

**- Specification Sheet -****PROTON 1-1-16**

The organic natural fertilizer **PROTON** derives from the fresh marine plants collected from the coastal waters of the north Atlantic ocean. It is a natural store of primary and secondary chelated nutrients and micronutrients such as Iron, Sulphur, Magnesium, Calcium, Boron, Copper, Zinc, Molybdenum, Manganese, Cobalt e.g. Also contains the carbohydrates Mannitol, Alginic acid and Laminarin, naturally occurring plant growth stimulators such as Cytokinins, Auxins, Gibberellins and the amino-acids Glutamic acid, Aspartic acid, Arginine, Alanine, Glycine, Leucine, Lysine, Valine, Serine, Phenylalanine, Isoleucine, Histidine, Proline, Threonine, Tyrosine, Methionine and Cysteine.

**PROPERTIES AND USES:**

- Improves nutrient uptake from the plants.
- Enhances the growth of a well developed root system and therefore of the whole plant.
- Promotes blooming.
- Increases fruiting.
- Increases the protein content of the fruits and their content in micronutrients.
- Improves the quality and the flavor of the fruits and vegetables.
- Fortifies plants against stress caused by various factors.
- Increases fruit resistance in transportations.
- Stimulates and promotes seed germination.
- Improves the physical and biological properties of the soil, increasing the total micronutrient availability.
- Enhances plants resistance against frost, drought and transplant shock.
- It is not phytotoxic.

**APPLICATION:**

**Proton** is applied foliarly, by fertigation and by seed and root dipping.

Application Rate: Generally it is applied at the following application rate.

*Foliar application:* 25- 50 g/100 l of water.

*Fertigation:* 1.5 – 2.5 kg/ha

*Nurseries:* 50 – 75 g/100 l of water.

*Seed dipping:* In solution 50 – 75 g/50 l of water. (Let the seed to dry well)

*Root dipping:* In a solution 50 – 75 g/50 l of water before transplanting.

**STANDARD ANALYSIS (w/w)**

Total Nitrogen (N)	0.80%
Phosphorus (P <sub>2</sub> O <sub>5</sub> )	1.00%
Potassium (K <sub>2</sub> O)	16.0%
Calcium (Ca)	0.30%
Magnesium (Mg)	0.30%

**PHYSICAL PROPERTIES:**

Appearance:	Brown-black powder
Density:	0.65 g/cm <sup>3</sup>
Solubility 20°C:	100% water soluble
pH:	10-10.5