

Liquid Organic Fertilizer with marine plant extracts

Marine

MARINE is a liquid organic fertilizer rich in natural hormones (auxins, gibberellins, betains etc), amino acids, vitamins and micronutrients. It contains marine plant extracts collected by the clear and very rich in iodine ocean waters which have been properly treated in order to maintain their ingredients active. These ingredients stimulate the biological processes in the plant cells and promote the plant growth.

THE ROLE OF HORMONES IN PLANT NUTRITION

MARINE is rich in auxins. Auxins are the first plant hormones ever discovered. Their presence is essential for the regulation of many biochemical processes which affect plant growth. Auxins stimulate cell elongation, they promote cell division and cell differentiation. Also they promote root growth and delay the senescence of the leaves and of the total plant. The presence of auxins is important for the proper formation of the fruits and the delay of the fruit degradation after harvest.

MARINE also contains another group of hormones, gibberellins which affect various plant growth processes including stem elongation, germination, dormancy, flowering, enzyme production, leaf and fruit ageing. Gibberellins are also involved in the natural processes which are responsible for the dormancy breaking, especially in plants which require stratification or light as to germinate.

Another group of natural hormones contained in **MARINE** are betaines which stimulate cell metabolism and contribute to the synthesis of methionine, polyamines and ethylene. Additionally they protect the cells by interfering in the cellular osmotic potential. Betaines regulate the turgor and the cellular osmotic balance and as a result cell membranes overcome the stress induced by the deficiency of the cell water. In this way plants become more resistant to frost, drought and heat.

BENEFITS

The regular use of **MARINE** in an integrated crop management program offers the following benefits:

- Enhanced growth of the underground and aboveground part of the plant.
- More flowers and fewer losses due to blossom drop.
- Higher fruit set capacity.
- Increased production yield.
- Improved crop quality.
- Nutrient deficiencies are less likely to appear.
- Higher photosynthetic capacity which means more energy and therefore more vigorous plants.
- Reduced possibility of plant stress due to weather conditions (frost, drought).
- Fortification of the biological processes of the plants and increased tolerance to various stressful factors.
- Elongation of the shelf life.



HUMOFERT





CROPS	APPLICATIONS	Foliar application	Soil application
Fruit trees, Nut trees, Olive	3-4 times per year (prior to blossom - at fruit set - young fruit - prior to harvest)	8-10 l/ha	20-40 l/ha
Vineyard	At start of new growth - prior to blossom - at berry set - at berry sizing -20-30 days prior to harvest	8 l/ha	20-40 l/ha
Citrus	Prior to blossom - at full blossom - at fruit sizing	8,5 l/ha	20-40 l/ha
Strawberry	At first blossom - every 2-3 weeks during harvest	8,5 l/ha	20-40 l/ha
Leafy vegetables	3-4 times starting from the first true leaf stage until harvest	7,5-10 l/ha	20-40 l/ha
Rest of vegetables - Horticulture	At 15-20 cm stage - prior to blossom - at fruit set - 15 days after fruit set - after every harvest	5 l/ha	20-40 l/ha
Flowers	Throughout the growing season until the bud emergence	1 l/100-200 l of water	20-40 l/ha
Ornamental plants	2-3 applications every 10-15 days starting from the vegetative growth stage	1 l/100-200 l of water	20-40 l/ha
Cereals	At 10-20 cm stage - at blossom or at the initial growth stages of the ear	2,5-5 l/ha	20-40 l/ha
Potato	Tuber dipping before sowing - foliarly at tuber formation - 10-15 days later - at pre blossom	2-5 l/ha	20-40 l/ha
Fodders	After each cutting	8-10 l/ha	20-40 l/ha
Corn	At 15-20 cm growth - at 23-35cm growth - just prior to tasseling	8-10 l/ha	20-40 l/ha
Rice	At the 3-4 leaf stage - at panicle initiation	5 l/ha	20-40 l/ha
Tobacco, Beets	3-4 applications every 10-15 days starting from the first leaf stage	4-8 l/ha	20-40 l/ha
Cotton	At blossom initiation - 7-10 days later	8-10 l/ha	20-40 l/ha
Lawn	Every 20-25 days throughout the growing season	4 l/ha	20-40 l/ha

APPLICATION RATES - APPLICATION

MARINE is suitable for foliar applications, watering of the roots and dipping of the seeds, roots and cuttings. Apply at the following dilution rates:

Foliar applications : 1 l/100-200 l of water.

Nurseries-Seedbeds : 0,8 - 1 l/100 l of water.

Seed dipping : 0,8 - 1 l/50 l of water (Let the seed dry well).

Root dipping : Prepare a solution of 0,8 - 1 l/50 l of water during transplanting and dip the roots thoroughly just before putting the plants in the soil.