

Cellulose fibrils suspension sprayed on leaf surface



Cellulose fibrils at 0.2wt% suspended in water sprayed on Pak-Choi leaf. At recommended application rate (around 0.05wt% dry content of cellulose fibrils), no clearly visible white spots/residues should be expected.



Cellulose fibrils as rainfastness adjuvant

What does it do?

Cellulose fibrils-based additive speeds up the viscosity recovery of the sprayed suspension and forms a film upon drying on the leaves, helping to keep the active ingredients in place.

- Optimal spray pattern with no influence on drift.
- Increases deposition and reduces run-off.
- Improves rainfastness.
- Should not chemically bind pesticides.
- Safe and non-toxic, it can be used throughout the growing season.



From previous experiments: Exilva as rainfastness adjuvant in a biological insecticide

Exilva has good film forming properties

The film should dry homogeneously and prolong the active ingredients residence time on the leaf.

At the same time, the liquid product should remain easy to handle and spray.

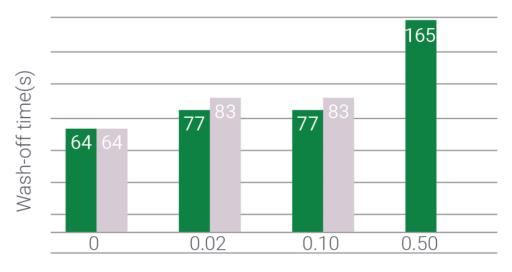
Tested in R&D lab:

- Incorporated Exilva into insecticide dilutions (Tank-Mix): insecticide diluted as recommended (dilution rate used 1:1.5) and Exilva added to the water of dilution before diluting the insecticide.
- Measured time to wash the blend off from surface after drying.

Commercial biological insecticide concentrate:

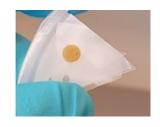
- 0.02% Spinosad active ingredient
- 50% of the formulation is sugar

EXILVA FOR RAINFASTNESS ENHANCEMENT WASH-OFF TIME VS EXILVA CONCENTRATION



Concentration of Exilva (wt% dry fibrils)

■Trial 1 ■ Trial 2



Time needed to wash off a Spinosad drop diluted 1:1.5, in function of the concentration of Exilva (% w/w dry fibrils), dropped onto a Parafilm surface and left to dry for 24 hours at 20°C.

