

Pyrethrum 5EC

Contains 5% Natural Pyrethrins

A new effective and natural solution to insect pests in horticultural production and organic farming.

Advantages of Pyrethrum 5EC

- Pyrethrum 5EC is approved for use against a wide range of pests including greenfly, whitefly, aphids, flea beetle and caterpillars.
- For use on vegetables, soft fruit and ornamentals.
- Can be used in indoor and outdoor growing systems.
- Can be used with a wide range of water volumes 275-1500 l/ha
- Leaves no pesticide residues.
- Can be harvested after 24 hours from last treatment.
- Can be used in organic farming systems.



MAPP 12685



Agropharm Ltd

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About Pyrethrum

Chrysanthemum flowers have been available in Europe for over 150 years and powdered flowers have been used as louse powders for decades, known originally as Persian Insect Powder. Liquid concentrates for insect control in public health situations have been used for 50 years. However, liquid concentrates suitable for horticultural use by professionals have only just become available with the launch of Pyrethrum 5EC in the UK.

Our pyrethrum is purified from flowers of *Chrysanthemum cinerariaefolium* grown in Tanzania. It is subject to rigorous quality control and is formulated as a 5% active ingredient product synergised with piperonyl butoxide from natural oils. Natural pyrethrum is nature's own insecticide and works by paralysing insects so that they will drop off crops and eventually die.

Pyrethrum is very safe to humans and has been used as hair shampoo for lice treatment, as an anthelmintic for young children and added to drinking water in some countries. Pyrethrum has, however, been subjected to the most modern toxicological and safety testing over the last 20 years and is now available for use on horticultural crops.

Pyrethrum is non systemic and kills insects by contact action. It is also non persistent in the environment and will not leave residues on crops.

Whilst dried Chrysanthemum flowers (*Chrysanthemum cinerariaefolium*) have been available in Europe for 150 years, and were sold in most chemist shops for flea and louse control, liquid concentrates containing extracts from this flower, miscible with water and suitable for spray application to crops, have only just been registered for use by the UK's Pesticides Safety Directorate.

Pyrethrum as an insecticide

Pyrethrum is a natural mixture of pyrethrins I and II and is purified from crude extracts of flowers using supercritical CO₂. The active ingredient causes rapid knockdown, mainly from pyrethrin II, followed shortly by death associated with pyrethrin I.

The mode of action is non systemic and contact action caused by binding of pyrethrins to sodium channels inhibiting the insects nervous system. This mode of action leads to a broad spectrum of insecticidal activity against mites, chewing and sucking insects on fruit, vegetables and ornamentals.

Pyrethrum 5EC is combined with a synergist piperonyl butoxide which improves the activity of the active ingredient. Piperonyl butoxide is prepared from a natural source (oil of sassafras) and inhibits a class of enzymes called mixed function oxidases (MFO's), which are responsible for the metabolism and inactivation of pesticides and foreign molecules in the insect. The blocking of this detoxification process therefore makes the insect more vulnerable to the action of pyrethrum.