

# BOMBA

Humification is the biological aerobic decay of the dead organic matter during which a rich organic product is formed, humus. Humification can occur naturally in the soil according to the following procedure. Plant and animal residues which contain organic compounds such as polysaccharides (starch), proteins and organic acids etc are gradually decomposed in the soil. Specifically, the complex organic compounds (starch) are degraded to simpler compounds (oligosaccharides) with the action of saprophagous microorganisms which decompose the dead organic matter of plant and animal origin. Humus is the end product of this complicated process and is a mixture of compounds of plant, animal and microbial origin. Humus is an integral part of soil organic matter. Soil organic matter comes from dead organisms (cells, tissues), animal secretions, branches, fruits, dead leaves, plant roots that are decomposed by the soil microbes (decomposers). Organic matter is considered the vital component of a healthy soil since:

- Provides a source of carbon and energy to the soil beneficial microorganisms.
- Stabilizes and holds soil particles together, inhibiting the hazard of erosion.
- Enhances crop growth by improving the soil's capacity to store and transmit air and water.
- Retains soil nutrients by providing cation exchange capacity.
- Organic matter acts as a reservoir of nutrients in the soil.
- Stores and supplies crops with nutrients, such as nitrogen, phosphorus and sulphur that are essential for the growth of plants and soil microorganisms.
- Prevents the soil compression.
- Is the main component for soil fertility.
- Contributes to soil biodiversity.
- Assists in the absorption and retention of water and that is why organic matter is lifeline for vegetation in sandy soils.

Humification is a time consuming process. Intensive cropping does not offer the time limit for replenishing organic matter by the natural procedure of humification. That is why the application of a product rich in organic matter such as **BOMBA** is necessary for making soil fertile and achieving high yields for all crops.

## SYNTHESIS

Oligosaccharides	26 %
L-Amino acids	10 %
Humic acids	5 %
Proteins	5 %
Micronutrients	0.5 %

The application of BOMBA allows the rapid replenishment of organic matter in the soil since it contains a variety of organic compounds that increase the population of the beneficial soil microorganisms. Soil microorganisms are essential for the degradation of organic matter and chelation of soil nutrients.



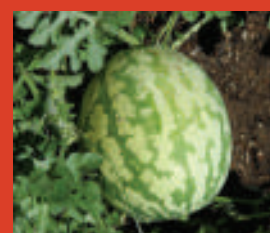
## PROPERTIES

- Replenishes the organic matter of the soil.
- Creates optimum conditions for the growth and proliferation of the beneficial microorganisms.
- Restores the biological balance in soils after disinfection.
- Activates and enriches the growth substrate of crops which is inactivated because of intensive cropping.
- Fortifies the root system and increases the dry matter of the underground part of the plants.
- Reduces the density of concrete soils allowing a better soil aeration and a deeper root penetration.
- Creates chemical bonds with the soil metals increasing their uptake by the plants.
- Promotes the early maturing of crops.
- Increases the capacity of achieving high yields.
- Improves the qualitative characteristics of the crop.
- Contributes to the increase of the farmers' profit.

## APPLICATIONS - DOSAGES

It being applied on the soil through all irrigation/fertilization (by fertigation) systems or by drenching the zone around the roots

CROP	APPLICATIONS	DOSAGE
Greenhouse crops (cucumber, tomato, pepper, eggplant, melon, squash)	7-10 days after transplanting - At fruit set - Every 2-3 weeks	1-3 ml per plant
Open field fruiting vegetables (tomato, pepper, squash, eggplant, watermelon, melon)	7-10 days after transplanting - Before fruit set - Every 2-3 weeks	1-2 ml per plant
Cabbage, Cauliflower, Broccoli, Lettuce, Endive, Asparagus	After planting - 1-2 weeks after the first application	1 ml per plant
Strawberry	1 week after transplanting - At the wake up from latency - After fruit set	2-3 ml per plant
Potato, Carrot, Red beet, Onion, Sugar beets	7-10 days after planting - At tuber set - 10-15 days later	1-2 ml per plant
Parsley, Celery, Dill	Every 15-20 days	20 l/ha
Tobacco	At planting and 20-30 days later	1-2 ml per plant
Cotton	After the 4 leaf stage - After boll set	1 ml per plant
Rice	After the emergence of the rice from the water	10-20 l/ha
Ornamentals	Every 15-20 days	1-2 ml per plant
Bushes	Every 15-20 days	3-4 ml per bush
Lawns, Turfs	Every 20-30 days	500 ml /100 sq.m.
Vineyard	At blooming- After fruit set	20-30 l/ha
Citrus, Kiwi	At blooming- After fruit set	20-30 l/ha
Apples, Pears, Figs	At blooming- After fruit set	20-30 l/ha
Apricots, Peaches, Cherries, Plums, other stone fruits	After fruit set	20-30 l/ha



**HUMOFERT**

