

Plantos Verde is a 100 % natural product, no polluting, made of calcite micro particles. It consists of a foliar treatment which acts on the plant reinforcement and on the activation of the primary and secondary metabolisms. It favours a better resistance of the plant against the biotic and abiotic stresses. Moreover, it improves quality and yield of cultivations, while the environment is always respected.

Facts sheet

Main components:

CaCO3 (carbonate calcium):	82.3%
SiO2 (silicium dioxide) :	8.56%
MgO (magnesium oxide) :	3.02%
CaO (calcium oxide):	41.7%
Iron:	8783 mg/kg
Mn (manganese):	156 mg/kg
Selenium:	0.24 mg/kg
Carbonic solubility:	65
Neutralizing value:	47

Plantos Verde is made of calcite comes from tribomechanical technology, which allow to get finest granularity (granularity in the region of micrometer) and new physicochemical characteristics with a higher reactivity in the plant. Phytotoxicity tests were made at SADEF laboratories to show Plantos Verde inocuity on vegetal. The product is not toxic, even with important doses. Fluorimetry and % dry matter measurements confirms this fact.

Different laboratories analysis and many fields experimentations were made to show particularities and specificities of calcite micronised by this new tribomechanical technology.

Analyses made at Chemical Superior National College of Mulhouse show that tribomechanical treatment has a determining effect on the textural characteristics: total specific surface has doubled and the one of the total porous volume has tripled. Moreover, calcite microparticles have a negative charge which gives us a lot of particularities.

Cuticular pH of the leaf is in the region of 5.8. At this acid pH, 85.2 % of the TMA calcite is soluble on leaf. Calcium is the main soluble element is (32.8 %). So calcium carbonate dissociation on the plant allows an important calcium contribution. Calcium is involved in many biochemical mechanisms and in cellular functioning. Many kinase proteins have a catalytic activity, calcium dependant. Those proteins have an important part in the transmission of the defence signal when plant detects a pathogen agent.

From an agronomic point of view, calcium contribution favours the healing, improves fruits and vegetables preserving and increases resistance to biotic and abiotic stress. Photosynthetic process is enhanced by Plantos Verde applications. Calcium carbonate dissociation allows an intra cellular carbon dioxide contribution. So photobreathing process is inactivated thanks to a photosynthetic activation.