

USE TERR O CIDE 54 45 as a fumigation treatment prior to planting those crops which may suffer from the damaging effects of certain soil borne pests such as NEMATODES (root knot, stunt, root lesion, burrowing, citrus, stem, bulb, free living (sting, ring, awl, spiral, lance, pin, stubby root, stylet, dagger) INSECTS (wireworms, symphillids (garden centipedes), white grubs) DISEASES (*Fusarium*, *Verticillium*, *Pythium*, *Rhizoctonia*). Also effective against black shank, Granville wilt, and black root rot of tobacco.

Asparagus	Cauliflower	Lettuce	Peanuts	Potatoes
Broccoli	Corn (sweet)	Melons	Peppers	Strawberries
Lima Beans	Cotton	Ornamentals	Pineapple	Tobacco
Carrots	Cucumbers	Okra	Fruit tree	Tomatoes
	Eggplant		planting sites	

WHEN TO TREAT: Fumigate with TERR O CIDE 54-45 any season of the year when optimum soil preparation can be accomplished and preferably when the 6 inch soil temperature is between 45 and 75 F. Late summer or early fall is recommended for symphillid control.

SOIL PREPARATION: Remove or cover all plant residue with fertile, moist soil far enough in advance of fumigation to allow for maximum decomposition. Excessive trash can reduce effective fumigation by absorbing fumigant or preventing effective soil sealing. Deep tillage (12-18 inches) by plowing or subsoiling prior to fumigation improves total pest control. Do not till the soil below the plow pan following fumigation and prior to planting. Till the soil to a very fine condition, leaving few if any clods. Optimum seedbed moisture, including the soil surface, is the most essential factor for effective fumigation. Do not fumigate dry soil. Seedbed moisture for at least 10 days prior to fumigation improves soil borne pest control.

HOW TO TREAT: OVERALL (broadcast) chisel injection equipment should place uniform streams of TERR-O-CIDE 54-45 10-12 inches apart, 6-8 inches below the soil surface. Seal by pulling a float and ring or smooth surface roller. **Plow sole** equipment should place uniform streams on the plow sole immediately covered by soil. Seal plowed soil immediately by leveling and pulling a ring or smooth surface roller. 1.2 acre inch of water added by sprinkler or rain will improve soil surface sealing. Laying of plastic tarps, sealed at the edges, on "overall" treated areas will improve control.

ROW: Adjust the space between injection chisels to the same spacing as the planter rows. Apply 6-8 inches below the soil surface. Seal by listing 8-10 inch high peaked beds over the shank marks. Rolling of the listed beds is only required for higher temperature (65 F.) soils. After the "exposure period" remove or plant through listed beds directly over the treated strip. For tobacco fumigation use 2.7-3.6 gallons per acre on 42 inch centers.

BED OR SWATH: Set two or more chisels 10-12 inches apart with their swath center line with the following bed or planter row center. Seal by bed forming or level and rolling the swath area.

ORCHARDS, NURSERY AND SIMILAR WIDE ROW PERENNIALS: 2 foot and wider (mature crop drip-line) strips may be treated as in "overall" or "swath" methods by wider chisel spacings (18-20 inches) and deeper injections (12-14 inches) and marking the treated centers for planting before and after fumigation. Replanting sites may be fumigated by treating with 12 inch square handspade probing and sealing with the foot or plastic tarps.

FLIPPING: In cool soils (below 65 F.) after at least 3 days fumigation period, but while the odor is still present, a shallow (6-8 inch) fast plowing immediately followed by leveling and rolling may be used after "overall" fumigation. This method improves topsoil fumigation. A normal plowing just prior to planting fumigated soil brings the most highly treated zone to the seeding zone.

Use as preplant only except as indicated.
Do not exceed maximum dosage per acre in a single year.

Crop or Areas	Type of Application	Remarks	Gallons per Acre	CC 100 Linear Ft. Chisel	
				low rate	high rate
ROW OR FIELD CROPS (A) asparagus, beans (lima), broccoli, melons, carrots, cauliflower, corn (sweet), cucumbers, eggplant, lettuce, okra, peppers, tomatoes, strawberries, cotton, sweet potatoes	Overall	Mineral	6.8-12	59	104
Potatoes (white)	Overall	Mineral	6.4-6.8	56	59
Tobacco	Row	Wherever needed	2.7-3.6	82	109
Ornamentals	Overall	Wherever needed	4.6-8.7	40	76
Fruit Tree Planting Sites	Overall or strip	Wherever needed	20.5		178
Pineapple (B)	Row	Wherever needed	4.20	34	174
Peanuts (C)	Row	Wherever needed	2.3-4.1	60	107

For wireworms in western irrigated districts, use 2.7-4 gallons per acre (21-34 cc. 100 linear ft. chisel). Wireworms are not controlled by row treatment.

Always use 6.8-9.1 gal. A for symphillid control.

Use higher rates for heavier soils, or higher pest infestations.

(a) Allow 1-3 weeks to elapse between time of application and planting.

(b) For Hawaiian pineapple plant in or near the plant line at depth of 5 to 8 inches. Depending on cultural practices, the interval between treating and planting may be as short as 2 days.

(c) CAUTION CONCERNING PEANUT HAY AND HULLS: Although a safe tolerance has been established by the U.S. Food and Drug Administration for residues of bromides in peanut kernels grown on soil fumigated with TERR O CIDE 54 45, the peanut hay and hulls will contain certain bromide residues not covered by a tolerance. Such peanut hay and hulls are not suitable as feed for meat or lactating dairy animals. To avoid misuse of such hay or hulls, do not sell to another party or otherwise introduce into commerce. Any forage crop grown on soil treated with a bromide-containing fumigant should not be used as a feed for dairy animals, or for animals being finished for slaughter until 2 years after row treatments are made and 3 years following overall treatments. Do not exceed 6.4 gallons per acre (56 pounds EDB A).