

TABLE 12.1. General host status of field crops for the common southern plant-parasitic nematode species

Nematode Common name Genus species	Cotton <i>Gossypium</i> <i>hirsutum</i>	Soybeans <i>Glycine max</i>	Corn <i>Zea mays</i>	Peanuts <i>Arachis hypo-</i> <i>gaea</i>	Wheat <i>Triticum</i> <i>aestivum</i>
Southern root-knot	Host <sup>1</sup>	Host <sup>1</sup>	Host	Non-host	Non-host
<i>Meloidogyne incognita</i> race 3, 4					
Peanut root-knot	Non-host	Host	Host	Host <sup>1</sup>	Non-host
<i>Meloidogyne arenaria</i> race 1					
Javanese root-knot	Non-host	Host	Host	Non-host	Non-host
<i>Meloidogyne javanica</i>					
Reniform	Host	Host <sup>1</sup>	Non-host	Non-host	Non-host
<i>Rotylenchulus reniformis</i>					
Soybean cyst	Non-host	Host <sup>1</sup>	Non-host	Non-host	Non-host
<i>Heterodera glycines</i>					
Lesion	Host	Host	Host	Host	Host
<i>Pratylenchus</i> spp.					
Lance	Host	Host	Host	Non-host	Host
<i>Hoplolaimus</i> spp.					
Sting	Host	Host	Host	Host	Host
<i>Belonolaimus</i> spp.					
Stubby-root	Non-host	Non-host	Host	Non-host	Host
<i>Paratrichodorus</i> spp.					

<sup>1</sup>Resistant or tolerant cultivars may be available for these crops. Check with your state Extension service or seed supplier for the most recent information on cultivars.

**TABLE 12.2.** Nematicides registered on cotton, corn and soybeans

Chemical name	Trade name	Formulation	Label application rate
1, 3-dichloropropene	Telone II	Fumigant	3–6 gallons per acre. Apply as a broadcast or row treatment with a fumigant shank. Shank trace should be sealed with soil to prevent loss of fumigant. Leave soil undisturbed for 7 days after application.
Sodium methyldithiocarbamate (anhydrous)	Vapam HL	Fumigant	37.5–75 gallons per acre depending on crop, target pest and soil conditions. Apply post harvest and 14–21 days prior to planting a new crop.
Potassium N-methyldithiocarbamate	K-pam	Fumigant	30–60 gallons per acre depending on crop, target pest and soil conditions. Apply post harvest and 14–21 days prior to planting a new crop.
Ethoprophos	Mocap	Liquid and granules	0.75–1 pound of active ingredient of a 15 percent material per 1,000 feet of row in a band 12–15 inches wide over the row. Mix with the top 2–4 inches of soil with mechanical equipment right after application.
Terbufos	Counter	Granules	6–8 ounces per 1,000 feet of row for any row spacing. Do not exceed 8.7 pounds per acre.
Aldicarb	Meymik	Granules	3.5–10 pounds per acre. Drill granules just below seed line or place in the seed furrow and cover with soil. If rate exceeds 7 pounds per acre, apply granules in a 4- to 6-inch band and work into the soil or cover with soil. Plant seed in or above the zone. Sidedress granules 8–16 inches to one or both sides of the plant row at 2–5 inches deep at a rate of 5–14 pounds per acre.
Oxamyl	Vydate	Liquid	17 ounces per acre. Foliar applications must follow a pre-plant soil fumigant or an at-planting band or in-furrow application of a contact nematicide. Vydate C-LV can be applied as a single or a sequential broadcast rate of 8.5–17 ounces. The initial application in the 2nd to 5th true leaf stage and repeating 7–14 days later.
Thiodicarb and Imidacloprid	Aeris and Gaucho	Seed treatment	0.75 mg ai/seed + 0.375 mg ai/seed. All seed-applied components are applied by the manufacturer.
Abamectin and Azoxystrobin and Fludioxonil and Mefenoxam and Thiamethoxam	Avicta and Dynasty and Cruiser	Seed treatment	0.15 mg ai/seed + 0.34 mg ai/seed + 0.03mg ai/seed. All seed-applied components are applied by the manufacturer.
Fluopyram and Imidacloprid	Velum Total	In-furrow spray	10–18 fluid ounces per acre. Apply as an in-furrow spray at planting.
Harpin protein	N-Hibit	Seed treatment	3 ounces per hundredweight of seeds. Apply to seed in a sufficient amount of water to provide good coverage up to 24 hours prior to application.
<i>Paecilomyces lilacinus</i>	Nem-Out	Soil drench	0.15–0.30 pounds per acre applied as a soil drench in 30–40 gallons of water
<i>Pasteuria</i> spp.	Clariva Elite	Seed treatment	5.6 fluid ounces per hundredweight of seeds
<i>Bacillus firmus</i>	VOTIVO FS	Seed treatment	7 fluid ounces per hundredweight. All seed-applied components are applied by the manufacturer.