

DeruNed bv

DeruNed develops and supplies natural crop protection products for professional horticulture.

Using 100% natural ingredients such as enzymes, amino acids and plant extracts, DeruNed formulates effective preparations that feed and protect your crop. These natural products are suitable for use in combination with chemical and biological crop protection products.

To develop a high quality product, DeruNed works together with several independent research centres.

DeruNed products are available from your horticultural supplier. If you have any questions after reading this information you can contact our product team.

Syzar disrupts the feeding and reproductive behaviour of leaf miner flies.

What is Syzar?

Syzar is a natural crop protection product based on cloves. Syzar is effective in the fight against the leaf miner fly. Syzar has proven effective in disrupting the egg-laying and eating behaviour of the leaf miner fly. Syzar can amplify the effect of chemicals used against the leaf miner fly, so that the use of chemicals can be much reduced.

How does Syzar work?

Syzar works by covering the top of the leaf with aromatic compounds. This prevents the female eating holes or laying eggs on the places where Syzar is present.

Eugenol

The odour of Syzar is caused by Eugenol. Eugenol is a compound that is naturally present in low concentrations in many crops. However in cloves the concentration is very high. The compound has a strong repellent effect on many insects, but in some cases also attracts insects.

Faltering movements

The repellent effect is very strong for the leaf miner fly. However the leaf miner fly can only smell the Eugenol when it is close to the treated leaves. If the female leaf miner fly is looking for food or for suitable places to lay eggs it will encounter the odour of Eugenol each time it is close to the leaf, and its movements will become very faltering. It is driven from one plant to another to find a suitable place to feed and lay its eggs. If the crop is well treated with Syzar, the fly will hardly be able to find a suitable place, so it will feed less. This means fewer spots on the crop.

Repeat regularly

Treated leaves are protected for at least two weeks against feeding and egg-laying spots. The female goes looking for other leaves that are still unprotected. It is thus important, to achieve a good effect with Syzar, that the treatment should be repeated regularly. Only regular repetition can ensure that all leaves are actually covered. Because of the growth of the crop, it is necessary to repeat the treatment every week. In times of rapid growth it is necessary to administer Syzar every five days.



How is Syzar used?

Syzar is commonly used in flowers, potplants and vegetable crops. When using ensure good leaf coverage.

Syzar can be applied with all the usual spraying techniques, but the best choice is application via the LVM, because of the good leaf coverage. The most reliable result is obtained by beginning early in the spring and continuing so that the crop is clean at the end of the season.

Syzar can be incorporated within a spraying programme with chemicals. Using close observation of the crop (by close examination and using (yellow or blue) trap plates) you can support Syzar with chemicals when the first symptoms of leaf miner fly are observed.

Dosage:

600 ml per acre repeat weekly
1,5 lt per ha repeat weekly

In times of low pressure:

400 ml per acre repeat weekly
1 lt per ha repeat weekly

In times of rapid growth:

repeat every 5 days.

Storing Syzar

Syzar can be kept for two months after opening, providing the bottle is securely closed and stored in a cool, dark place.

The leaf miner fly

It is the female leaf miner fly that does the most damage. It makes spots on the leaf when it feeds and lays eggs. The feeding male uses the damage done by the female. The female prefers to make feeding spots on young, but already well-grown leaves. Egg spots are generally made on somewhat older leaves. Both sorts of spots are made by most sorts of leaf miner fly by boring in from the top in the leaf. They can be recognized as yellowish green spots. The feeding spots are round; the egg spots are oval. The female lays one egg in each egg spot.

After the larva has emerged from the egg it immediately begins to feed on leaf pulp. It eats a winding tunnel through the leaf, never coming into the open. While it is in the leaf the larva sheds its skin twice. Just before pupation the larva makes a crescent-shaped exit on the bottom of the leaf and drops through it onto the ground. There it digs itself in and pupates. Some time later a new, inconspicuous little fly emerges from the ground. The whole cycle takes 25 days at a temperature of 20 degrees.



Syzar

A natural product to combat the leaf miner fly

