



Natural Pesticides No. TNP2

Mexican marigold, *Tagetes minuta*

Mexican marigolds grow world-wide. The plant is resistant to natural enemies, survives in poor soils, and spreads easily. It survives at altitudes of up to 3,000 metres and requires minimal amounts of water. Tagetes is propagated by seed. It has fungicidal, insecticidal, nematicidal and repellent properties.

*Other varieties of Tagetes are also effective for controlling pests, including African marigold (*Tagetes erecta*) and French marigold (*Tagetes patula*).*

Preparations

- **Marigold spray**

Place large quantities of fresh crushed marigold flowers (roots and leaves can also be added), in a bucket of water. Leave to stand for 5 to 7 days and stir daily. When decayed, strain the mixture through a cloth and keep the liquid. Dilute with equal quantities of soapy water. Use potash based soft soap that is used for washing dishes and not the modern washing powders that contain caustic soda that will harm plants.

How to use: Begin spraying before the pest or disease arrives, as a preventative measure. Apply once a week. The spray is particularly effective if the weather is not too damp. If spraying equipment is not available you can sprinkle the solution using twigs or grass tied together to form a whisk.

The liquid acts as a crop strengthener to help potatoes, beans, tomatoes and peas resist blight, mildew and other fungal diseases.

It helps to prevent coffee berry disease. It also repels aphids, blowflies, caterpillars, diamondback moths, ants, maggots, termites, flies and nematodes.

- **Chilli, garlic, Mexican marigold and onion spray**

Chop 3 garlic cloves, 2 handfuls of marigold leaves, 2 large onions, and 2 chilli pods. Place in a pan of water and bring to the boil. Leave the solution to cool. Strain the mixture and keep the liquid. Dilute the solution with 4 times as much water.

How to use: This mixture is used as a spray or sprinkle to deter most insects.

- **Mexican marigold and *Melia azadirach* (syringa, persian lilac) spray**

Soak Mexican marigold leaves and syringa leaves and berries in a bucket of water for 2 to 3 days. Strain the mixture and keep the liquid. Dilute with water until the solution is pale green or brown.

How to use: Use as a spray or sprinkle against ants, mites and cabbage root fly.

Other uses of marigold

Mulching: Decayed flowers, leaves and stalks can be used as a mulch around the base of plants which may help to deter pests.

Interplanting and rotation: Traditionally *Tagetes* spp. have been interplanted with other plants whose roots are attacked by nematodes. The roots of *Tagetes* give off a substance that kills nematodes. Nematode infested soil can be thoroughly cleaned up by temporary dense planting of, or rotation with *Tagetes*.

Attractant: *Tagetes* attract many beneficial insects so planting them amongst a crop can help to reduce pest populations.

Note: The aroma of tagetes can make bees aggressive so beware that your clothes or hands do not smell of Tagetes when dealing with bees.

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