



BOTRYSTOP
CONTROL OF CINEREA BOTRYTISES
ECOLOGICAL & ANTIRESIDUAL TREATMENTS TO FAVOUR THE QUALITY OF CROPS

1. Introduction

CINEREA BOTRYTISES, CAUSATIVE AGENT OF THE GRAY ROTTENNESS.

The name of the Botrytis genre drifts from the **Greek** due the organization of the spores in form of clusters, since in Greek botrys means groups of grapes. While that the name of the Botrytis cinerea species drift from the **Latin** for grapes as ashes; although poetic, the grapes, it refers to the cluster of the **spores** of the fungus in the **conidiophores**, and the ashes it refers to the grizzly color of the accumulated spores. Normally it refers to the fungus by the name of the anamorphic (asexual form), because the sexual phase it's rare to observe. The teleomorphic (sexual form) is an **ascomycete**, Botryotinia fuckeliana.



Botrytis complicates the production of wine making the **fermentation** more complex. **Botrytis produces an anti fungus** that kills the **yeast** and frequently stops the fermentation before the wine has accumulated sufficient levels of **alcohol**. The **gray mold** of Botrytis is another condition of the grapes caused for Botrytis cinerea that takes to big losses of the industry of the wine.

Traditional alternatives and inconvenient of them

Cultural trainings:

- Protecting the delicate plants from persistent rains.
- Diminish the irrigations and the environmental humidity. The soil must drain well.
- To cut the infected parts or eliminate the whole plant in order that not infects to other near.
- It is fundamental to take out the remains of cultivation and the plants affected by the illness.
- Disinfecting the tools of pruning.
- Special care in the pruning and when it is picked out leaves. The application of a fungus paste in the wounds is an advisable measure.
- Be careful that don't stay humid the plants during the night, above all if it are in the inside as in the grape for fresh fruit. Therefore, the irrigations have to be a first's hour on the morning.
- Good ventilation to impede the excess of humidity.

In all the cases, the cultural trainings not impede the development of the illness and don't result operative for the high consumption of manual labor and the inefficacy in curative rate.

- Preventive treatments each 10-12 days with recommended systemic fungicides
- Iprodiona is a specific product against Botrytis.
- Procimidona and Vinclozolina also are specific, although are older and are appearing resistances.
- The Benzimidazoles are not specific and are less effective.



The treatments with systemic fungicides answer as preventive scale, not curative, but the great and irreparable convenient is the big ant ferment effect of the metabolites of the degradation of the systemic fungicides, besides the problem of health that it can occasion the residues of these fungicides. Notwithstanding, the security period of those products make not useful at the end of crop.

2. Agrares technology

Objetives

Avoiding the Botrytis appearance in preventive and curative level, through an ecological technology anti-residual that doesn't affect the fermentations and not it present never problems of metabolites that can alter the health of the consumers (active ingredient: glicerinoses ésteres of acids of grape).. These objectives are fulfilled strictly with periodic treatments of BOTRYSTOP.

Fundament

From the starting of fruit, it can be limited almost to the 100% the germination of spores that arrives in spring with periodic treatments of BOTRYSTOP to the fattening and before the closing of the cluster, being a cause strictly of barrier of entrance of the environmental oxygen.

Equally, if you observe the symptomatic "ash", even with the first light wounds in the berries, treatments with enough solution " cover " the clusters with a film effect that impedes the air intake and the fungus doesn't colonize the substrate, who causes the closing of wounds and it is kept the quality of the crop. This film effect, in preventive and curative, it is exclusively for the encircling film of the epidermis who gives place the acid ésteres that contain the product.

Description of the agrares technology

The agrares technology based on the systematic use of BOTRYSTOP gets avoid the burden damages of the vineyard that causes the Botrytis cinerea, in anti-residual way, avoiding stopped fermentative and annulling totally the risk for the health of the consumer that presents the traditional antibotrytis. At the same time as it observes an increment of the thickness of the leaf, favoring the macerations and the quality of the final wine.

Application of the agrares technology

The application for pulverization secures the dampening of the surface of the epidermis to preserve those of the irrigations of contamination for Botrytis cinerea, or avoiding the development of the fungus eradicating the illness with the first symptoms.

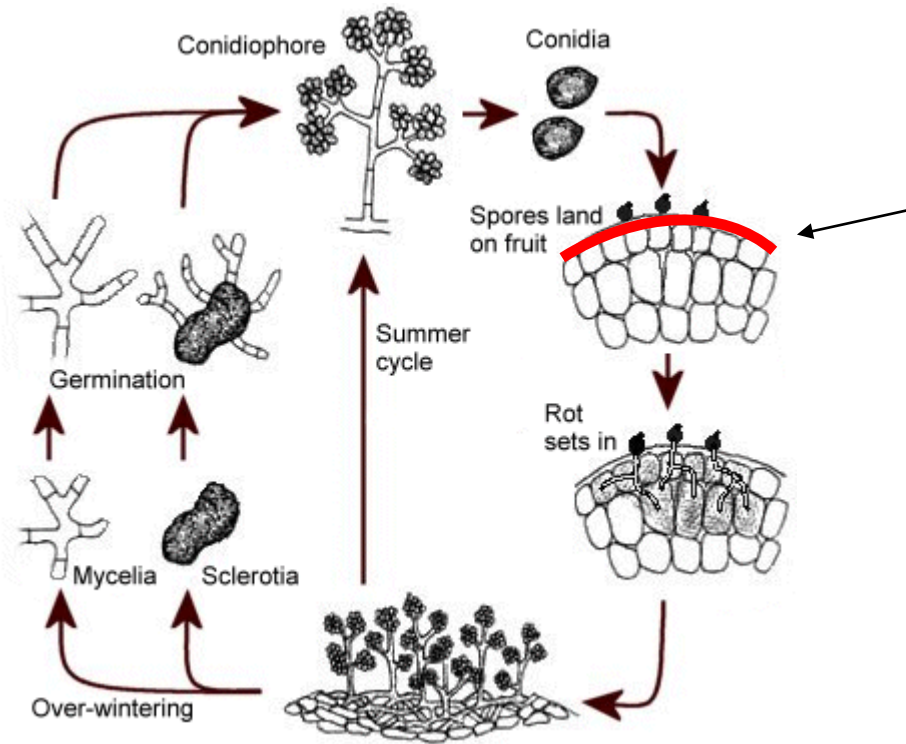
DOSE OF EMPLOYMENT

GREENHOUSE: The dose is 1,5cm³/L of BotrySTOP + 1,5cm³ of MildiuSTOP except in tomatoes, where will decrease to 1cm³/L of BotrySTOP + 1cm³ of MildiuSTOP.

OPEN AIR: The dose is 2cm³/L of BotrySTOP + 2cm³/L of MildiuSTOP.

In case of curative treatment, apply 300 cc/HI (3 L/ha) + 3L/Ha of MildiuSTOP. If an imminent risk is observed of alteration of the epidermis, must be started the treatment. Is useful for all kind of susceptible to cultivations alterations related with the climate and the rottenness. Especially fitted in vineyard, of processes involved in viniculture and of grapes fresh fruit, horticultural and fruits in general.

This recommended doses will STOP **Botrytis and Mildew** attacks.



The product acts at this moment as a "film" effect in the epidermis.

**BOTRY
STOP**