

# RIZOCYN

## NATURAL ROOT BIOSTIMULANT

**RIZOCYN** is a natural biostimulant, special for the rapid growth of a voluminous and healthy root system of plants cultivated in the greenhouse and in the open field. It is composed of 100% organic natural ingredients and benefits not only the plants themselves but also their entire ecosystem, creating ideal conditions for the growth of vigorous and high yield crops.

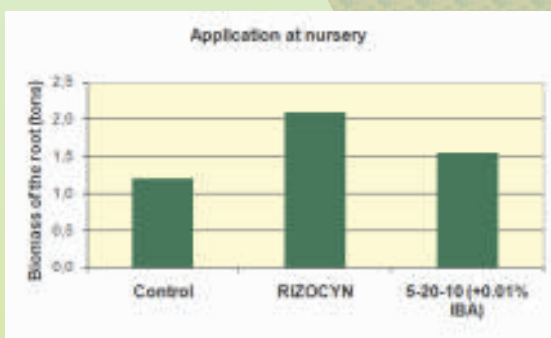
### Synthesis

- Natural growth factors (Cytokinins, auxins, gibberellins)
- Vitamins (including C and Riboflavin-B2)
- Amino acids of animal and plant origin
- Carbohydrates (Monosaccharides and polysaccharides)
- Humic and fulvic acids
- Micronutrients (Fe, Mn, Cu, Mg, Zn, Ca, B, S)

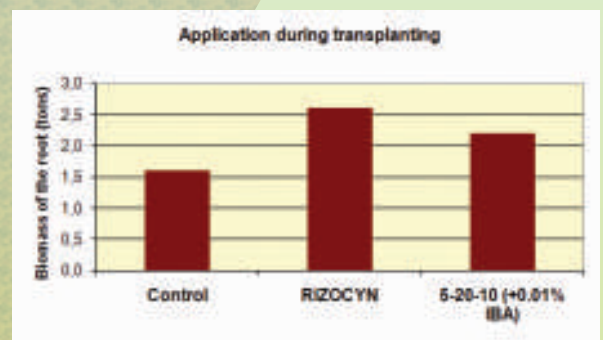
### Benefits from using RIZOCYN

- Promotes the growth of the root in all types of plantlets.
- Assists in overcoming the transplanting shock and ensures the soonest possible establishment of all transplanting plants in the soil.
- Increases the population of the beneficial soil microorganisms.
- Improves the structure of the soil and supplements the organic matter which is consumed due to excessive cropping.
- Enhances the cation exchange capacity of the roots.
- Assists the root penetration even in concrete soils.
- Contributes to the better aeration of the root.
- Increases the cell divisions in the root.
- Promotes seed germination.
- Contributes to the creation of very productive plants with great resistance against diseases.

### Experimental Results of Academic Research



Academic study results showed that 2 applications in the nursery at an application rate 6 l per ha, achieve a 79% more increase of the root's biomass compared to the control and a 31% more increase of the root's biomass compared to the plants that are treated with a mineral 5-20-10 fertilizer which contains 0.01% chemical IBA. Both Rizocyn and 5-20-10 fertilizer are applied at the same application rate and for an equal number of applications.



From the same study it is clear that 1 application during transplanting at an application rate 15 l per ha achieves a 59% more increase of the root's biomass compared to the control and a 48% more increase compared to the plants that are treated with a mineral 5-20-10 fertilizer which contains 0.01% chemical IBA. Both Rizocyn and 5-20-10 fertilizer are applied at the same application rate and for an equal number of applications.

Produced by

**HUMOFERT**



## Mode of action of RIZOCYN

### • **Activates the soil**

**RIZOCYN** contains a sufficient amount of humic and fulvic acids, which are a rich in carbon source of energy. Humic and fulvic acids break down concrete soils and chelate nutrients such as phosphorus and iron which are present in the soil but are not assimilated by plants.

### • **Maintains nutrients in the soil**

The proteins and oils increase the capacity of the soil to retain nutrients for a longer period of time. Furthermore, the above mentioned nutrients along with carbohydrates and humic acids offer a lattice structure to the soil colloids and increase the cation exchange capacity. In this way, soils act as a retention net for the nutrients and as a result the nutrient leaching is reduced and also the beneficial microbial action is increased.



### • **Offers additional organic matter to the soil**

**RIZOCYN** contains a high percentage of complex carbon compounds, which increase the organic matter of the soil and activate the beneficial microbial activity.

### • **Nourishes plants**

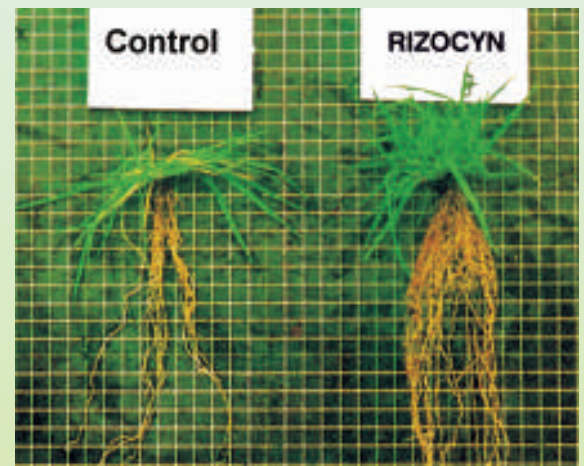
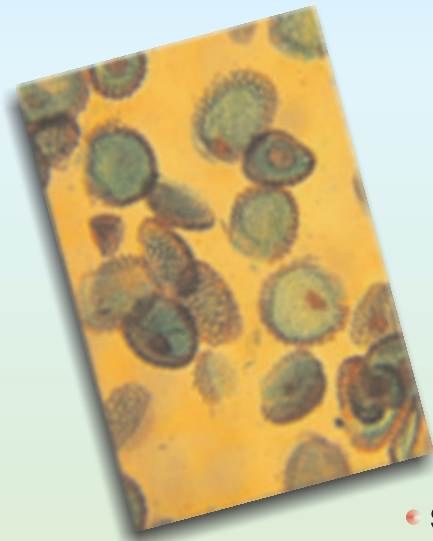
Mono- and poly-saccharides are a food source both for the plants and the microorganisms. These compounds assist plants to assimilate sugars and increase the amount of the contained carbohydrates in plants. Carbohydrates are a rich in carbon food source for the beneficial microorganisms and they also promote the quick growth of a healthy root system.

### • **Stimulates growth**

The natural hormones of **RIZOCYN** promote the rapid seed germination while in parallel they really increase the growth of the root and the plant. On the other hand, amino acids assist the plant growth and the formation of the cellular walls of the plants.

### • **Increases penetration**

The contained in **RIZOCYN** natural chelating agents assist the root to penetrate deeper and assimilate all the needed nutrients. Since these agents are natural there is no risk of phytotoxicity.



## Application rates - Use

Tomato, Cucumber, Eggplant, Pepper, rest of vegetables: 10-20 l/ha. Apply right after transplanting with the first watering. Repeat after 3 weeks.

Watermelon, Melon, rest of horticulture: 10 l/ha. Apply with the transplanting water or right after transplanting the first watering. Repeat after 3 weeks.

Tobacco: 10-20 l/ha. Apply during planting with the transplanting water. Repeat at an application rate 10 l/ha at the growth stage.

Potato: Dipping of the potato seed in a solution of a dilution ratio 250 ml/100 l of water.

Fruit trees, Vineyard, Ornamental plants: Dip the roots and the cuttings in a solution 250-500 ml/100 l of water for 3 minutes before planting.

Lawn: 150-200 ml/100 square meters.

Seedbeds: 150-200 ml/100 l of water.

Nurseries: 1-2 l/1,000 l of water. Apply with watering.