

Rock powder in a preventive strategy



What is it?

Very different substances (kaolin, zeolite, bentonite) deriving from the more or less fine grinding of natural rocks. They are used alone or in combination with copper or aldehydes against olive fly.

**Disturbing
action**

**Copper use
reduction**

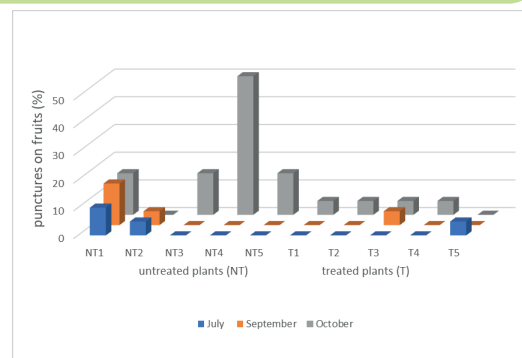
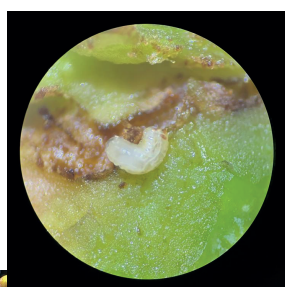
**Plant
protection**

**Soil
amendment**

How does it work?

Mixed in water and applied to the aerial part of the olive trees, using shoulder lances or more modern equipment which distribute the product, covering the entire canopy.

A veiling of crystalline particles is created that makes the drupes unrecognizable to the fly by altering the smell of the olives, modifying their colour and texture and therefore discouraging oviposition. Moreover, the whitish cover helps to retain a lot of water which hinders the development of insect larvae and protects the plants from excessive heating. Once washed away by rain, the powder has an invigorating effect on the soil.



Plants treated with zeolite recorded a lower fly attack than untreated plants, which instead showed an incidence of affected drupes reaching 50 %

Results

By using rock powders, the grower can reduce the use of chemical interventions, choosing a preventive approach and allowing the transition from a larvicide to an adulticide strategy. If well applied, rock powder contributes to preserve the productivity of the plant, the quality of the fruits and economic benefits.

Cost – Cost-efficiency

- low cost (approximately):
kaolin 90 €/ha/year
zeolite 25 €/ha/year
bentonite 10 €/ha/year
- no increase in equipment cost
- reduction in copper cost
- reduction in chemicals cost