

NeemAzal®-T/S



Against free-living sucking, chewing
and leaf-mining insects



NeemAzal[®]-T/S



Preparation of the spraying solution, application

NeemAzal[®]-T/S is generally used as a 0,3% to 0,5% aqueous solution, at a rate of 1,5-3 L/ha of cultivated area. Usually 300L to 1000L of spraying solution are applied per hectare and complete wetting of the plants with the spraying solution is essential for the success. The treatment should be repeated if rainfall follows the application within about 8 hours.

Fill spray tank with the required amount of water and add NeemAzal[®]-T/S under thorough stirring. Use the solution on the day of preparation. Do not prepare more spraying solution than necessary.

Phytotoxicity information

NeemAzal[®]-T/S was tested with many plants under outdoor and greenhouse conditions and shows generally good plant compatibility during the warm season. The compatibility of NeemAzal[®]-T/S depends on the variety and species of plants.

In ornamentals many plants react on NeemAzal[®]-T/S -treatment with good leaf and blossom compatibility or good leaf compatibility, respectively.

For some varieties blossom damages or leaf damages have been observed.

In orchards serious plant toxicity has only been observed in the case of some pear varieties!

In the case of plant species that normally react insensitive, individual varieties can exhibit incompatibilities. This has occasionally been observed with the apple variety 'Gala'. Because of the season dependent culture conditions and the many species and varieties of plants, we can not make a general statement about the compatibility of NeemAzal[®]-T/S. We recommend to perform sensitivity tests with a few plants or some leaves in the respective growth stadium 3 to 5 days before treatment of larger areas.

Updated information on observations of phytotoxic reactions can be found at: www.trifolio-m.de

Obvious advantages of NeemAzal[®]-T/S

- Selective effects on target organisms
- Harmless to most beneficials
- Non toxic to honey bees
- Safe to aquatic organisms

NeemAzal[®]-T/S

NeemAzal[®]-T/S
is accepted
for organic
farming!

Plant extract for use in

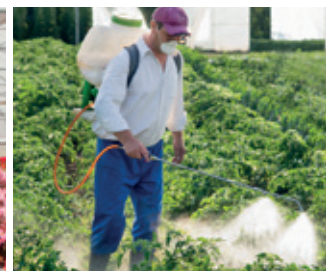
orcharding, ornamental plants,
vegetable gardening and agriculture



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The Neem tree

Different parts of the tropical Neem tree *Azadirachta indica* are used in India since times immemorial for curing many diseases. In a holistic perception the protection of plants and animals against diseases and illness is a medical issue as well. The leaves and especially the seed kernels of the Neem tree and their extracts have been used for the control of various insect pests in India. On behalf of different reasons there is a demand for standardised natural products for plant protection today. Our research has combined the experience of the thousands year old Indian experience and modern demands for plant protection products. The result of our development is NeemAzal[®]-T/S.



Against:

Hemiptera, Homoptera, Lepidoptera, Coleoptera, Diptera, Thysanoptera, Acarina (like Aphids, Thrips, Leaf Miners, White Flies, Spider Mites, Apple Ermine Moth, Cockchafer, Colorado Potato Beetle, Winter Moth, Elder Bush Aphid, Rosy Apple Aphid and many more)

In:

Leafy, legume and other vegetables, berries, herbs and spices, fruit and nut trees, ornamental flowers and shrubs, ornamental trees, vine yards

Mode of action

NeemAza[®]-T/S contains NeemAza[®], the purified active ingredient of the seed kernels of the tropical Neem tree *Azadirachta indica*. The active substance permeates into the leaves and is distributed partially systemic in the plant; the pest insects take it up orally upon feeding (sucking or biting).

NeemAza[®]-T/S has a special mode of action. It stops the insects feeding and plant damaging activity. However, a “knock down” effect should not be expected. Within a few hours after application of NeemAza[®]-T/S pest insects become inactive and after a few days the population does not develop any longer and collapses.

After the treatment with NeemAza[®]-T/S larvae react with feeding and moulting inhibition and mortality; adult (beetle) show feeding inhibition, infertility and to a lesser degree mortality.

As a result of this comparatively slow „insectistatic“ mode of action of NeemAza[®]-T/S a final assessment of the treatment should be done 7-10 days after application under practical conditions. The number of dead pest insects is not necessarily a good evaluation criterion. For the assessment the following criteria are appropriate: loss of leaf mass, damage to leaves, formation of honey dew, yield of crops, development of the pest population, positive effects on beneficials.

The success of the application of NeemAza[®]-T/S depends on the progress of the pest infestation and adequate timing of the treatment.

NeemAza[®]-T/S is harmless to most beneficials - they are an important factor in the control of the remainder of the pest population. NeemAza[®]-T/S can favourably be combined with the use of beneficials in the plant protection conception.



Organic insecticide active ingredient NeemAza[®] is a natural extract from neem seeds formulation based on renewable natural resources.

Pest Management

- Efficient control of insect pests and spider mites (free-feeding; sap-feeding and biting insects)
- Systemic and translaminar mode of action
- Harmless for most beneficial organisms
- Non-toxic for honey bees
- Safe for aquatic organisms

Residue Management

- Exemption of tolerance in the USA
- Fast degradation on crop
- Waiting period for most crops between 0 and 14 days, depending on applicable national laws

Resistance Management

- Standardised extract Neem-Aza[®] is a complex mixture of numerous active substances (limonoids)
- Resistance of insects against NeemAza[®] and its formulation NeemAza[®]-T/S is unknown and very unlikely to occur
- Use of NeemAza[®]-T/S in spray program supports prevention of resistance development

Registrations applied for in Germany

Pest (maximum number of applications)	Area of application: culture, (growth stage)	Time of application	Remarks
Aphids and other sucking pest insect (2) Leaf Miners (4) Thrips (2) White Flies (2)	Ornamentals: Greenhouses and in the field	Beginning of infestation	Spray, period between applications: 7-10 days
Sciaride (4)	Ornamentals: Greenhouses	Beginning of infestation	Soil application, period between applications: 7 days
Colorado potato beetle (2)	Field: Potatoes	5 days after deposition of more than 10 egg masses on 50 plants	Spray
Ermine Moth larval stage L1-L2 (1)	Ornamentals (field): Adornment woods, Orchards	Beginning of infestation	Spray
Winter Moth, larval stage L 1 to L 2 (1)	Orchard (except for strawberries), from plant stage: Red bud to Balloon Ornamentals: field	Beginning of infestation with larvae	Spray
Elder Bush Aphid (1)	Orchard: Elder (before blooming)	Beginning of infestation	Spray
Rosy Apple Aphid (1-2)	Orchard: apples (from plant stage: red bud to balloon, majority of the blossoms in the balloon stage to end of blossoming)	Beginning of infestation or occurrence of fundatrices	Spray, 2nd application 10-14 days later
Fruit Damaging Bugs (2)	Orchards: Apple Ornamentals: Field	Beginning of infestation	Spray, period between applications 10-14 days
Sucking and biting pest Insects, Thrips, Minor Fly (3)	Vegetable (greenhouses and filed)	Beginning of infestation	Spray, period between applications: 7-10 days
Cockchafer (1-2)	Forest: Orchard (except for strawberries), from plant stage: Red bud to ballon Ornamentals: Field	Beginning of infestation, flight of beetles (sex ratio males:females = 1:1)	Airspray Spray

* - has to be determined under local conditions of cultivation and pest incidence!
For detailed information please contact us.



NeemAza[®]-T/S

Further information

Avoid every unnecessary contact with the product. Abuse can damage your health. Keep out of reach of children. Follow the general protective measures: keep away from food, beverages and feed. Do not eat, drink or smoke at work. Avoid skin contact. In rare cases of especially sensitive persons Neem original formula Aza[®]-T/S may lead to reversible skin or eye irritations. In the case of contact wash with plenty of water.

Honey Bees: **not dangerous** under the recommended application conditions.



Effects on beneficial organisms:

the product is classified as being **non-hazardous** for populations of the species *Poecilus cupreus* (ground beetle).

The product is classified as being **slightly harmful** for populations of the following species: *Phytoseiulus persimilis* (predatory mite), *Typhlodromus pyri* (predatory mite), *Encarsia formosa* (chalcid wasp), *Aphidius rhopalosiphi* (braconid wasp).

The product is classified as being **harmful** for populations of the following species: *Amblyseius cucumeris* (predatory mite), *Coccinella septempunctata* (larvae of the seven-spotted ladybird), *Chrysoperla carnea* (lacewing), *Episyrphus balteatus* (hover fly).

Water protection: do not dispose the product or remains thereof into water.

Stability: two years after date of manufacture.

Active substance: 1% Azadirachtin A (10 g/litre) corresponding to 4% NeemAza[®] (natural Neem-Kernel-Extract).

Formulation: plant oil and surfactants based on renewable natural products.



Manufactured by:

Trifolio-M

Hochreine Biosubstanzen

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