
- It is recommended to limit nozzle height to two feet from the ground or leave a 25 foot untreated buffer zone around the perimeter of the target crop field.

Instructions for Cleaning Spray Equipment after Application

Because some crops are extremely sensitive to low rates of Envoke, special attention must be given to cleaning equipment before spraying a crop other than those listed on this label. Immediately after spraying, clean equipment thoroughly using the following procedure.

1. Flush tank, hoses, boom, and nozzles with clean water.

2. Prepare a tank cleaning solution using a commercial tank cleaner or a solution of 1 gallon household ammonia per 50 gallons water. **Do not** use chlorine-based cleaners, such as Clorox®. Refer to the publication "Clean It Up! A Guide to Cleaning Sprayers" from Syngenta, for additional information. The guide may be obtained from your local Syngenta Sales Representative.

3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all internal parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.

4. Flush hoses, spray lines, and nozzles for at least several minutes with the cleaning solution.

5. Dispose of rinsate from steps 1-4 in an appropriate manner. Spray the cleaning solution on an untreated crop on which Envoke is registered, or return to a rinsate tank for later use as make-up water for spraying crops on which Envoke is registered, or use other approved disposal.

6. Repeat steps 2-5.

7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.

8. Rinse the complete spraying system with clean water.

Note: If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles that are attached to a dedicated rinsing system, less than a full tank of cleaning solution may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and re-circulate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure 1-2 times.

SPECIFIC USE DIRECTIONS

COTTON

Envoke can be used postemergence over-the-top and/or postemergence directed (with certain crop height or stage restrictions) in cotton.

APPLICATION TYPES AND INSTRUCTIONS FOR COTTON

Postemergence Over-the-Top Applications (AL, AR, FL, GA, KS, KY, LA, MO [Bootheel], MS, NC, SC, TN, VA, and OK/ TX east of State Highway 83 and east of I-35 – Picker Type Varieties

Apply Envoke postemergence over-the-top at 0.10-0.15 oz./A when cotton has reached a minimum of 5 true leaves. A high quality nonionic surfactant (NIS) with a minimum of 80% surface-active agent should be added to the spray solution at 0.25% volume/volume (v/v) or 1 qt./100 gals. Do not apply Envoke postemergence over-the-top in tank mix with any other herbicide, fertilizer, or additives other than the NIS, unless as specified on this label or EPA approved Syngenta supplemental labeling, or unacceptable injury may occur. For recommended herbicide rates and weed sizes to achieve optimum control in cotton refer to Table 1.

Post-directed Applications (AL, AR, FL, GA, KS, KY, LA, MO [Bootheel], MS, NC, SC, TN, VA, and OK/TX East of State Highway 83 and east of I-35) – Picker/Stripper Type Varieties

Apply Envoke post-directed at 0.10/0.15-0.25 oz./A once cotton is large enough to adequately direct applications (usually 6 inches in height or above). Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v or 1qt./100 gals. or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals.). Adjust spray to minimize contact with cotton terminal and foliage while directing the application to maximize contact with weeds. Good coverage is essential for optimum weed control.

Early season weed control with the use of a registered preemergence or early postemergence herbicide is recommended prior to the post-directed application of

Envoke. This will reduce weed competition and allow cotton to achieve a height advantage over targeted weeds. For recommended herbicide rates and weed sizes to achieve optimum control in cotton refer to Table1. Application of Envoke may be made up to 60 days before cotton harvest.

Post-directed Applications (CA, AZ and NM) – Picker/Stripper/Pima Type Varieties

Apply Envoke at 0.10/0.15-0.25 oz./A as described in the post-directed section above. Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v (1 qt./100 gals.), or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals.). For optimum weed control, irrigation should be made prior to Envoke application to ensure the weeds are not under stress from lack of moisture. Best results are usually obtained when Envoke application is made within 7 days after irrigation. This is particularly important if the target weed is nutsedge. Nutsedge should not exceed 6 inches in height at the time of Envoke application. MSMA, Dual MAGNUM®, Touchdown® (Roundup Ready® cotton only), or other labeled herbicides may be required before the first irrigation to keep nutsedge from exceeding 6 inch height at the appropriate timing for Envoke. Application of a registered preemergence or early postemergence herbicide is recommended prior to the post-directed application of Envoke. This will reduce weed competition and facilitate cotton achieving a height advantage over targeted weeds

For recommended herbicide rates and weed sizes to achieve optimum weed control in cotton refer to Table 1.

Special Use Precautions For Post-Directed Applications (CA, AZ, NM) (Picker/Stripper/Pima Type Varieties)

- Envoke may not be used on the same cotton acre in two consecutive years.
- Two full cotton growing seasons without use of Envoke must pass before planting a crop other than cotton the next year.
- A field bioassay, described in Table 2 is recommended for the intended rotational crop.
- Do not use greater than 0.0141 lb. a.i./A (0.3 oz. Envoke), per year trifloxysulfuron-sodium from either Suprend™ or Envoke herbicide sources. Suprend Herbicide also contains Envoke. Each pound of Suprend contains 0.007 lbs. a.i. of trifloxysulfuron-sodium which is equivalent to 0.15 oz. of Envoke.

  Envoke may be used as a post-directed application to picker, stripper, or pima type cotton varieties. Cotton plant parts exposed to the herbicide spray may exhibit chlorosis or necrosis.

TANK MIXES WITH OTHER PESTICIDES OR GROWTH REGULATOR WHEN USING POSTEMERENCE OVER-THE-TOP APPLICATIONS

Envoke can be tank mixed with Centric®, Karate® with Zeon™ Technology, Denim™, Trimax™, Intruder™, Zephy® for control of insects. Envoke may be tank mixed with Staple® herbicide for control of certain weeds including smallflower morningglory. Envoke may be tank mixed with Touchdown HiTech™ or glyphosate as a salvage treatment where weeds threaten to cause a loss of the crop. Salvage treatments will result in significant boll loss, delayed maturity and/or yield loss. Add to the finished spray solution a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v (1 qt./100 gals.) Spray contacting cotton leaves and stems may cause injury including chlorosis, necrosis and stunting.

For all tank mixtures of Envoke with other pesticides, refer to each label for weeds or pests controlled, application information and follow all restrictions and precautions on each label.

TANK MIXES WITH OTHER HERBICIDES WHEN USING DIRECTED APPLICATIONS

Envoke can be tank mixed with Caparol®, Dual MAGNUM, MSMA, Staple or Cotoran® for post-directed applications where use of these products is also registered for use in cotton. Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v (1 qt./100 gals.), or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals.). Envoke can be tank mixed with Buctril® for post-directed applications in BXN cotton varieties. For all tank mixtures of Envoke with other herbicides, refer to both labels for weeds controlled and application information and follow all restrictions and precautions on both labels. Spray contacting cotton leaves may cause cotton injury with many of these tank mixtures.

TANK MIXES WITH GLYPHOSATE

Envoke can be tank mixed with glyphosate containing products on all conventional cotton varieties if applied with hooded sprayers that completely enclose the spray pattern for weed control between the rows. Adjust the hooded sprayer in raised seedbeds to ensure the front and rear flaps touch the ground to completely enclose the spray solution. Keep the spray off the cotton leaves and stems. Spray contacting cotton leaves and stems may cause cotton injury.

In Roundup Ready cotton Envoke can be tank mixed with glyphosate if applied with precision post-directed or hooded sprayers through the layby cotton stage. Applications that contact the cotton leaves may result in boll loss, delayed maturity, and/or loss of yield. Crop injury may occur when the foliage of treated weeds comes in direct contact with the leaves of the crop.

See the tank mix partner product labels for rates, timings, and other application requirements.

TARGET WEEDS

Applications should be made to actively growing weeds at the heights specified below.

Table 1: Weeds Controlled or Suppressed With Envoke Applied Postemergence Over-the-top or Postemergence-directed in Cotton

Common Name	Scientific Name	Control Level^	Control Level^ AZ/CA/NM Only	Over-the-Top or Directed Rate (0.1 oz./A)	Enhanced Over-the-Top or Standard Directed Rate (0.15 oz./A)	Enhanced Directed Rate (0.25 oz./A)
				Weed Size Ranges for Optimum Control (Inches)		
Barnyardgrass	*Echinochloa crus-galli*	S	S	0.25-0.5	0.25-1	0.25-1
Bristly starbur	*Acanthospermum hispidum*	C	NA	1-2	1-4	1-6
Broadleaf signalgrass	*Brachiaria platyphylla*	S	NA	0.25-0.5	0.25-1	0.25-1
Carpetweed	*Mollugo vertillata*	C	C	0.5-1	0.5-2	0.5-3
Cocklebur, common*	*Xanthium strumarium*	C	S	1-4	1-5	1-6
Coffee senna	*Cassia occidentalis*	C	S	1-4	1-5	1-6
Corn, volunteer (non-IT/IR)	*Zea mays*	C	S	1-4	1-5	1-6
Florida beggarweed	*Desmodium tortuosum*	C	NA	1-3	1-4	1-5
Horse purslane	*Trianthema portulacastrum*	S	S		0.5-1	0.5-2
Hemp sesbania	*Sesbania exaltata*	C	NA	1-3	1-4	1-5
Johnsongrass (seedling)	*Sorghum halepense*	C[1]	C[1]	1-2	1-4	1-6
Lambsquarters, common	*Chenopodium album*	C	C	0.5-1	0.5-2	0.5-3
Marestail/ horseweed	*Conyza canadensis*	S	S	1-2	1-3	1-4
Mexicanweed	*Caperonia castaniifolia*	S	S	1-2	1-2	1-2
Morningglory:						
Entireleaf**	*Ipomoea hederacea var integriuscula*	C	S	1-2	1-4	1-5

Ivyleaf**	*Ipomoea hederacea*	C	C	1-4	1-5	1-6
Pitted**	*Ipomoea lacunosa*	C	C	1-4	1-5	1-6
Tall**	*Ipomoea purpurea*	C	S	1-2	1-3	1-4
Nutsedge***:						
Yellow	*Cyperus esculentus*	C[1]	S	2-6	2-6	2-6
Purple	*Cyperus rotundus*	S	S	2-3	2-4	2-4
Peanut, volunteer	*Arachis hypogaea*	S	NA		1-2	1-3
Pigweed*:						
Redroot*	*Amaranthus retroflexus*	C[1]	C[1]	1-3	1-4	1-6
Smooth*	*Amaranthus hybridus*	C[1]	C[1]	1-3	1-4	1-5
Tall waterhemp*	*Amaranthus tuberculatus*	S	NA	1-2	1-2	1-2
Ragweed, Common	*Ambrosia artemisiifolia*	C	NA	1-2	1-4	1-6
Redweed	*Melochia corchorifolia*	C	NA	0.5-1	0.5-2	0.5-3
Sicklepod	*Senna obtusifolia*	C	NA	1-3	1-4	1-6
Smellmelon	*Cueumis melo*	S	NA	1-3	1-4	1-4
Soybean, volunteer (non-sts)	*Glycine max*	C	S	1-2	1-3	1-4
Sunflower, common*	*Helianthus annuus*	C	NA	1-3	1-4	1-5
Sunflower, praire	*Helanthus petiolaris*	C[1]	NA	1-3	1-4	1-5
Velvetleaf	*Abutilon theophrasti*	C[1]	NA	1-4	1-4	1-4
Wild poinsettia	*Euphorbia heterophylla*	C	NA	0.5-1	0.5-2	0.5-3
Wooly croton	*Croton capitatus*	S	NA	1-2	1-2	1-2

^C = Control (85-100%) of weeds present at the time of application. C[1]= may require use of higher rates or repeated applications of Envoke to achieve control. S = Suppression. Suppression means significant activity but not always at a level generally considered acceptable for commercial weed control.

NA = Weed not likely found in this geography.

*Certain biotypes of this weed are known to be resistant ALS herbicides. Envoke will not control these biotypes.

**For best control treat at 1-2 leaf stage of weed growth

***Irrigation and/or rainfall prior to treatment may improve efficacy (see special instructions section). Improved control may be achieved using Dual MAGNUM or Dual MAGNUM plus Touchdown (glyphosate-tolerant cotton) followed by Envoke.

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GENERAL RESTRICTIONS FOR COTTON

- Sequential applications of Envoke should be made at least 14 days apart.
- Do not exceed a total of 0.4 oz. of Envoke per acre per season (0.0188 lbs. a.i./A) from all application types and timings in AL, AR, FL, GA, KS, KY, LA, MO (Bootheel), MS, NC, SC, TN, VA, and OK/TX east of State Highway 83 and east of I-35.
- Do not exceed a total of 0.3 oz. Envoke per acre per season (0.0141 lb. a.i./A) from all application types and timings in CA, AZ, NM.
- Suprend Herbicide also contains Envoke. Each pound of Suprend contains 0.007 lbs. a.i. of trifloxysulfuron-sodium and is equivalent to 0.15 oz. of Envoke.
- Do not apply Envoke within 60 days of cotton harvest.

GENERAL PRECAUTIONS FOR COTTON

- To minimize crop response, Envoke should not be applied if cotton is under severe stress due to drought, cold weather, hail, flooding, waterlogged soils, compacted soil, disease, insect damage, nutrient deficiency, or other causes. Postemergence over-the-top applications of Envoke to picker-type cotton varieties can occasionally result in yellowing of leaves and/or stacking of plant internodes. Symptoms may persist for a short period of time but do not reduce cotton yield.
- Do not apply Envoke postemergence over-the-top in tank mix with any other herbicide, fertilizer, or additives other than the NIS and drift control agents, unless as specified on this label or EPA approved Syngenta supplemental labeling, or unacceptable injury may occur. Tank mixing Envoke with any EC formulated product may increase crop injury potential. Do not tank mix Envoke with malathion, profenofos (Curacron®), or unacceptable cotton injury can occur. To avoid crop injury, apply malathion containing insecticides at least 24 hours before or after the application of Envoke.
- Applications of Envoke may result in reduced weed control if weeds are under severe stress from drought or if weeds are taller than the optimum heights listed in Table 1.
- Envoke will antagonize the grass activity of the postemergence grass herbicides including; Poast®, Select®, Fusion®, Fusilade®, Assure® II, etc. Do not tank mix Envoke with these graminicides. Application of any of these graminicides within 7 days before or after an application of Envoke will result in unacceptable grass control. **Note:** Grass weed antagonism has <u>not</u> been observed with glyphosate products.

- Degradation of Envoke in the soil is enhanced by soil with pH <7 and moist conditions. Application of Envoke to soils with pH >7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield. Alkalkine soils increase the potential for injury to rotational crops. If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first 5 months following application of Envoke and/or less than 1 inch of rainfall/irrigation within the first month after application), rotational crop injury may occur. In areas where soil pH is >7.5 and/or a drought occur, a field bioassay prior to planting of the rotational crop is recommended.

Table 2: Rotational Crop Restrictions Following Cotton

Following normal crop harvest, which has been treated with one or more applications of Envoke, the crops listed below may be planted at, or after, the time interval specified from the last application of Envoke. If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

Rotational Crop Intervals in Months for Envoke in Cotton (Excluding CA, AZ, NM)	
	Maximum Rate Applied Per Season
Rotational Crop	**0.4 oz./A**
Bell pepper (transplanted)	12*
Cotton	7
Corn, field	7
Corn, sweet	7
Grain sorghum	7
Parsley	12*
Peanut	7
Potato, Irish	12*
Radish	12*
Rice	7
Soybean	7
Sugarcane	1
Tobacco (transplanted)	7
Tomato (transplanted)	3
Wheat, winter	3
All other crops	18*

* Field Bioassay. Take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop and allow to grow for three weeks. If, at the end of three weeks, no difference exists between the treated and untreated soil in root and shoot growth of the intended rotational crop, it is safe to plant the intended rotational crop with good growing conditions.

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ROTATIONAL CROP RESTRICTIONS FOLLOWING COTTON IN CA, AZ, NM

- Envoke may not be used on the same cotton acre in two consecutive years.
- Two full cotton growing seasons without use of Envoke must pass before planting a crop other than cotton the next year.
- A field bioassay, described above, is recommended for the intended rotational crop.

Table 3: Envoke Equivalent Rates

Envoke Ounces Product/A	Suprend Pounds Product/A	Trifloxysulfuron-sodium a.i./A
0.10	0.67	0.0047
0.15	1.00	0.007
0.19	1.25	0.00875
0.20	1.36	0.0095
0.23	1.50	0.0105
0.25	1.69	0.0118
0.30	2.01	0.0141
0.40	2.69	0.0188

REPLANTING AFTER COTTON CROP FAILURE

If a cotton crop is lost (e.g., due to hail), and if not more than 0.15 oz./A of Envoke has been applied, cotton, STS-soybean (sulfonylurea tolerant soybean), or Imidazolinone tolerant (IR/IT) corn) may be replanted 30 or more days after the Envoke application, or 14 or more days after the first significant rainfall event (≥0.5 inches) following the Envoke application. If Envoke has been applied at ≥0.15-0.40 oz./A, cotton or STS soybean may be planted 30 days after the first significant rainfall event (≥0.5 inches) following the Envoke application.

SUGARCANE

Envoke can be used pre-spiking, postemergence over-the-top, and/or postemergence directed (with certain crop height or stage restrictions) in sugarcane in Puerto Rico and the states of FL, LA, HI and TX. See Table 4 for a list of weeds controlled.

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APPLICATION TYPES AND INSTRUCTIONS FOR SUGARCANE

Pre-spiking Application in Plant Sugarcane (FL Only)

Apply Envoke pre-spiking to plant sugarcane prior to spiking at the rate of 0.3 oz./A. A high quality nonionic surfactant with a minimum of 80% surface-active agent should be added to the spray solution at 0.25% volume/volume (v/v) or 1 qt./100 gals.

Postemergence Over-the-Top Applications of Ratoon Sugarcane

Apply Envoke postemergence over-the-top to ratoon sugarcane up to 24 inches tall at the rate of 0.3 oz./A. A high quality nonionic surfactant with a minimum of 80% surface-active agent should be added to the spray solution at 0.25% v/v or 1qt./100 gals.

Post-directed Applications Plant or Ratoon Sugarcane

Apply Envoke post-directed at the rate of 0.3-0.6 oz./A to plant or ratoon sugarcane that is 24 inches tall up through layby. The spray should be directed away from the upper plant parts (whorl) so as to minimize contact with the crop, while maximizing contact with target weeds. Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v (1 qt./100 gals.) or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals.).

TANK MIXTURES FOR SUGARCANE

Envoke can be tank mixed with all registered and commonly applied postemergence herbicides in sugarcane. Envoke may be tank mixed with ametryn (e.g., Evik®) for post-directed applications only. Reduction in weed control can occur when mixing Envoke with atrazine and other herbicides. Consult with your local Syngenta representative or extension agent regarding the compatibility of specific tank mix combinations. Envoke tank mixed with asulam provides a complementary broadleaf, grass, and sedge weed control spectrum.

A high quality nonionic surfactant (NIS) with a minimum of 80% surface-active agent should be added to the spray solution at 0.25% v/v or 1 qt./100 gals. When tank mixing Envoke and other herbicides, refer to both labels for weeds controlled and application information and follow all restrictions and precautions on both labels.

TARGET WEEDS

Applications should be made to actively growing weeds at the heights specified below.

Table 4: Weeds Controlled or Suppressed in Sugarcane with Envoke Applied Postemergence Over-the-Top or Postemergence-Directed

Common Name	Scientific Name	Control Level^	Postemergence Over-the-Top Rate (0.3 oz./A)	Post-Directed Rate (0.3-0.6 oz./A)*
			Weed Size Ranges for Optimum Control (Inches)	
Alligatorweed	*Alternanthera philoxeroides*	C	1-4	1-6
Asiatic dayflower	*Commelina communis*	S	1-4	1-4
Barnyardgrass	*Echinochloa crus-galli*	S	0.25-1	0.25-1
Bristly starbur	*Acanthospermum hispidum*	C	1-4	1-6
Broadleaf panicum	*Panicum adspersum*	C	1-4	1-6
Broadleaf signalgrass	*Brachiaria platyphylla*	S	0.25-1	0.25-1
Carpetweed	*Mollugo vertillata*	C	0.5-2	0.5-3
Cocklebur, common**	*Xanthium strumarium*	C	1-6	1-8
Coffee senna	*Cassia occidentalis*	C	1-5	1-6
Corn, volunteer (non-IT/IR)	*Zea mays*	C	1-5	1-6
Cudweed, wandering	*Gnaphalium pensylvanicum*	C	1-4	1-6
Dogfennel	*Eupatoriu m cappilliforium*	C	1-4	1-4
Fall Panicum	*Panicum dichotomiflorum*	S	1-4	1-6
Florida beggarweed	*Desmodium tortuosum*	C	1-4	1-5
Florida pellitory	*Parietaria floridana*	C	1-4	1-5
Guineagrass	*Panicum maximum*	S	1-4	1-4
Horse purslane	*Trianthema portulacastrum*	C	1-4	1-6
Hemp sesbania	*Sesbania exaltata*	C	1-4	1-5
Itchgrass	*Rottboellia cochinchinensis*	C	1-4	1-4
Johnsongrass (seedling)	*Sorghum halepense*	C	1-6	1-8
Johnsongrass (rhizome)	*Sorghum halepense*	S	4-10	4-10
Lambsquarters, common	*Chenopodium album*	C	0.5-2	0.5-3
Marestail/horseweed	*Conyza canadensis*	S	1-3	1-4
Morningglory:				
Entireleaf***	*Ipomoea hederacea var integriuscula*	C	1-4	1-5
Ivyleaf***	*Ipomoea hederacea*	C	1-5	1-6
Pitted***	*Ipomoea lacunosa*	C	1-5	1-6
Scarlet***	*Ipomoea coccinea*	C	1-4	1-4
Tall***	*Ipomoea purpurea*	C	1-3	1-4

Nutsedge***:				
Yellow	*Cyperus esculentus*	C	1-6	1-6
Purple	*Cyperus rotundus*	C	1-6	1-6
Peanut, volunteer	*Arachis hypogaea*	S	1-2	1-3
Pigweed**:				
Palmer**	*Amaranthus palmeri*	C	1-6	1-8
Redroot**	*Amaranthus retroflexus*	C	1-6	1-8
Smooth**	*Amaranthus hybridus*	C	1-6	1-8
Spiny	*Amaranthus spinosus*	C	1-6	1-8
Tall waterhemp**	*Amaranthus tuberculatus*	S	1-2	1-2
Ragweed, Common	*Ambrosia artemisiifolia*	C	1-4	1-6
Redweed	*Melochia corchorifolia*	C	0.5-2	0.5-3
Sicklepod	*Senna obtusifolia*	C	1-8	1-8
Spainishneedles	*Bidens bipinnata*	C	1-4	1-6
Soybean, volunteer (non-sts)	*Glycine max*	C	1-3	1-4
Sunflower, common**	*Helianthus annuus*	C	1-4	1-5
Toadflax, old field	*Linaia canadensis*	C	1-4	1-6
Velvetleaf	*Abutilon theophrasti*	C[1]	1-4	1-4
Wild poinsettia	*Euphorbia heterophylla*	C	0.5-2	0.5-3

^C = Control (85-100%) of weeds present at the time of application. C[1]= may require use of higher rates or repeated applications of Envoke to achieve control. S =Suppression. Suppression means significant activity but not always at a level generally considered acceptable for commercial weed control.

*Use higher rate on larger weeds within the size range.

**Certain biotypes of this weed are known to be resistant ALS herbicides. Envoke will not control these biotypes.

***For best control treat at 1-2 leaf stage of weed growth

GENERAL PRECAUTIONS OR RESTRICTIONS FOR SUGARCANE

- Do not exceed a maximum of 3 applications or a total of 1.5 oz. Envoke (0.07 lb. a.i./A) per season (see Table 3 for Envoke equivalent rate conversions).
- Do not apply Envoke within 100 days of sugarcane harvest.
- Make sequential applications at least 14 days apart.
- Do not apply to sugarcane under stress due to drought, standing water, heavy insect and/or disease pressure, low soil fertility, etc.
- Postemergence over-the-top applications of Envoke can result in yellowing of sugarcane and occasionally stunting. Symptoms may persist for a short period but have no effect on sugarcane yield.

- Degradation of Envoke in the soil is enhanced by soil with pH <7 and moist conditions. Application of Envoke to soils with pH >7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield. Alkaline soils increase the potential for injury to rotational crops. If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first 5 months following application of Envoke and/or less than 1 inch of rainfall/irrigation within the first month after application) rotational crop injury may occur. In areas where soil pH is >7.5 and/or a drought occur, a field bioassay prior to planting of the rotational crop is recommended.

Table 5: Rotational Crop Restrictions Following Sugarcane

Following normal crop harvest, which has been treated with one or more applications of Envoke, the crops listed below may be planted at, or after, the time interval specified from the last application of Envoke. If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

Rotational Crop Intervals in Months for Envoke in Sugarcane			
	Maximum Rate Applied Per Season		
Rotational Crop	**0.4 oz./A**	**0.9 oz./A**	**1.5 oz./A**
Bell pepper (transplanted)	12*	12*	12*
Cabbage	12	12*	12*
Celery	9	12*	12*
Chinese Cabbage	9	9*	12*
Cilantro (FL only)	9	9*	12*
Cotton	7	12	12
Corn, field	7	12	12
Corn, sweet	7	9	12
Lettuce	12	12*	12*
Parsley	9	9*	12*
Potato, Irish	12*	12*	12*
Radish	9	12*	12*
Rice	7	7	9
St. Augustine Sod	7	7*	9*
Snap Bean	7	9*	9
Soybean	7	9*	9*
Spinach	9	12*	12*
Tomato (transplanted)	3	12	12
Wheat, winter	3	5	7
All other crops	18*	18*	18*

*Field Bioassay. Take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended

rotational crop and allow to grow for three weeks. If, at the end of three weeks, no difference exists between the treated and untreated soil in root and shoot growth of the intended rotational crop, it is safe to plant the intended rotational crop with good growing conditions.

REPLANTING AFTER SUGARCANE CROP FAILURE

In the event of crop failure, sugarcane may be replanted immediately.

ALMOND (CA) AND CITRUS (AZ, CA, FL, GA, TX)

Envoke can be used as part of a glyphosate based weed control program in almonds and citrus for improved initial and/or residual of control of certain troublesome weeds.

APPLICATION TYPES AND INSTRUCTIONS FOR ALMOND AND CITRUS

Preemergence Weed Control in Established Orchards

Envoke may be applied at 0.2-0.4 oz./A to the orchard floor, avoiding contact with fruit, foliage and stems of almond and citrus trees. For best results, preemergence application should be made in the fall to a clean orchard floor for control of ryegrass, lambsquarters, prostrate spurge, annual bluegrass, hairy fleabane. Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% volume/volume (v/v) (1 qt./100 gals. spray solution), or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals. spray solution).

Postemergence Weed Control in Established Orhards

Envoke can be tank mixed with Touchdown® or other glyphosate formulations registered for use in established citrus or almonds for improved initial postemergence control and improved duration of control of the weeds noted above as well as those listed in Table 6. For tank mixtures, refer to both labels for weeds controlled, application information, and follow all restrictions and precautions on both labels

TANK MIXTURES FOR ALMOND AND CITRUS

Mix 0.2-0.4 oz. Envoke with Solicam®, Princep®, Gramoxone® Max, or glyphosate products registered for use in these crops. Applications should be made postemergence to target weeds under the tree canopy. Not more than three applications may be made per year. Applications should be at least 30 days apart. For tank mixtures, refer to both labels for weeds controlled, application information, and follow all restrictions and precautions on both labels.

TARGET WEEDS

Applications should be made to actively growing weeds at the heights specified below.

Table 6: Weeds Controlled or Suppressed in Almond and Citrus with Envoke Applied Postemergence

Common Name	Scientific Name	Control Level^	Postemerge Rate (0.2 oz./A) Weed Size Ranges for Optimum Control (Inches)	Postemerge Rate (0.4 oz./A)* Weed Size Ranges for Optimum Control (Inches)
Alligatorweed	*Alternanthera philoxeroides*	C	1-4	1-6
Asiatic dayflower	*Commelina communis*	S	1-4	1-4
Barnyardgrass	*Echinochloa crus-galli*	S	0.25-1	0.25-1
Bristly starbur	*Acanthospermum hispidum*	C	1-4	1-6
Broadleaf panicum	*Panicum adspersum*	C	1-4	1-6
Broadleaf signalgrass	*Brachiaria platyphylla*	S	0.25-1	0.25-1
Carpetweed	*Mollugo vertillata*	C	0.5-2	0.5-3
Cocklebur, common**	*Xanthium strumarium*	C	1-6	1-8
Coffee senna	*Cassia occidentalis*	C	1-5	1-6
Corn, volunteer (non-IT/IR)	*Zea mays*	C	1-5	1-6
Cudweed, wandering	*Gnaphalium pensylvanicum*	C	1-4	1-6
Dogfennel	*Eupatoriu m cappilliforium*	C	1-4	1-4
Fall Panicum	*Panicum dichotomiflorum*	S	1-4	1-6
Florida beggarweed	*Desmodium tortuosum*	C	1-4	1-5
Guineagrass	*Panicum maximum*	S	1-4	1-4
Horse purslane	*Trianthema portulacastrum*	C	1-4	1-6
Hemp sesbania	*Sesbania exaltata*	C	1-4	1-5
Itchgrass	*Rottboellia cochinchinensis*	C	1-4	1-4
Johnsongrass (seedling)	*Sorghum halepense*	C	1-6	1-8
Johnsongrass (rhizome)	*Sorghum halepense*	S	4-10	4-10
Lambsquarters, common	*Chenopodium album*	C	0.5-2	0.5-3
Marestail/horseweed	*Conyza canadensis*	S	1-3	1-4
Morningglory:				
Entireleaf***	*Ipomoea hederacea var integriuscula*	C	1-4	1-5
Ivyleaf***	*Ipomoea hederacea*	C	1-5	1-6
Pitted***	*Ipomoea lacunosa*	C	1-5	1-6
Scarlet***	*Ipomoea coccinea*	C	1-4	1-4
Tall***	*Ipomoea purpurea*	C	1-3	1-4

Nutsedge***:				
Yellow	*Cyperus esculentus*	C	1-6	1-6
Purple	*Cyperus rotundus*	C	1-6	1-6
Peanut, volunteer	*Arachis hypogaea*	S	1-2	1-3
Pigweed**:				
Palmer**	*Amaranthus palmeri*	C	1-6	1-8
Redroot**	*Amaranthus retroflexus*	C	1-6	1-8
Smooth**	*Amaranthus hybridus*	C	1-6	1-8
Spiny	*Amaranthus spinosus*	C	1-6	1-8
Tall waterhemp**	*Amaranthus tuberculatus*	S	1-2	1-2
Ragweed, Common	*Ambrosia artemisiifolia*	C	1-4	1-6
Redweed	*Melochia corchorifolia*	C	0.5-2	0.5-3
Ryegrass	*Lolium spp.*	C	1-2	-1-2
Sicklepod	*Senna obtusifolia*	C	1-8	1-8
Spainishneedles	*Bidens bipinnata*	C	1-4	1-6
Spurge	*Euphorbia spp.*	C	1-2	-1-2
Soybean, volunteer (non-STS)	*Glycine max*	C	1-3	1-4
Sunflower, common**	*Helianthus annuus*	C	1-4	1-5
Toadflax, old field	*Linaia canadensis*	C	1-4	1-6
Velvetleaf	*Abutilon theophrasti*	C[1]	1-4	1-4
Wild poinsettia	*Euphorbia heterophylla*	C	0.5-2	0.5-3

^C = Control (85-100%) of weeds present at the time of application. C[1]= may require use of higher rates or repeated applications of Envoke to achieve control. S =Suppression. Suppression means significant activity but not always at a level generally considered acceptable for commercial weed control.

*Use higher rate on larger weeds within the size range.

**Certain biotypes of this weed are known to be resistant ALS herbicides. Envoke will not control these biotypes.

***For best control treat at 1-2 leaf stage of weed growth

GENERAL PRECAUTIONS OR RESTRICTIONS FOR CITRUS AND ALMOND

- Apply Envoke to citrus or almond trees, which are more than 1-2 years old in their final growing location and where the soil is void of cracks and is firmly settled around the roots.
- Do not apply to sand or loamy sand soils. Do not apply to gravelly soils.
- Do not apply Envoke within 14 days of citrus harvest or within 3 days of almond harvest.
- Make sequential applications of Envoke at least 30 days apart.
- Do not exceed a total of 1.2 oz./A Envoke per crop season.

- Spray contacting citrus or almond foliage, stems, or roots can cause crop injury.

- Degradation of Envoke in the soil is enhanced by soil with pH <7 and moist conditions. Application of Envoke to soils with pH exceeding 7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield. Alkaline soils increase the potential for injury to rotational crops. If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first 5 months following application of Envoke and/or less than 1 inch of rainfall/irrigation within the first month after application) rotational crop injury may occur. In areas where soil pH is >7.5 and/or a drought occur, a field bioassay prior to planting of the rotational crop is recommended.

- Cease Envoke applications 1-2 years prior to termination of orchard.

- Avoid Envoke application to trees weakened by or recovering from stress caused by, but not limited to drought, flood, disease, nematodes, winter injury, mechanical injury, frost, excessive fertilizer or soil salts, low fertility, or pesticides

Table 7: Rotational Crop Restrictions Following Almond and Citrus

Following normal crop harvest, which has been treated with one or more applications of Envoke, the crops listed below may be planted at, or after, the time interval specified from the last application of Envoke. If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

Rotational Crop Intervals in Months for Envoke in Almond and Citrus	
	Maximum Rate Applied Per Season
Rotational Crop	**1.2 oz./A**
Bell pepper (transplanted)	18*
Cotton	18
Cucurbits	18*
Grain sorghum	18
Parsley	18*
Potato, Irish	18*
Radish	18*
Rice	18
Tomato (seeded)	18*
Wheat, winter	18
Leafy vegetables	18*
All other crops	18*

*Fleld Bioassay. Take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop and allow to grow for three weeks. If, at the end of three weeks, no

difference exists between the treated and untreated soil in root and shoot growth of the intended rotational crop, it is safe to plant the intended rotational crop with good growing conditions.

REPLANTING OF ALMOND AND CITRUS TREES

Prior to replanting of almond or citrus trees, cease making Envoke applications to the established grove at least 1-2 years in advance. For all other crops, wait 18 months after last application before planting.

TOMATO (TRANSPLANTED TOMATOES IN ALABAMA, CALIFORNIA, FLORIDA, GEORGIA, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE ONLY)

Envoke can be used postemergence or as a postemergence-directed spray application in transplanted tomatoes (fresh market or processing) to aid in the control of certain problem weeds.

APPLICATION TYPES AND INSTRUCTIONS FOR TRANSPLANTED TOMATOES

Post-directed Applications in Transplanted Tomatoes Grown in Plastic

Envoke can be applied at 0.10/0.15 oz./A postemergence or 0.10/0.15-0.20 oz./A post-directed to transplanted tomatoes grown in plastic for control of emerged nutsedge and other weeds listed in Table 8. A maximum of one application per season postemergence to tomatoes is allowed. Follow-up treatments must be post-directed. For post-directed applications, adjust spray to avoid contact with tomato plants. The application should be made prior to fruit set and at least 45 days prior to harvest. A high quality nonionic surfactant (NIS) with a minimum of 80% surface-active agent should be added to the spray solution at 0.25% volume/volume (v/v) or 1 qt./100 gals. A registered preemergence herbicide such as Dual MAGNUM may be used for improved weed control.

Row Middle Weed Control in Transplanted Tomatoes Grown in Plastic

Envoke may be applied to row middles in transplanted tomatoes grown in plastic for weed control at 0.10/0.15-0.20 oz./A alone or in mixture with Touchdown, Gramoxone Max, Reglone®, Dual MAGNUM, Dual II MAGNUM®, Aim™ or Sencor®. Tank mixtures with Select or Poast may be mixed with Envoke but antagonism on grasses, reduced grass control will occur. Add to the finished spray solution either a high quality nonionic surfactant with a minimum of 80% surface-active agent at 0.25% v/v (1 qt./100 gals.) or a nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier at 0.5-1.0% v/v (2-4 qts./100 gals.).

Refer to product labels for precautionary statements, restrictions, rates, and a list of pests controlled.

TANK MIXTURES FOR TOMATO

Do not apply Envoke with any other pesticide, fertilizer, or additive other than the NIS and/or drift control agent, or unacceptable injury may occur.

TARGET WEEDS

Envoke can be used to aid in the control of annual sedges and both yellow and purple nutsedge in transplanted tomatoes. When used postemergence, or postemergence as a directed spay in transplanted tomato, Envoke will provide control or partial control of the weeds listed in Table 8. Applications should be made to actively growing weeds at the heights specified below.

Table 8: Weeds Controlled or Suppressed With Envoke Applied Postemergence Over-the-Top or Postemergence-Directed in Tomato

Common Name	Scientific Name	Control Level^	Rate (0.1 oz./A)	Rate (0.15 oz./A)	Rate (0.2 oz./A)
			Weed Size Ranges for Optimum Control (Inches)		
Barnyardgrass	*Echinochloa crus-galli*	S	0.25-0.5	0.25-1	0.25-1
Bristly starbur	*Acanthospermum hispidum*	C	1-2	1-4	1-6
Broadleaf signalgrass	*Brachiaria platyphylla*	S	0.25-0.5	0.25-1	0.25-1
Carpetweed	*Mollugo vertillata*	C	0.5-1	0.5-2	0.5-3
Cocklebur, common*	*Xanthium strumarium*	C	1-4	1-5	1-6
Coffee senna	*Cassia occidentalis*	C	1-4	1-5	1-6
Corn, volunteer (non-IT/IR)	*Zea mays*	C	1-4	1-5	1-6
Florida beggarweed	*Desmodium tortuosum*	C	1-3	1-4	1-5
Horse purslane	*Trianthema portulacastrum*	S		0.5-1	0.5-2
Hemp sesbania	*Sesbania exaltata*	C	1-3	1-4	1-5
Johnsongrass (seedling)	*Sorghum halepense*	C[1]	1-2	1-4	1-6
Lambsquarters, common	*Chenopodium album*	C	0.5-1	0.5-2	0.5-3
Marestail/horse-weed	*Conyza canadensis*	S	1-2	1-3	1-4

Morningglory:					
Entireleaf**	*Ipomoea hederacea var integriuscula*	C	1-2	1-4	1-5
Ivyleaf**	*Ipomoea hederacea*	C	1-4	1-5	1-6
Pitted**	*Ipomoea lacunosa*	C	1-4	1-5	1-6
Tall**	*Ipomoea purpurea*	C	1-2	1-3	1-4
Nutsedge***:					
Yellow	*Cyperus esculentus*	C[1]	2-6	2-6	2-6
Purple	*Cyperus rotundus*	S	2-3	2-4	2-4
Peanut, volunteer	*Arachis hypogaea*	S		1-2	1-3
Pigweed*:					
Palmer*	*Amaranthus palmeri*	S	1-2	1-2	1-2
Redroot*	*Amaranthus retroflexus*	C[1]	1-3	1-4	1-6
Smooth*	*Amaranthus hybridus*	C[1]	1-3	1-4	1-5
Tall waterhemp*	*Amaranthus tuberculatus*	S	1-2	1-2	1-2
Ragweed, Common	*Ambrosia artemisiifolia*	C	1-2	1-4	1-6
Redweed	*Melochia corchorifolia*	C	0.5-1	0.5-2	0.5-3
Sicklepod	*Senna obtusifolia*	C	1-3	1-4	1-6
Soybean, volunteer (non-STS)	*Glycine max*	C	1-2	1-3	1-4
Sunflower, common*	*Helianthus annuus*	C	1-3	1-4	1-5
Velvetleaf	*Abutilon theophrasti*	C[1]	1-4	1-4	1-4
Wild poinsettia	*Euphorbia heterophylla*	C	0.5-1	0.5-2	0.5-3

^C = Control (85-100%) of weeds present at the time of application. C[1]= may require use of higher rates or repeated applications of Envoke to achieve control. S =Suppression. Suppression means significant activity but not always at a level generally considered acceptable for commercial weed control.

*Certain biotypes of this weed are known to be resistant ALS herbicides. Envoke will not control these biotypes.

**For best control treat at 1-2 leaf stage of weed growth, Improved control may be achieved using Dual MAGNUM preemergence followed by Envoke.

***Will provide control of emerged yellow nutsedge at 0.10 oz./A if Dual MAGNUM used preemergence under plastic

GENERAL PRECAUTIONS OR RESTRICTIONS FOR TRANSPLANTED TOMATOES

- Do not apply more than 0.3 oz. of Envoke per acre per season from all application types and timings.
- Allow at least two weeks after transplanting before applying Envoke.
- For post-directed application, tomato plants should be sufficiently large to allow for good spray coverage of target weeds while avoiding spray contact with the growing point of tomato plants.
- Do not apply Envoke within 45 days of tomato harvest.
- If spray comes in contact with tomato foliage, Envoke may cause transient yellowing, delayed growth/maturity, and stunting.
- To minimize crop response, Envoke should not be applied if tomato plants are under severe stress due to drought, cold weather, excessive moisture, low soil fertility, compacted soils, or heavy insect/disease pressure.
- Degradation of Envoke in the soil is enhanced by soil with pH <7 and moist conditions. Application of Envoke to soils with pH >7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield. Alkaline soils increase the potential for injury to rotational crops. If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first 5 months following application of Envoke and/or less than 1 inch of rainfall/irrigation within the first month after application) rotational crop injury may occur. In areas where soil pH is >7.5 and/or a drought occur, a field bioassay prior to planting of the rotational crop is recommended.
- Do not apply Envoke to tomatoes treated with soil-applied organophosphate insecticides. Do not apply Envoke within 21 days before or 7 days after a foliar organophosphate application.

Table 9: Rotational Crop Restrictions Following Tomato

Following normal crop harvest, which has been treated with one or more applications of Envoke, the crops listed below may be planted at, or after, the time interval specified from the last application of Envoke. If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

Rotational Crop Intervals in Months for Envoke in Tomato	
	Maximum Rate Applied Per Season
Rotational Crop	**0.3 oz./A**
Bell pepper (transplanted)	12
Cotton	1
Corn, field	7
Corn, sweet	7
Cucurbits (transplanted)	18
Grain sorghum	7
Parsley	12*
Peanut	7
Potato, Irish	12*
Radish	12*
Rice	7
Soybean	7
Sugarcane	1
Tobacco (transplanted)	7
Tomato (transplanted)	3
Wheat, winter	3
All other crops	18*

*Field Bioassay. Take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop and allow to grow for three weeks. If, at the end of three weeks, no difference exists between the treated and untreated soil in root and shoot growth of the intended rotational crop, it is safe to plant the intended rotational crop with good growing conditions.

REPLANTING AFTER CROP FAILURE

In the event an Envoke treated tomato crop is lost (e.g., due to hail), tomatoes may be re-transplanted immediately, as long as the plant bed has not been disturbed. For all other rotational crops, see the Table 9 above. In case a preemergence herbicide was used, follow the rotational crop restrictions on that label as well as Envoke.

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Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP

(CONTAINER LABEL)

Envoke®

Herbicide

Group	2	Herbicide

A selective herbicide for control of certain broadleaf, sedge, and grass weeds in almond, citrus, cotton, sugarcane, and transplanted tomato

Active Ingredient:

2-pyridinesulfonamide, N-[[(4,6-dimethoxy-2-pyrimidinyl)amino] carbonyl]-3-(2,2,2-trifluoroethoxy)-, monosodium salt, monohydrate; trifloxysulfuron-sodium (ISO draft proposal)*:	75.0%
Other Ingredients:	25.0%
Total:	100.0%

*CAS No: 290332-10-4

KEEP OUT OF REACH OF CHILDREN.

CAUTION— PRECAUCIÓN

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.)

See additional precautionary statements and directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1132

EPA Est. 70992-FRA-001

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful is absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
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 inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call **1-800-888-8372**	

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsates.

This pesticide is toxic to vascular plants and should be used strictly in accordance with the drift precautions on this label in order to minimize off-site exposures.

Ground Water Advisory

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where the water table is shallow may result in ground water contamination.

Storage and Disposal

Container Disposal

Triple rinse (or equivalent), then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

Chemigation

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

Product of France

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

3 ounces
Net Weight

SCP