

**Empsico**<sup>®</sup>  
Geolife<sup>®</sup> technology

# Bioactivation program for pastures and meadows for haying



 **SWISS  
MADE**

**Bioma**<sup>®</sup>



## **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.

# Empsico®

## Bioactivation program for pastures and meadows for haying

The Empsico® 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**

- Accelerates and optimizes all humification processes, rapidly transforming nutrients and making them easily accessible to the plant, especially avoiding nitrogen leaching processes.

On  
hay



**Restoring the  
soil-meadow  
balance for  
hay**

- 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.

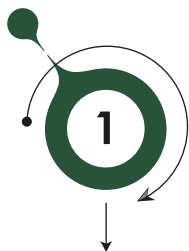


The Empsico® kit consists of 2 solutions to be applied to the soil and 1 solution to be applied as a foliar spray for 1 hectare.

## Soil applications

### Empsico® Humificant

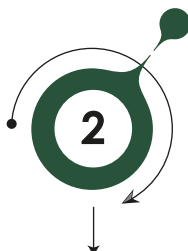
1 solution of 2,25 kg per hectare



- Initializes the first reactions in the soil.
- Revives the indigenous microbiology.

### Empsico® Booster Fertilizer

10 liters per hectare



- Accelerates the development of indigenous microbiology, balances soil biology and increases the bio-accessibility of nutrients.

## How to apply?



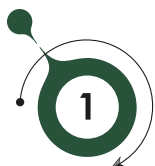
**Volume of water:** 400-500 litres/ha or more

**Maximum pressure:** 5 bar  
Application on the soil

## When to apply?

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

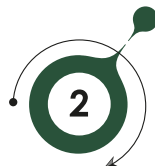
### Empsico® Humificant



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

→ 8 to 15 days apart →

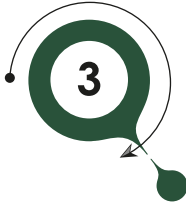
### Empsico® Booster Fertilizer



# 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 regeneration.

## How to apply?



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

## When to apply?

Contact your technician for more details

Ideally after each mowing



**Fylo® Leaf Treatment**



## Our results:

### Recovery of mountain pastures in critical condition.

*Rumex, gentian and ferns.*

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

### Airola-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® Humificant (2 sachet)  
total weight - 2,25 kg
- b) 1 Empsico® 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® Humificant**

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

### **Empsico® Booster Fertilizer**

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

### **Fylo® 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® Humificant: BLW 5992
- Empsico® Booster Fertilizer: BLW 5993
- Fylo® Leaf Treatment: BLW 6002





Manufacturer  
BIOMA SA  
Via Luserte Sud 8  
CH - 6572 Quartino  
Switzerland  
+41 91 840 1015  
info@bioma.com  
www.bioma.com

