



# With Siltac SF towards effective and sustainable pest control in pear cultivation

*"The beautiful & large pears from Beerepoot last year"*

Siltac SF is a very effective 'green' product in the control of the pear psylla and other insects. In a lower dosage it is added to the regular spraying from mid/end of May. In summers with high pressure, experienced growers spray once more. In this way they keep the pest under control, while of course others have a better chance.

Pear growers Chris Beerepoot from Zwaagdijk (NL) and Jeroen Peters in Ingen (NL) add Siltac SF to every scab spray. In this way, the larvae and eggs of the pear psylla are cleaned up every week. Because beneficial insects are spared, a biological balance is created. Both are convinced of this strategy. They chose Siltac SF because of the decreasing availability of chemical products and/or their disappointing of such products. That often led to frustration. "The disadvantage of chemical control is that you have to be there at exactly the right time, or you have to repeat the spraying. It did not work satisfactorily and the costs increased," says Beerepoot. Siltac SF has a mechanical effect. It contains silicone polymers, fixes harmful insects and crushes them to death.

Repeated spraying of Siltac SF at 0.1% provides constant pressure on the young, harmful insects. This also applies to spider mites, rust mites and aphids. The fact that natural animals are spared is because they move faster and are physically stronger. Peters first tried the product for several years before using it as standard last year. "You have to start at an early stage, but make sure that it is not too humid. If the leaves are wet, it could lead to minor leaf burn. With this strategy, I am convinced that pear growers will use Siltac SF more and more."

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## BALANCE

According to the growers, optimizing the strategy is a learning process. Beerepoot has now been using Siltac SF for the eighth year in a row. We observe many more parasitic wasps, predatory bugs and earwigs." If you still see earwigs eating in the autumn, that is a good sign, because young earwigs consume the larvae of the pear psylla. During winter pruning in January and February, we previously saw many adult pear psylla, which then lay millions of eggs. This spring in May, according to the grower, the pressure was extremely low. But he is alert, because he does not expect much from the earwigs that overwinter in the soil this spring. "This year their effect may be disappointing, it was a wet winter and I don't know how long those creatures can hold their breath in the soil." Wet places in the orchard are the weakest places. "That's where we first see problems. We managed to solve this last year by blowing a higher dose of Siltac SF (0,15%) through the orchard with extra ventilation.



On top of that we have a reflection screen on the sprayer." The screen increased effectiveness of the spraying and the bugs kept hitting and sticking to it. Peters saw many natural predators in his orchard last year, but admits that it can still be exciting. "Sometimes you know you're on it the tipping point and nature afterwards takes over. But if the pest pressure is high, it can be stressful." To prevent damage from honeydew, he sprayed soapy water. On top of that he also added a high dose of Siltac SF & Microferm, a lactic acid bacterium that causes the honeydew breaks down.

***"-so no other chemical insecticides-"***

## START ON TIME

With this crop protection strategy it is important to start on time. Siltac SF works best on small insects. "You shouldn't wait until all growth stages of the pest are already present. Then you don't kill everything and you never get rid of it," Beerepoot explains. He preferentially tackles the first larval stage of the pear psylla, which occurs when the eggs turn orange. "In warm weather, the pest pressure can increase explosively, which is why we also spray Siltac SF as a preventive measure." Growers would prefer to start in April, but then the crop and leaves are not dry enough. Beerepoot: "In practice we start in mid-to-late May. The leaves is too sensitive before that time Always remember that you need fast drying conditions." Peters emphasizes that spraying should also be done again in the autumn, after picking and before the leaves fall off. "Otherwise they will feed on the buds."

The first aphid control will be carried out in both gardens at the beginning of April. Then they spray with Teppeki, which is selective and naturally spares beneficials. Peters also uses Movento in May, which has a systemic effect. Caterpillars are chemically controlled fourteen days after full bloom. Because the biological alternative did not work sufficiently, according to Beerepoot. Peters also has good experience with Coragen.

***"Always remember that you need fast drying conditions"***

## TECHNIQUE

Both growers agree that the technique is important for good coverage and to get into the difficult to reach places. Beerepoot used a single cross-flow sprayer with satisfaction for eight years. This year he invested in a Wanner 2-row sprayer with reflection screens. Peters has had more experience with this. Last year, when the pressure was high, Peters used the traditional single-angle cross-flow sprayer, which he believes provides better coverage in certain corners. "We then provide a lot of ventilation and a lot of water at a slow speed, so that the veins are soaking wet both above and below." The standard dosage is 1 liter of Siltac SF in 1000 liters of water (0.1 %). At a driving speed of 6.5 km per hour, Beerepoot sprays 250 liters per hectare. Peters says he will go up to 300 liters per ha. When a higher dosage is mentioned, 0.15% is meant. The fact that Siltac SF can be mixed with fungicides naturally saves growers a lot of work. A further advantage of Siltac SF is its strong spreading effect.

*"Siltac SF on the sprayer"*



*"This year the garden has been wet for a long time. This is unfavorable for earwigs"*

## COST SAVINGS

Because Beerepoot used approximately 2.25 liters of Siltac SF per hectare for the complete control of pear psylla, spider mites and rust mites, i.e. no other chemical insecticides, this resulted in significant cost savings.

## Residue free by mechanical mode of action

Siltac SF is a product of ISA CropCare in The Netherlands. It is designed to combat numerous pests such as spider mites, all types of aphids, whiteflies and psylla and has a strong wetting/spreading effect. According to European guidelines Siltac SF does not require approval as a crop protection product. Because it is completely degradable, it has no MRL. Moreover, resistance cannot be built up due to the mode of action.

The application should take place in good drying weather. The components in Siltac SF then form a net that shrinks very quickly and captures and kills insects in less than a minute. Under the influence of water, the net quickly disintegrates into components that are considered harmless. The product is suitable for hard and soft fruit, greenhouse vegetables and ornamental plants.