# Empsico® Geolife® technology

# Bioactivation program for pastures and meadows for haying







# Bioma®

# 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.









## Geolife<sup>®</sup> technology An innovative manufacturing and patented process.

Geolife<sup>®</sup> 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.

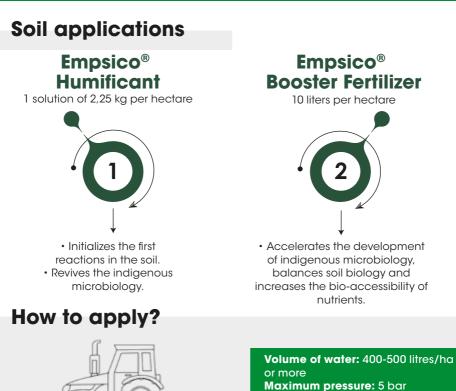
## **Empsico**<sup>®</sup> Bioactivation program for pastures and meadows for haying

The Empsico<sup>®</sup> range has a broad action spectrum and is suitable for humifying treatments of pastures and meadows for haying, even at high altitude.

	OBJECTIVES		
On soils	Make nutrients accessible Activate the appropriate microbiology Facilitate the structuring of the soil	<ul> <li>Accelerates and optimizes all humification processes, rapidly transforming nutrients and making them easily accessible to the plant, especially avoiding nitrogen leaching processes.</li> </ul>	
On haying	Restoring the soil-meadow balance for haying	<ul> <li>Generates a greater regrowth speed of the grasslands and improves the general character of the forages with positive impacts on the quality and quantity of the animal productions.</li> </ul>	



The Empsico<sup>®</sup> kit consists of 2 solutions to be applied to the soil and 1 solution to be applied as a foliar spray for 1 hectare.



Application on the soil

### When to apply?

Empsico® Booster Fertilizer can be applied after each cycle: contact your technician to define the protocol.





At the time of vegetative recovery (between March and June depending on the region)

→ 8 to 15 days apart





### Application after each mowing

### Fylo® Leaf Treatment

1 liter per hectare



 Strengthens photosynthetic activity and optimizes soil-leaf and leaf-soil lymphatic flows.
 Assists root reconstration

• Assists root regeneration.

### How to apply?





**Volume of water:** 100-500 liters/ha Foliar application





## Our results: Recovery of mountain pastures in critical condition.

Rumex, gentian and ferns.

Study carried out by Woolti Sàrl, Mr. Marcel Bisi, CH-6596 Gordola/TI Specialized in biological treatments.

#### Airolo-Pesciüm pastures evaluation, August 2018:

- Balanced nutrition, the percentage of unwanted weeds is less than half
- The color and type of grass is strong and the plant is more elastic with a finer structure
- · Flower buds (dandelions and white clovers) are proportionally present

Results	Before	After	Difference
Length of stay at the mountain pasture		5 additional days	+ 5 days
Length of trip	90 minutes	0 minutes	- 90 minutes
Profitability per day/cow	12 liters	15 liters	+ 20%
Milk yield (additional stay at the alpine pasture)			+ 75 liters/cow
Additional contribution for longer stay on the alpine pasture			Fr. 18.50/ cow
Increase in cheese production	4800 liters	6000 liters	+ 120 kg of cheese (10%)



# Processing and conservation:

Composition of the Empsico® kit for one hectare

- a) 1 Empsico<sup>®</sup> Humificant (2 sachet) total weight - 2,25 kg
- b) 1 Empsico<sup>®</sup> Booster Fertilizer 10 liters
- c) 1 Fylo® Leaf Treatment 1 liter

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

# Product composition:

#### Empsico<sup>®</sup> Humificant

Inoculum of mycorrhizal fungi, rhizosphere bacteria. Rhizosphere beetles, Mycorize by weight, Trichoderma

#### Empsico<sup>®</sup> Booster Fertilizer

Brown algae, Organic nitrogen (N), Organic carbon (C), Molecular weight organic matter (SOPM), pH 4,94

#### Fylo<sup>®</sup> Leaf Treatment

Brown algae, Organic nitrogen (N), Organic carbon (C), Molecular Weight Organic Matter (SOPM), pH 4,37

# 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 Empsico® range must not be classified or labelled according to its physicochemical properties, its effects on the health and safety of the environment and is not required to submit a safety data sheet. The Empsico® range includes only organisms that are naturally present in nature and non-hazardous (WHO Class 1).

### **Compliance:**

The Empsico® programme can be used in Organic Agriculture in accordance with FiBL Switzerland, Ecocert and the American NOP (National Organic Program) regulations.

- Empsico<sup>®</sup> Humificant: BLW 5992
- Empsico<sup>®</sup> Booster Fertilizer: BLW 5993
- Fylo® Leaf Treatment: BLW 6002

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Notes :

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