

Potato XXII – 11

Soil Fumigants and Nematicides

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Nematodes are microscopic soil-inhabiting worms that feed on roots and tubers. Nematicides may provide protection from infestations. Rotation to non-host crops also reduces the population of some nematode species. Trap crop may also be appropriate in certain situations. Verticillium wilt is caused by a soil-borne fungus. Fumigation may reduce losses from this disease by reducing the amount of soil-borne inoculum. Because some nematodes interact with the Verticillium fungus, reduction of nematode populations may also reduce losses from Verticillium wilt. Rotation to non-host crops and the incorporation of green manure also reduces loss from Verticillium. Fumigants and nematicides are generally non-specific in their activity and are generally also highly toxic. As with all pesticides, proper caution must be exercised.

Product list for soil fumigation and nematodes:

| Product | Disease | Product per Acre | Remarks |
|---|----------------|---|---|
| (grouped by active ingredient) | | | |
| Aldicarb | | | |
| Temik 15G NW Lock'n Load | Nematodes | 20 lb per acre; 21 oz per 1000 ft of row | Apply granules with the seed pieces in the planting furrow and cover with soil or apply in a 6-inch band and work into the soil or cover with soil into a depth of 4 inches and plant seed pieces in the treated zone. Do not harvest within 150 days of an application in Idaho, Nevada, Oregon, Utah, and Washington. |
| 1,3-Dichloropropene + Chloropicrin | | | |
| Telone C-17 | Nematodes | Broadcast gal per acre Mineral soil: 10.8 to 17.1 (use 21.6 for cyst-forming nematodes); Muck or peat soil: 27.4 to 30.0 Fl oz per 1000 ft | Effective against wireworms and symphylans. |

per outlet
 Mineral soil: 31.8
 to 50.2; Muck or
 peat soil: 80.6 to
 88.2

| Ethoprop | | | |
|---------------------|---|--|---|
| Mocap 10% Granular | Nematodes (restrictions apply) | 2.1 lb banded per 1000 row feet; 60 to 120 lb per acre broadcast | Effective against wireworms and symphylans. |
| Metam Sodium | | | |
| Metam Sodium | Nematodes and Verticillium (Early Maturity Disease) | 40 to 100 gal per acre | Some of the soil properties to consider when determining the application rate include soil texture, percent organic matter and depth of soil to be treated. |
| Nemasol 42% | Nematodes and Verticillium (Early Maturity Disease) | 30 to 75 gal per acre | Some of the soil properties to consider when determining the application rate include soil texture, percent organic matter and depth of soil to be treated. |
| Nemasol 426 | Nematodes and Verticillium (Early Maturity Disease) | 30 to 75 gal per acre | Some of the soil properties to consider when determining the application rate include soil texture, percent organic matter and depth of soil to be treated. |

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Categories: Potato, Soil fumigants, Nematicides

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