## Winter Gardening with BioNeem®

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A COMMERCIAL GRADE, BIOLOGICAL INSECTICIDE FROM GROSAFE

BioNeem® is a broad spectrum insecticide derived from the neem tree, for the control of aphids, thrips, whitefly, leafminers, mealybugs and scale

BioNeem® contains 10,000 ppm (1%) of pure azadirachtin and 30% clarified hydrophobic extract of neem oil to produce a high efficacy "Super Neem".

## For use on fruits, vegetables, ornamentals, flowers and lawns.

BioNeem® is a naturally based anti-feeding insecticide. It leads to feeding inhibition and to moulting and a reduction in fecundity and breeding ability. BioNeem® controls a wide range of plant pests without harming beneficial insects.

In comparison to other Neem products based on neem oil, BioNeem® contains four times the amount of active ingredient compound in a standardised form. Unlike synthetic insecticides with only one biologically active compound, where their repeated use invariably results in build-up of resistance among the target insects, BioNeem® has multiple actives and no risk of resistance.

BioNeem® is a unique new generation formulation. It is formulated by using technical grade azadirachtin at a rate of 10g/litre and neem oil at a rate of 300g/litre. Azadirachtin technical is the true insecticide and is extracted from the neem seed while neem oil is added back to the formulation as a compatible "carrier" that provides additional insecticidal properties.

This clarified hydrophobic extract of neem oil supports the active ingredient, azadirachtin technical, by suffocating insect and mite pests.

## Benefits of using BioNeem®

- BioNeem® effectively controls the economically important pests such as whitefly, aphids, thrips, mealybugs, caterpillars and leafhoppers in a wide range of crops.
- Does not affect natural enemies. Safe to use with beneficial parasites and predators, thus offering long lasting pest control.
- Helps to increase productivity by controlling pests and improving crop health.
- BioNeem® is eco-friendly and helps to maintain the Ecological Balance.
- Insects cannot develop resistance against BioNeem®.
- No residue
- Lower cost per litre



Call to find your nearest stockist on **0800 220 002** info@grosafe.co.nz www.grosafe.co.nz

## How to get the best from BioNeem®

- 1. Use only registered neem products approved for use on edibles such as Grosafe BioNeem®, which can be used on edibles with a one day withholding period.
- 2. Because the main modes of action are antifeedant and development disruption, BioNeem® is more effective on young stages of insects and less effective on mature stages. Hence if BioNeem® is used alone it is important to apply at first sign before insect colonies mature.
- 3. Coverage of all surfaces is important because insects readily find untreated spots to feed on and survive.
- 4. Neem is more effective when mixed with Grosafe Enspray 99®. Using Enspray 99® in a mixture with BioNeem®, provides the following benefits:
  - Enspray 99® is a food grade paraffin oil which controls most stages of sucking insects from eggs adults, by smothering, thus providing an instant kill of existing colonies including adults.
  - Enspray 99® is a very effective spreader-sticker which improves the coverage resulting in BioNeem® having better spread.
  - BioNeem® is then left to repress re-establishment of the colony with it's antifeedant and development disruption effect.
  - The Enspray 99® plus BioNeem® mix, will give good control of small caterpillars, but larger caterpillar species may require addition of a caterpillar insecticide such as Grosafe Bactur®
- 5. Grosafe BioNeem® plus Grosafe Enspray 99® are both BioGro Certified Organic. Use 8 ml of Grosafe Enspray 99®
- + 2 ml of Grosafe BioNeem® per litre of water.

As a preventative treatment before pests appear,

apply every 3-4 weeks. Repeat as required.

6. Grosafe BioNeem® plus Grosafe Enspray 99® are best used at first sign as part of a prevention programme. Apply 2 or 3 sprays about 5 days apart.

