Ampelos®Geolife® technology

Wineyard bioactivation program









A Swiss company with more than 30 years of international presence.

BIOMA is a company active in the production and marketing of "Chemical free" and "GMO free" solutions for the food industry, oenology, agriculture, environmental bioremediation, zootechnics and animal and human well-being.

Our products optimize all biological processes through indigenous microbiology and make it possible to reach an optimal balance in the targeted biomass. We seek to minimize the environmental impact within each structure.

The purpose of BIOMA solutions is to optimize production while guaranteeing economic sustainability.



GMO-free



Chemical-free



Risk-free

Geolife® technology An innovative manufacturing and patented process.

Geolife® is a technology for the extraction and stabilization of organic compounds allowing the activation of our products. This technology makes our products unique, easy to use and safe for the user, animals and the environment.

Ampelos®

Vineyard bioactivation program

The Ampelos® program is used once a year and is integrated into each cultivation system, balancing the soil's indigenous microbiology and using the full potential of the vine

| | OBJECTIVES | Povivo the pitrification process: proper |
|--------------|----------------------------------|--|
| | Making nutrients available | Revive the nitrification process: proper transformation of ammonium into nitric nitrogen Solubilize the elements into the appropriate form and ideal proportion for the vine Express the terroir's potential |
| On soils | Activating proper microbiology | Rapidly catalyze the desired microbiology, naturally available in the soil Activate the plant's bio-protective functions and promote soil-plant exchanges |
| | Foster soil structuration | Revive the mineralization and humification processes: a suitable transformation of the organic matter Improve the colloidal structure and increase the retention of bioavailable elements for plants |
| On the plant | Restore soil-plant balance | Revitalize conductive tissues after a stress Strengthen the photosynthesis activity Assist root regeneration Strengthens the immune system |



The Ampelos® kit for 1 hectare consists of 2 solutions to be applied on the soil and 2 solutions to be applied in foliar form.

Soil applications

Ampelos® Humificant 1 solution of 3.25 kg per hectare 1 Kit da 600 gr per ettaro

Catalyzes the first responses on the soil. Stimulate indigenous microbiology.

Ampelos® Booster Fertilizer

10 liters per hectare



Accelerates the development of indigenous microbiology for quick soil biocolonization.

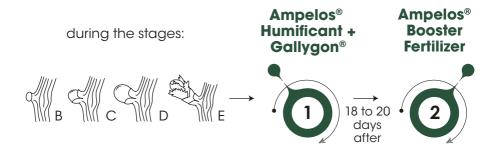
How to apply?



Water volume: 300-600 litres/ha Max. pressure: 5 bar

Application on the floor

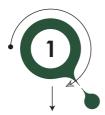
When to apply?



Foliar applications

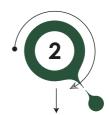
Fylo® Leaf Treatment

1 liter per hectare



Fylo® Leaf Treatment

1 liter per hectare



Stimulates the conductive tissues of the plant. Assists root regeneration. Strengthens photosynthesis.

One pack is included in Ampelos® program. Others can be purchased separately as needed.

How to apply?



Water volume: 150 liter/ha Foliar application alone or coupled with an organic treatment

When to apply? Contact your technician for more details.



Our results:

Academic study of Ampelos® carried out by the Institut Universitaire de la Vigne et du Vin (IUVV), Jules Guyot (Dijon, France) on a pinot noir plot.

| Increase | Vintage 2018 | | Vintage 2019 | | Differences (%) | |
|----------------------------|--------------|----------|--------------|----------|-----------------|-----------------|
| in yield | Witness | Ampelos® | Witness | Ampelos® | Vintage 2018 | Vintage 2019 |
| Weight of the harvest (kg) | 847 | 1056 | 552,8 | 833,6 | +24,7% | +50% |
| Number of classes | 38,5 | 48 | 25,5 | 38 | | |

The observations of the second vintage confirm the ones. The yield is significantly higher on the section treated with Ampelos®

| Maintaining | Vintage 2018 | | Vintage 2019 | |
|--------------------------|--------------|----------|--------------|----------|
| quality | Witness | Ampelos® | Witness | Ampelos® |
| Sugars (g/L) | 223 | 222 | 229 | 230 |
| A. Total (g/L of H2SO4) | 4,18 | 4,57 | 3,85 | 4 |
| Assimilable nitrogen | 263 | 252 | 150 | 160 |
| Н | 3,28 | 3,20 | 3,06 | 3,04 |
| A. Malic (g/L) | 2,1 | 2,4 | 2,25 | 2,7 |
| TAP (base 17.5 g/% vol.) | 12,7 | 12,7 | 13,1 | 13,15 |

Testimonials from our winegrower:

"The use of Ampelos® on my Asprinio vineyard has reduced, already from the first year, the presence of dwarfing viral effects, allowing better vegetation with regular development of the shoots, reduction of leaf curling and, above all, a strong increase in the production of better grapes, also in terms of chemical and health characteristics."

Dr Francesco De Angelis Owner of De Angelis (Caserta) Producer of Asprinio D.O.C. wine and sparkling "The use of Ampelos" is in its second year of application on a Sangiovese vineyard and a Cabernet Sauvignon vineyard. Both vineyards showed strong metabolic imbalances and reduced productivity, the use of Ampelos" already in the first year showed clear signs of vegetative rebalancing with a better homogeneity in production. The second year, despite a late frost, many counter buds were fertile and the vegetation regained normal vigour during all phenological phases."

Roberto Ciani Director Villa a Sesta Chianti Classico.

Processing and conservation:

Composition of the Ampelos® kit for one hectare:

- a) 1 Ampelos® Humificant 2,25 kg
- b) 1 Gallygon® 0,6 kg
- c) 1 Ampelos® Booster Fertilizer 10 litres
- d) 2 Fylo® Leaf Treatment 1 litre

Closed packaging, can be stored for 2 years in a dry and dark room between 10°C and 43°C. Opened packaging, can be stored for 3 months at room temperature and in a dark place (if properly closed and protected from humidity).

Composition:

Ampelos® Humificant

Specific purpose product - Mycorrhizal fungi inoculum, mycorrhizae content: 5% of weight; rhizosphere bacteria content: 1x10¹⁰ UFC/g; Trichoderma content: 1x10° UFC/g

Gallygon®

Specic purpose product Mycorrhizal fungi inoculum Mycorrhizae content: 17% of weight, rhizosphere bacteria content: 1x10¹⁰ UFC/g, Trichoderma content: 1x10⁹ UFC/g

Ampelos® Booster Fertilizer

Fluid yeast extract containing brown algae. Organic nitrogen (N): 18.70%; organic carbon (C) of biological origin: 28.30%; pH: 4.94; organic substance with molecular weight <50kDa: 30%

Fvlo® Leaf Treatment

Fluid yeast extract containing brown algae. Organic nitrogen (N): 32.30%; organic carbon (C) of biological origin: 41.60%; pH: 4.37; organic substance with molecular weight <50 kDa: 35%

Classification and labelling:

Chemicals are classified according to their level of physical, health and environmental hazard. These hazards are indicated by specific labels and safety data sheets (SDS). With the GHS (Globally Harmonized System), hazard statements have been worldwide standardized so that the recipients of the information (production workers, first aiders and consumers) can better understand the hazards of the chemicals used. In the EU, the principles of the GHS are ratified in the EU-1272/2008 (CLP) regulation. In accordance with this regulation, the Ampelos® range does not require classification or labelling according to its physicochemical properties, its effects on the health and safety of the environment and does not require a safety data sheet.

The Ampelos® range includes only organisms that are naturally present in nature and non-hazardous (WHO Class 1).

Compliance:

The Ampelos® program complies with use in organic farming according to the Swiss FiBL, Ecocert and the American NOP Regulation (National Organic Program).



