

SPECIAL LOCAL NEED SECTION 24(c) SUPPLEMENTAL LABELING

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Nufos[®] 4E

FOR USE AND DISTRIBUTION ONLY IN MISSISSIPPI USE DIRECTIONS FOR THE STATE OF MISSISSIPPI

ATTENTION

- It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Nufos 4E insecticide before applying. Carefully follow all precautionary statements and applicable use directions.
- Except as described below, use of Nufos 4E according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Nufos 4E.

PRODUCT NAME	EPA REG. NO.	MISSISSIPPI SLN NO.
NUFOS 4E	67760-28	MS-040005

DIRECTIONS FOR USE

GENERAL INFORMATION

Nufos 4E insecticide forms an emulsion when diluted with water and is suitable for use in all conventional spray equipment. Consult your state experiment station or state extension service for proper timing of applications.

General Use Precautions

Note to User: In the state of Mississippi, Nufos 4E may be applied only to crops listed in the Approved Crops section of this supplemental labeling (EPA SLN MS-050021) using ground equipment only. In Mississippi, do not apply Nufos 4E to cotton or soybean.

Mixing Directions

To prepare the spray, add a portion of the required amount of water to the spray tank and with the spray tank agitator operating add the Nufos 4E. Complete filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

Nufos 4E may also be used in tank mixtures with certain herbicides and/or with non-pressure fertilizer solutions as recommended under specific crop use directions. Prepare tank mixtures in the same manner as recommended above for use of Nufos 4E alone. When tank mixtures of Nufos 4E and herbicides are involved, add wettable powders first, flowables second, and emulsifiable concentrates last. Where a fertilizer solution is involved, it is strongly recommended that a fertilizer pesticide compatibility agent such as Unite or Complex be used. Maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture. Do not allow spray mixtures to stand overnight.

APPROVED CROPS

FIELD CORN, SWEET CORN (INCLUDING CORN GROWN FOR SEED)

For use to control cutworms, armyworms, corn earworm, corn rootworm adults, chinch bugs, grasshoppers, wireworms, flea beetle larvae and adults, aphids, billbugs, grubs, western bean cutworm, corn borers, symphylans, common stalk borer, and lesser cornstalk borer.

Preplant Incorporation Treatment

Use Nufos 4E at the following rates by application in sufficient water to the soil surface and incorporate into the soil:

Pests	Nufos 4E (pt/acre)
cutworms symphylans	2 -4
wireworms billbugs flea beetle larvae grubs seed corn maggots seed corn beetle	4
lesser cornstalk borer corn rootworm larvae	6

Use recommended rate in not less than 10 gallons of water per acre and apply as a broadcast spray to the soil surface using suitable power-operated ground spray equipment. On the same day of treatment, incorporate the insecticide into the top 2 to 4 inches of soil using a disc, field cultivator or equivalent equipment.

Nufos 4E may also be applied in tank mixtures with non-pressure fertilizer solutions and/or with Bladex, Eradicane, Sutan, Lasso, Dual, and atrazine herbicides. See **Mixing Directions** for further information. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for the other products used in combination with Nufos 4E.

Preplant, At-Plant or Preemergence Treatment in Conservation Tillage

Use Nufos 4E at the following rates by application in sufficient water to surface trash and exposed soil:

Pests	Nufos 4E (pt/acre)
cutworms armyworms	1-2

Use recommended rate in not less than 20 gallons of water per acre and apply as a broadcast spray using suitable power-operated ground spray equipment. Use higher rates for residual control. Nufos 4E may also be applied in tank mixtures with non-pressure fertilizer solutions and/or with paraquat and Glyphos herbicide. See **Mixing Directions** for further information. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for the other products used in combination with Nufos 4E.

Cultivation Time Treatment

Use Nufos 4E at the rate of 2 pints per acre to control corn rootworm larvae. Apply Nufos 4E as a water emulsion on both sides of the row at the base of the plants just ahead of the cultivator shovels. Cover the insecticide with soil around the brace roots. The best time to apply a basal treatment of a soil insecticide with cultivation is near the beginning of egg hatch. A cultivation application of Nufos 4E may be made in addition to an at planting application of Nufos 15G granular insecticide.

Postemergence Treatment

Use Nufos 4E at the following rate by application in sufficient water to ensure thorough coverage of treated plants:

Pests	Nufos 4E (pt/acre)	
grasshoppers	½ - 1	
armyworms	1 - 2	
chinch bugs		
aphids		
corn rootworm adults		
cutworms		
webworms		
western bean cutworm		
European corn borer (see note)		
southwestern corn borer		1 ½ - 2 e
corn earworm		
billbugs	2 - 3	
lesser cornstalk borer		
flea beetle adults		
common stalk borer		

Note: The recommended dosage will control silk clipping by corn rootworm adults. For European corn borer control, use 1 ½ to 2 pints per acre when application is made with power-operated ground equipment. See text below for generation specific treatment information.

Treat when field counts indicate that pests are or may become a problem. For best billbug, chinch bug and flea beetle control, apply with sufficient water to ensure a minimum spray volume of 20 to 40 gallons per acre and 40 psi using **ground spray equipment**. On corn less than 6 inches tall, apply the insecticide spray in a 9 to 12 inch wide band over the row. On corn greater than 6 inches tall, apply the insecticide spray using drop nozzles directed to the base of the plant. Do not reduce the dosage for banded or directed applications. Concentrate the full labeled dosage rate in the treated zone. When chinch bugs continue to immigrate to corn over a prolonged period or under extreme pressure, a second application of Nufos 4E may be needed.

For cutworm, webworm, western bean cutworm, armyworm, aphid, European and southwestern corn borer, grasshopper, lesser cornstalk borer, corn rootworm adult, corn earworm, and common stalk borer control, apply as a broadcast spray using power-operated ground spray equipment. Control may be reduced at low spray volumes under high temperature and wind conditions. For cutworms, it is preferable to apply Nufos 4E when soil is moist and worms are active on or near the soil surface. If ground is dry, cloddy or crusty at time of treatment, worms may be protected from the spray and effectiveness will be reduced. If such conditions exist, shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment may improve control. Apply as needed to maintain control. Use higher rates for larger worms or when heavy cutworm infestations are expected or present. Fields should be monitored for cutworm presence or damage. A second application may be required if damage or density levels exceed economic thresholds established for your area. Consult your agricultural experiment station or extension service specialist for additional information concerning control practices in your area. For webworm control, shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment is necessary. For first-generation European corn borer control, treat when 25 to 50 percent of the corn plants show pinhole feeding or leaf-feeding scars. For maximum control potential, ground applications of Nufos 4E should be directed into the corn leaf whorls. Scout fields within 5 days after application to determine if a second application is needed. University research indicates that achieving greater than 50% control of first-generation European borer with a single liquid insecticide treatment is highly dependent on timing, insecticide placement and weather conditions. Treatment for control of second-generation European corn borer should be applied when field counts of egg masses indicate an infestation is present or about to develop. For Southwestern corn borer control, treat when field counts of egg masses indicate pests are or may become a problem. A second application may be applied 10 to 14 days later, if needed due to reinfestation. For common stalk borer control, treat approximately 11 days after application of Glyphos herbicide or after complete burndown with paraquat herbicide (3 to 5 days). Do not use Nufos 4E in combination with the burndown herbicide for control of common stalk borer.

Restrictions

Do not apply within 35 days before harvest of grain. Do not apply more than a total of 15 pints of Nufos 4E per acre per season. Do not allow livestock to graze in treated areas nor harvest treated corn silage as feed for meat or dairy animals within 14 days after last treatment. Do not feed treated corn fodder to meat or dairy animals within 35 days after last treatment.

ONIONS (DRY BULB)

Use Nufos 4E to control onion maggot by application as an in-furrow drench. Apply Nufos 4E at the rate of 1.1 fluid ounce per 1000 linear feet of row at an 18-inch row spacing. Use a minimum of 40 gallons of total drench per acre. Incorporate to a depth of 1 to 2 inches.

Restrictions

Do not make more than one application per year.

PEANUTS

For suppression of wireworms, apply Nufos 4E at a rate of 4 pints per acre as a preplant broadcast spray to the soil surface followed by immediate soil incorporation to a depth of 3 to 4 inches. Use a minimum of 10 gallons of total spray per acre.

Restrictions

The combined total of preplant and postplant applications of Nufos 4E and Nufos 15G must not exceed 4 pounds active ingredient per acre per season. Do not make more than one application per season. Do not harvest within 21 days after treatment. Do not feed treated peanut forage or hay to meat or dairy animals.

SORGHUM – GRAIN SORGHUM (MILO)

Use Nufos 4E insecticide for control of the following pests at the dosages indicated:

Pests	Nufos 4E (pt/acre)	Specific Directions
chinch bugs	1 – 2	Apply as a directed spray toward the base of the plant using power-operated ground spray equipment with sufficient water to ensure coverage of an 8 to 12 inch band centered in the row. On plants less than 6 inches high, apply an 8 to 12 inch band over the row. Do not reduce the dosage for banded or directed applications. Concentrate the full labeled dosage rate in the treated zone.

Mix the specified dosage in enough water to ensure thorough coverage and apply using suitable ground spray equipment. To minimize chemical injury, do not apply Nufos 4E to drought stressed grain sorghum within 3 days following irrigation or rain except where the product is applied in irrigation water.

Precaution: Be aware that sorghum lines used in seed production fields may be more sensitive to chemical injury. Susceptible inbred lines or hybrids are likely to be at greater risk of yield-reducing chemical injury when sprayed at the higher rates of application. Do not apply more than 1 pint per acre of Nufos 4E to seed sorghum if the additional risk of crop injury is unacceptable.

Restrictions

The treated crop is not to be used for grain, forage, fodder, hay, or silage within 30 days after application of 1 pint of Nufos 4E per acre or within 60 days after application of rates above 1 pint per acre. Do not treat sweet varieties of sorghum. Do not apply more than 3 pints of Nufos 4E per acre per season.

SWEET POTATOES

Use Nufos 4E to reduce the feeding damage caused by populations of *Conderus* wireworm, *Systema* flea beetle and the sweet potato flea beetle. Apply at the rate of 4 pints per acre as a ground broadcast (overall) spray to the soil surface followed by incorporation. Mix the specified dosage with enough water to obtain uniform coverage and apply as a coarse spray using suitable ground spray equipment. Incorporate the insecticide to a depth of 4 to 6 inches as soon as possible after application by using a rotary hoe, disc cultivator, or other suitable incorporation equipment. Plant the crop in the usual manner no later than 14 days after treatment (any delay in planting will reduce the length of time that Nufos 4E will protect against feeding damage). Nufos 4E will not control false wireworms or white fringe beetle or other grubs that attack sweet potatoes.

Restrictions

Do not make more than one application per season. Do not harvest within 125 days of treatment.

TOBACCO

Use Nufos 4E for preplant treatment to control larvae of cutworms, flea beetles, mole crickets, root maggots, and wireworms. Apply 2 to 3 quarts of Nufos 4E per acre in not less than 10 gallons of water as a ground broadcast (overall) spray to the soil surface one week before transplanting. Immediately

following application, incorporate the insecticide into the soil to a depth of 2 to 4 inches using suitable equipment. The application of Nufos 4E will also suppress the movement of imported fire ants into treated fields.

To control the above insects and low to moderate populations of rootknot nematodes in North Carolina, South Carolina, and Virginia, use Nufos 4E at the rate of 5 quarts per acre. To control the above insects and moderate populations of rootknot nematodes in all tobacco growing regions, use Nufos 4E in a tank mix with Nematicur 3 at the rate of 2 quarts of Nufos 4E plus 4 quarts of Nematicur 3 nematicide per acre. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for Nematicur 3 used in combination with Nufos 4E. Apply the specified dosage in not less than 10 gallons of water as a broadcast (overall) spray to the soil surface 24 to 48 hours before bedding and transplanting. Immediately following application, incorporate into the soil to a depth of at least 4 inches using suitable equipment. Where the nematode species *Meloidogyne arenaria* or *M. javanica* are present or high populations of *M. incognita*, apply Telone* II soil fumigant at the recommended label rate.

Before broadcast application of Nufos 4E onto existing beds, knock down beds to final shape for transplanting. Use of PTO-driven implements that will incorporate Nufos 4E to a depth of 4 inches is recommended.

Restrictions

Do not make more than one application per season.

PECANS

Use Nufos 4E at the dosages indicated by application as a foliar spray to control pests listed in the following table. Mix the required dosage in sufficient water to ensure thorough and complete coverage of the foliage and crop and apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays applied to tree nut crops, mix the required dosage in sufficient water to allow for spray to runoff. For concentrate sprays, apply an equivalent amount of Nufos 4E per acre. Treat when pests appear or in accordance with local conditions. Consult your state agricultural experiment station, certified pest control advisor, or extension service specialist for specific use information in your area.

Use Nufos 4E at the rates indicated to control the listed pests.

Pests	Dosage of Nufos 4E (pt/acre) (Dilute or Concentrate)	Remarks and Restrictions
pecan nut casebearer fall webworm	1 ½ - 4	Make no more than five applications per year.
<i>Phylloxera</i> spp. ¹ black pecan aphid hickory shuckworm ² pecan leaf scorch mite (suppression) ³ fire ants and other ant species ⁴	2 – 4	Do not apply within 28 days of harvest. Do not allow livestock to graze in treated orchards. Make no applications of tank mixtures closer to harvest than the longest pre-harvest interval shown for any of the products in the tank mixture.
yellow pecan aphid black margined aphid	1 – 4 pints of Nufos 4E plus: 5.33 fl oz of Pydrin 2.4E, or 1.70 fl oz of Asana 1.9EC, or	For dilute applications with ground equipment use at least the minimum rate of Nufos 4E listed for the pest. Apply in 100-600 gallons of water per acre. Up to 20 pints of Nufos 4E may be applied per acre per

	3.00 fl oz of Ammo 2.5EC, or 2.56 fl oz of Cymbush 3E	year.
¹ For best Phylloxera spp. control, make 2 applications at a 7 to 10 day interval using a minimum of 1.0 pint of Nufos 4E per acre starting at bud swell. ² For best results make 2 applications, 10 to 14 days apart. ³ To suppress pecan leaf scorch mite, use a preventative program. ⁴ For ant control, apply as an orchard floor spray. Do not apply where weed growth or other obstructions prevent uniform coverage of the orchard floor.		

VEGETABLES

Use Nufos 4E at the dosages indicated to control the pests listed in the following table. To avoid phytotoxicity in vegetables, except Brussels sprouts, do not mix with other pesticide products or treat plants that are under extreme heat and drought stress.

Crop	Pests	Dosage Nufos 4E	Use Directions	Restrictions
cauliflower	root maggot	1.6 – 2.4 fl oz/ 1000 linear ft of row	For direct seed crops apply the specified dosage in a water-based spray as a 4-inch wide band over the row at planting time.	Do not apply more than 2 pints of Nufos 4E to cauliflower planted in 40-inch rows. Use proportional amounts for other row spacings no to exceed 4 pints of Nufos 4E per acre.
broccoli Brussels sprouts cabbage Chinese cabbage collards kale kohlrabi turnips	root maggot	1.6 – 2.75 fl oz/1000 linear ft of row	Shallow incorporation is necessary. Placement behind the planter shoe and in front of the presswheel is recommended. For transplanted crops , apply Nufos 4E as a water-based spray directed to the base of the plants immediately after setting. Use a minimum of 40 gallons of total spray per acre. Do not add any additional adjuvants, surfactants or spreader stickers. Do not apply as a foliage application.	Do not apply more than 2.6 pints of Nufos 4E per acre to broccoli, Brussels sprouts, cabbage, Chinese cabbage, collards, kale, kohlrabi, and turnips planted in 40-inch rows. Do not apply more than 4 ½ pints of Nufos 4E per acre to these crops in 20-inch rows (or two rows per bed). Use proportional amounts for other row spacings not to exceed 4 ½ pints of Nufos 4E per acre.
Crop	Pests	Dosage Nufos 4E	Use Directions	Restrictions

broccoli cabbage	root aphid	1.2 fl oz/1000 linear ft of row for single row plantings, and 2.4 fl oz/1000 linear ft of row for double row plantings.	Apply Nufos 4E in a water emulsion or with liquid fertilizer injected as a sidedress on each side of the row after plants are established. Avoid mechanical damage to crop roots. Use a minimum of 15 gallons of total spray volume per acre.	Do not make more than one application per season or apply within 30 days before harvest.
Brussels sprout	armyworms cabbage aphid cutworms imported cabbageworm striped flea beetle (adult)	1 – 2 pints/acre	Apply Nufos 4E with conventional power- operated spray equipment in 20 to 150 gallons of water per acre. Apply when insects appear on foliage and at 7 to 14 day intervals thereafter as needed. Consult your state agricultural experiment station, extension service specialist, or integrated pest control advisor for proper time to treat in your area.	Do not make more than 6 applications per season. Do not apply within 21 days before harvest.
radishes	root maggot	1.0 fl oz/1000 linear ft of row	Apply the specified dosage as a water-based drench in the seed furrows with the seed at planting time. Use a minimum of 40 gallons of total drench per acre.	Do not apply more than 5 ½ pints of Nufos 4E per acre or make more than one application per season.
rutabagas	root maggot	1.6 – 3.3 fl oz/1000 linear ft of row	Apply the specified dosage in a water-based spray as a 4-inch wide band over the row at planting time, behind the planter shoe and in front of the press wheel to achieve shallow incorporation. Use a minimum of 40 gallons of total spray volume per acre.	Do not apply more than 4 ½ pints of Nufos 4E per acre or make more than one application per season. Do not use rutabaga tops for food or feed purposes.

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