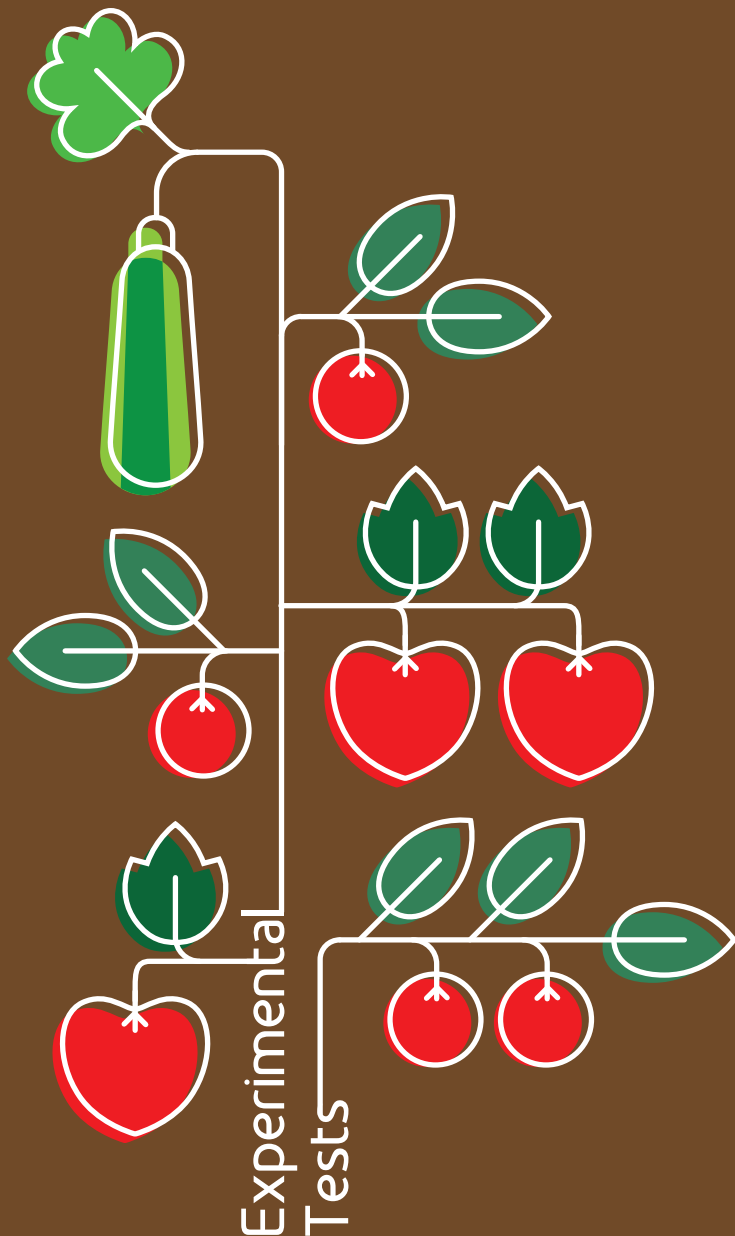


HYDRO GOLD VEG

BETTER ROOTS DEVELOPMENT
AND PHOTOSYNTHETIC
EFFICIENCY



hydro fert



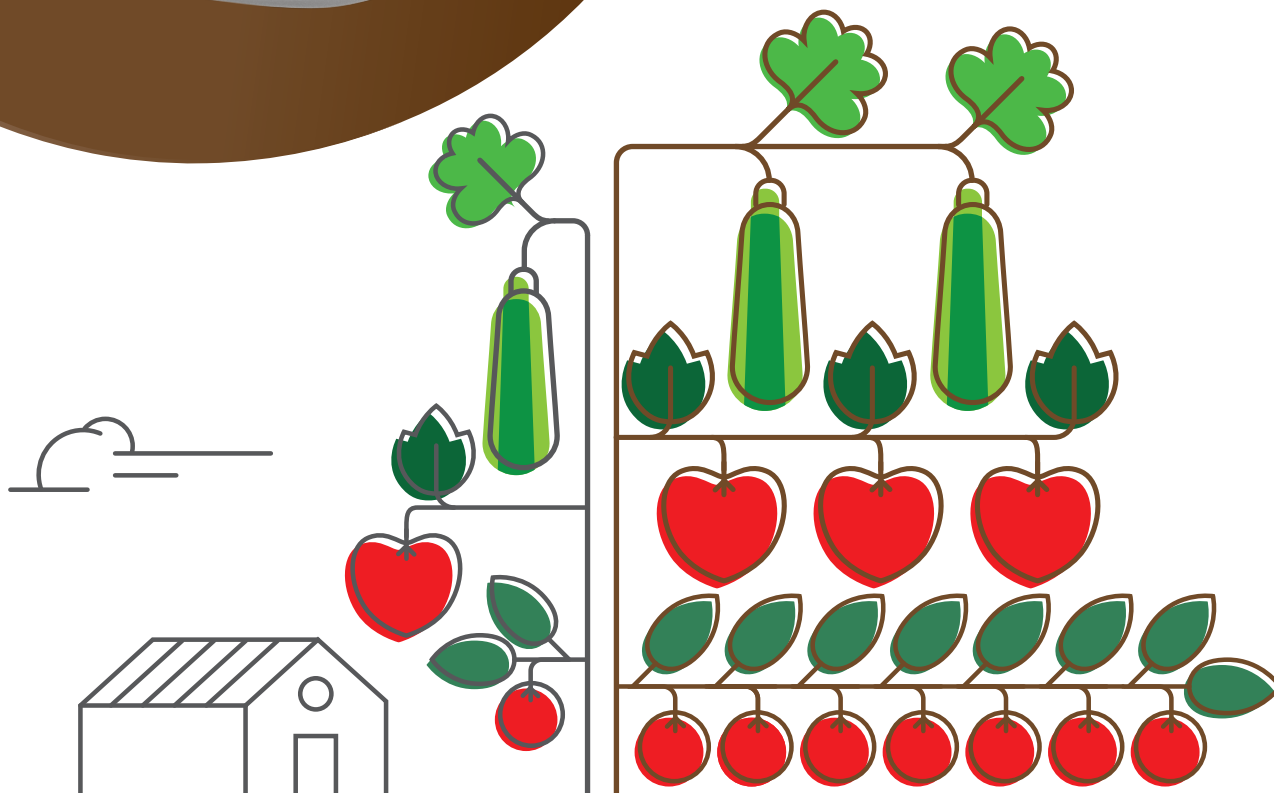
Hydro Gold Veg

1L	5 - 20 L	120 L	1000 L
	BIO		

Fluid extract of yeast containing brown seaweeds, with amino acids of plant origin (20%) and micronutrients. Allowed in organic agriculture.

BENEFITS

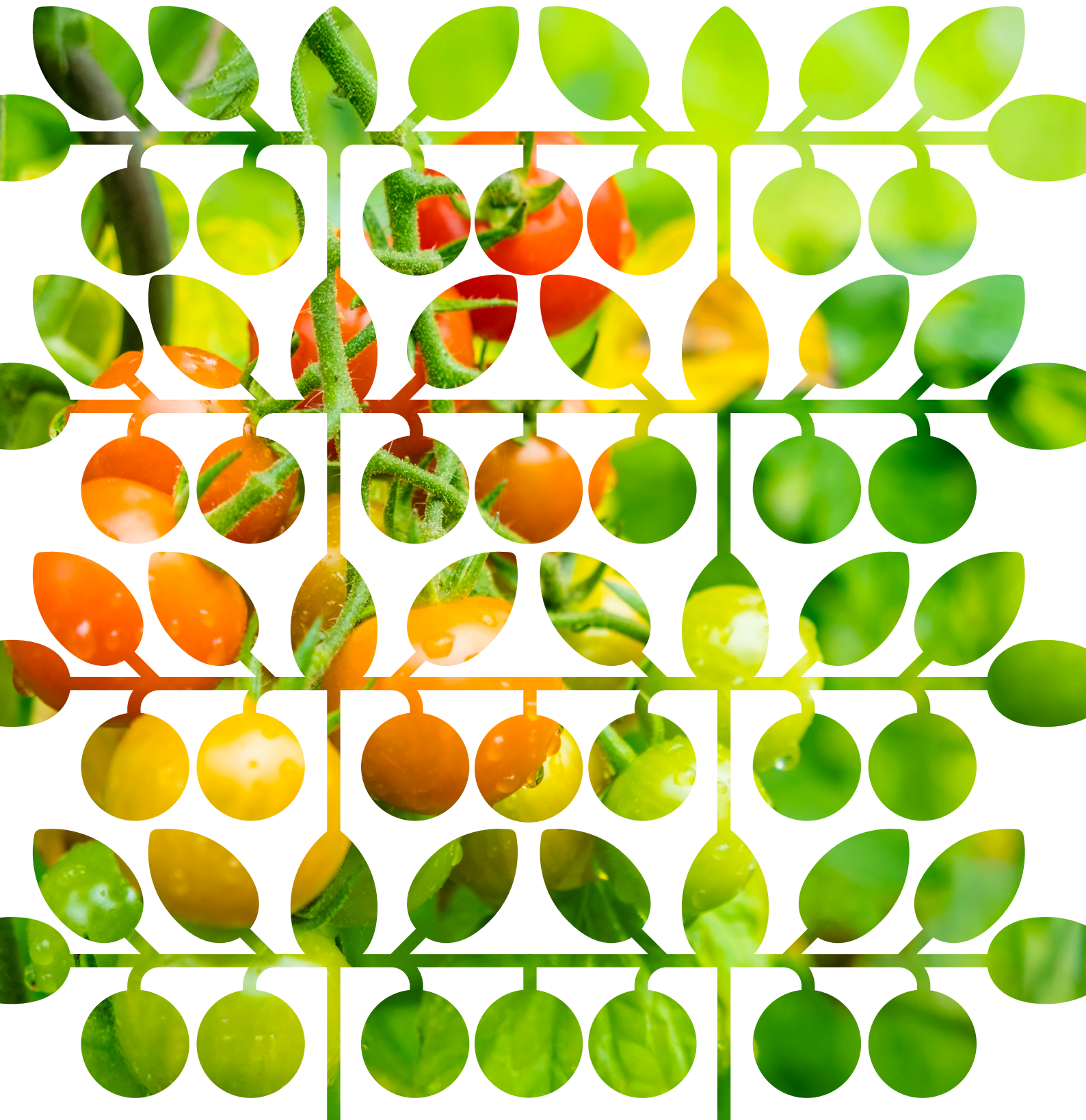
- increased roots development
- better photosynthetic efficiency
- superior yields



Hydro Gold Veg is a totally water-soluble organic nitrogen fertilizer, based on amino acids of plant origin, containing brown seaweed (*Sargassum*, *Laminaria*). Thanks to its particular composition, with a high and well-balanced content of free amino acids that can be rapidly absorbed, it can enhance the production of proteins, enzymes, plant regulators and sugars.

Plant extracts: precious allies of plants

When regularly applied, Hydro Gold Veg is apt to achieve increased roots volume, homogeneous plant development, yields' improvement in terms of quality and quantity, as well as longer shelf life. In case of stress conditions (frost, hail, weeding, root asphyxia), it helps quickening the plant's vegetative regrowth.

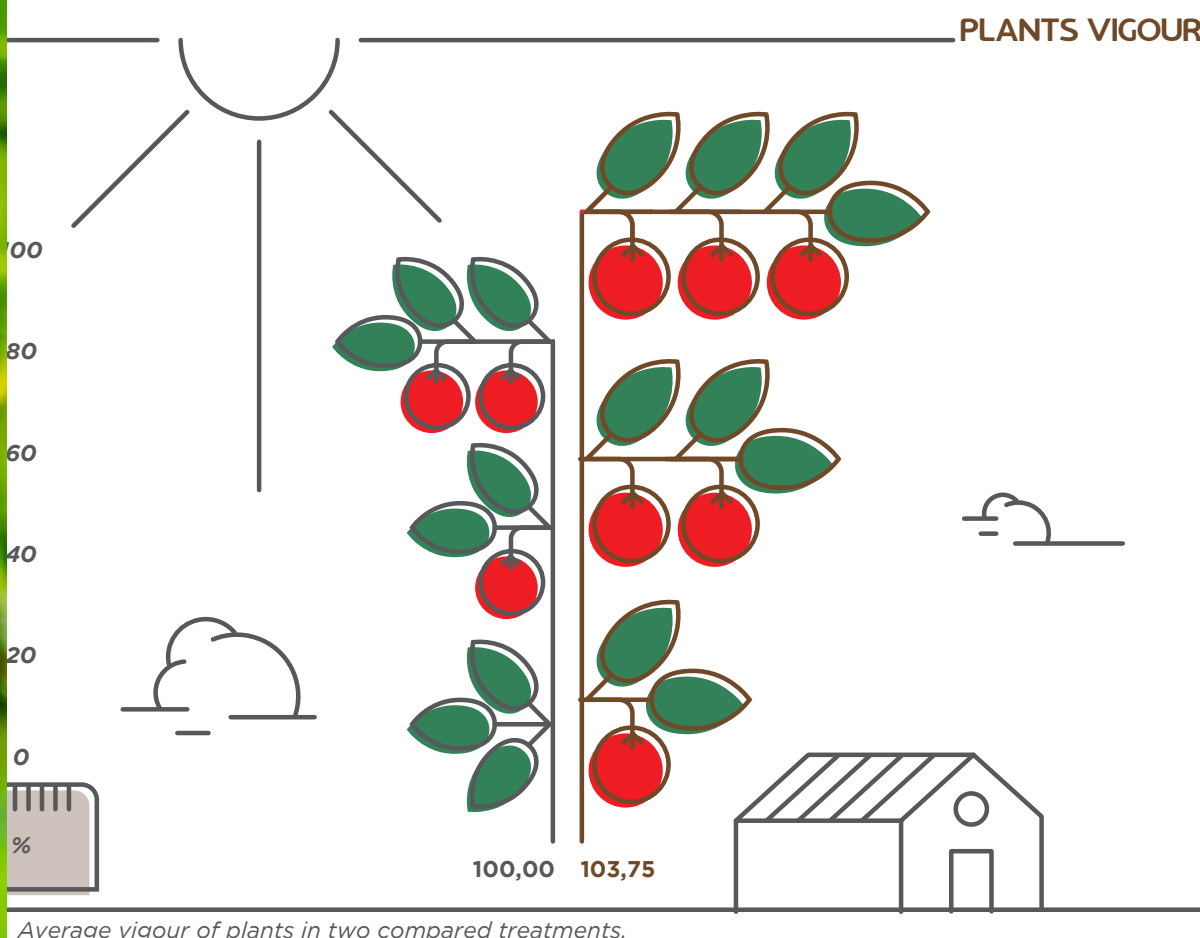


Tomato crops in open fields



MATERIALS AND METHODS

Species	<i>Solanum lycopersicum</i> var. HEINZ 1538		
Experimental design	Fully randomized blocks		
Duration	14 weeks: 13/05/2019 (transplanting) - 23/08/2019 (end of trial)		
Temperature	According to the climate trend in the countryside of Trinitapoli (Italy)		
Relative humidity	According to the climate trend in the countryside of Trinitapoli (Italy)		
Light	Typical of the trial period		
Substratum	Sandy and loamy soil		
Method of administration	Fertigation		
Compared treatments	Control and Hydro Gold Veg (20 l/ha)		
Number of applications	3 (flowering, fruit setting, fruit growth)		



Hydro Gold Veg increases the average plants vigour compared to the untreated control. The brown seaweeds and the free amino acids, that can be rapidly absorbed, favour a bigger vegetative growth.

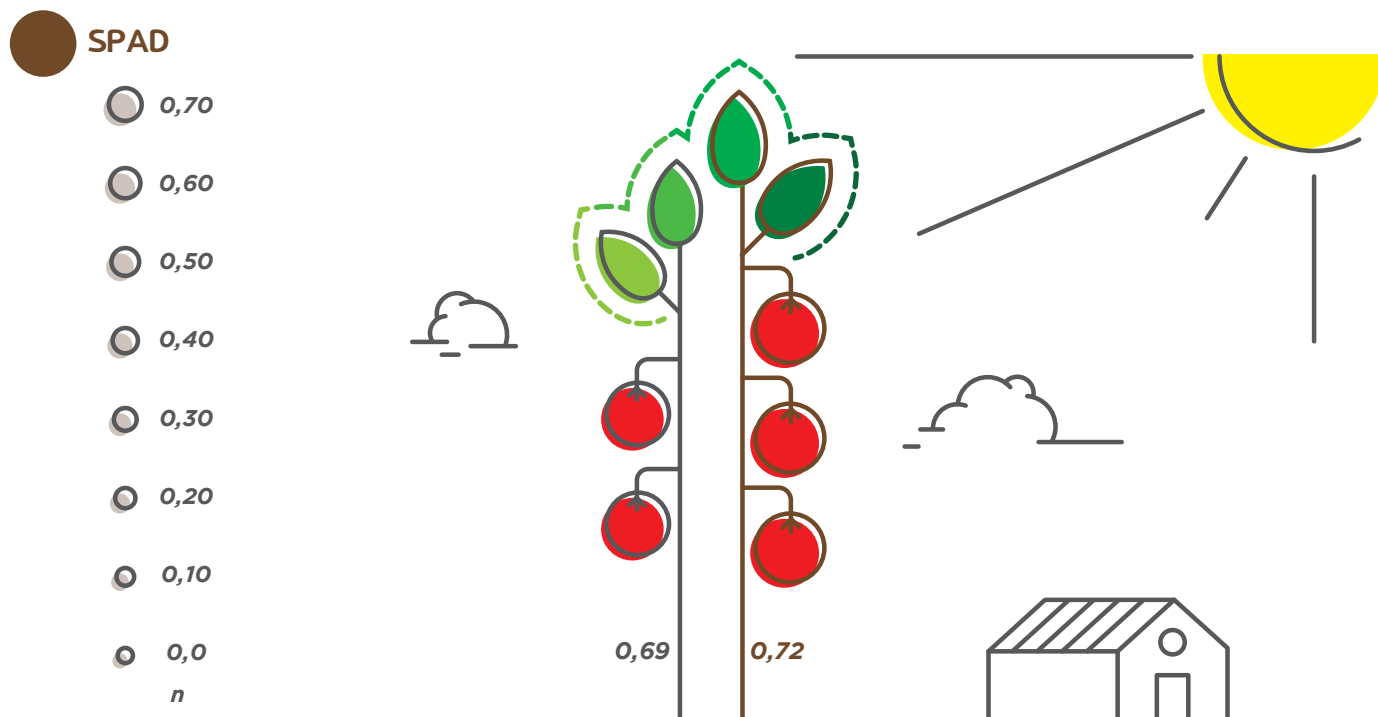


FIG 2 - Average SPAD values in two compared treatments.

Hydro Gold Veg increases the chlorophyll content (SPAD value) compared to the untreated control. This improves the phytosanitary status of plants, which become stronger against physical stress caused by frost or hail damages.

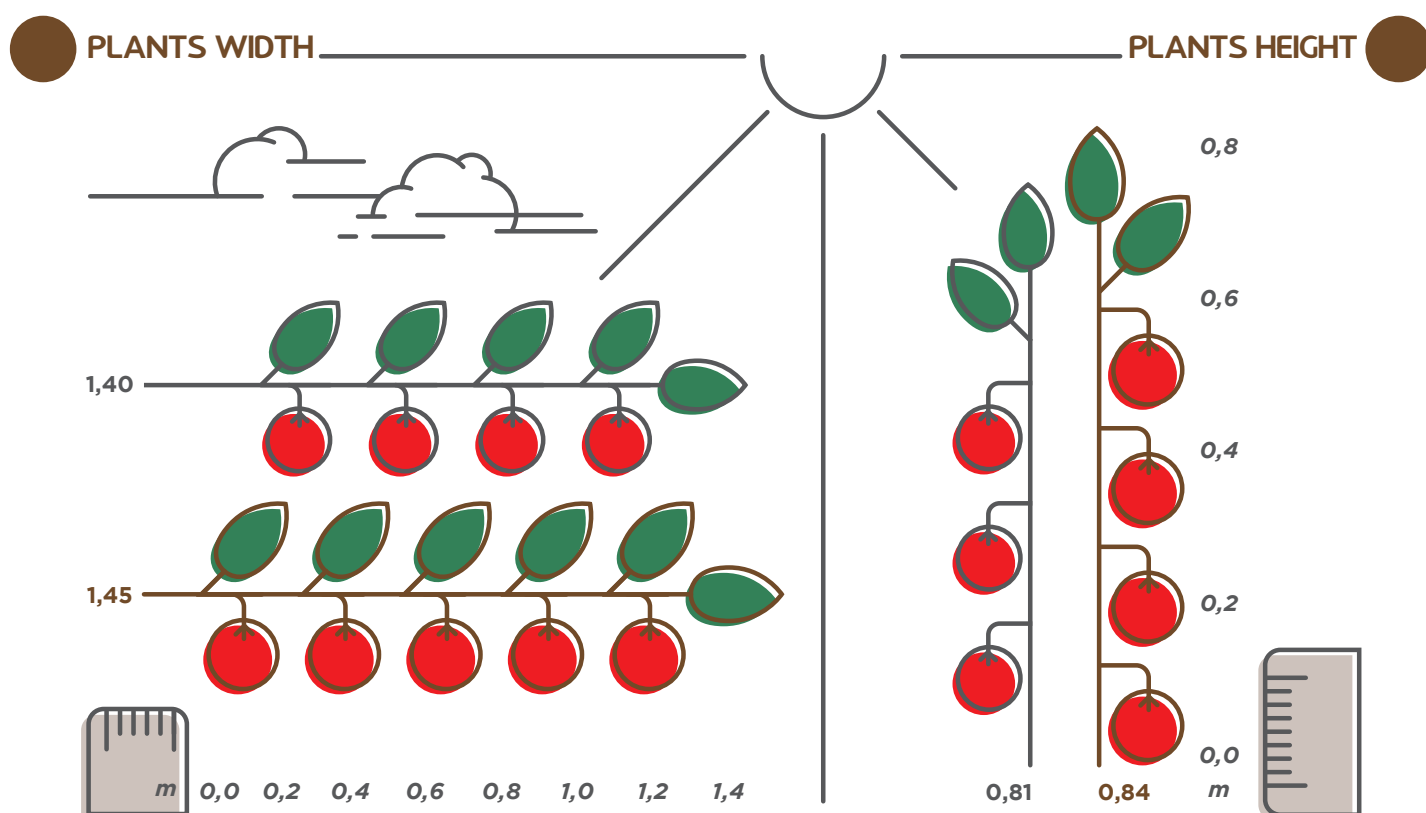


FIG 3 - Average width and height of plants in two compared treatments.

Hydro Gold Veg increases the height and width of plants compared to the untreated control, confirming the previous results which report a higher percentage of vigour. The free amino acids which can be rapidly absorbed favour a higher production of enzymes, plant growth regulators (PGR), sugars, proteins, and, therefore, a bigger growth.



ROOTS WIDTH

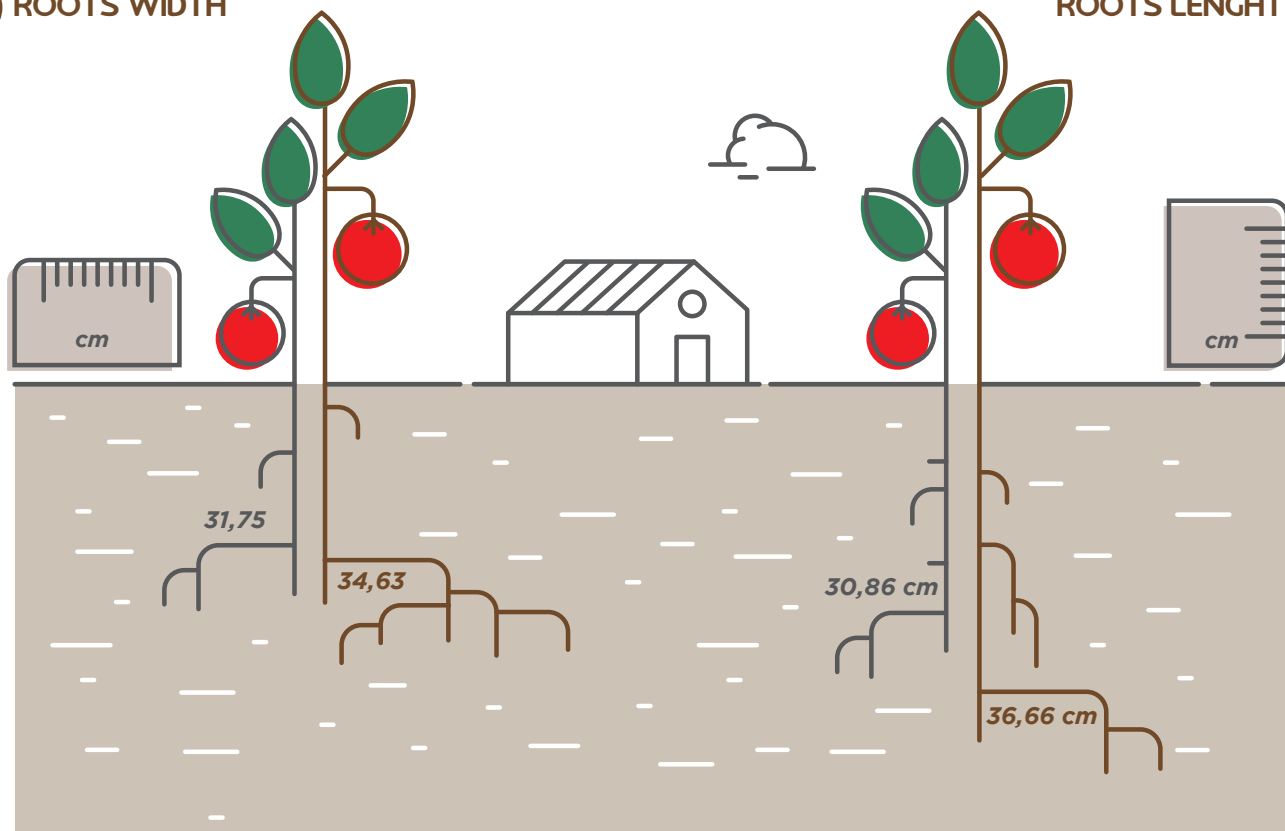


FIG 4 - Average width and lenght of roots in two compared treatments.

ROOTS VOLUME

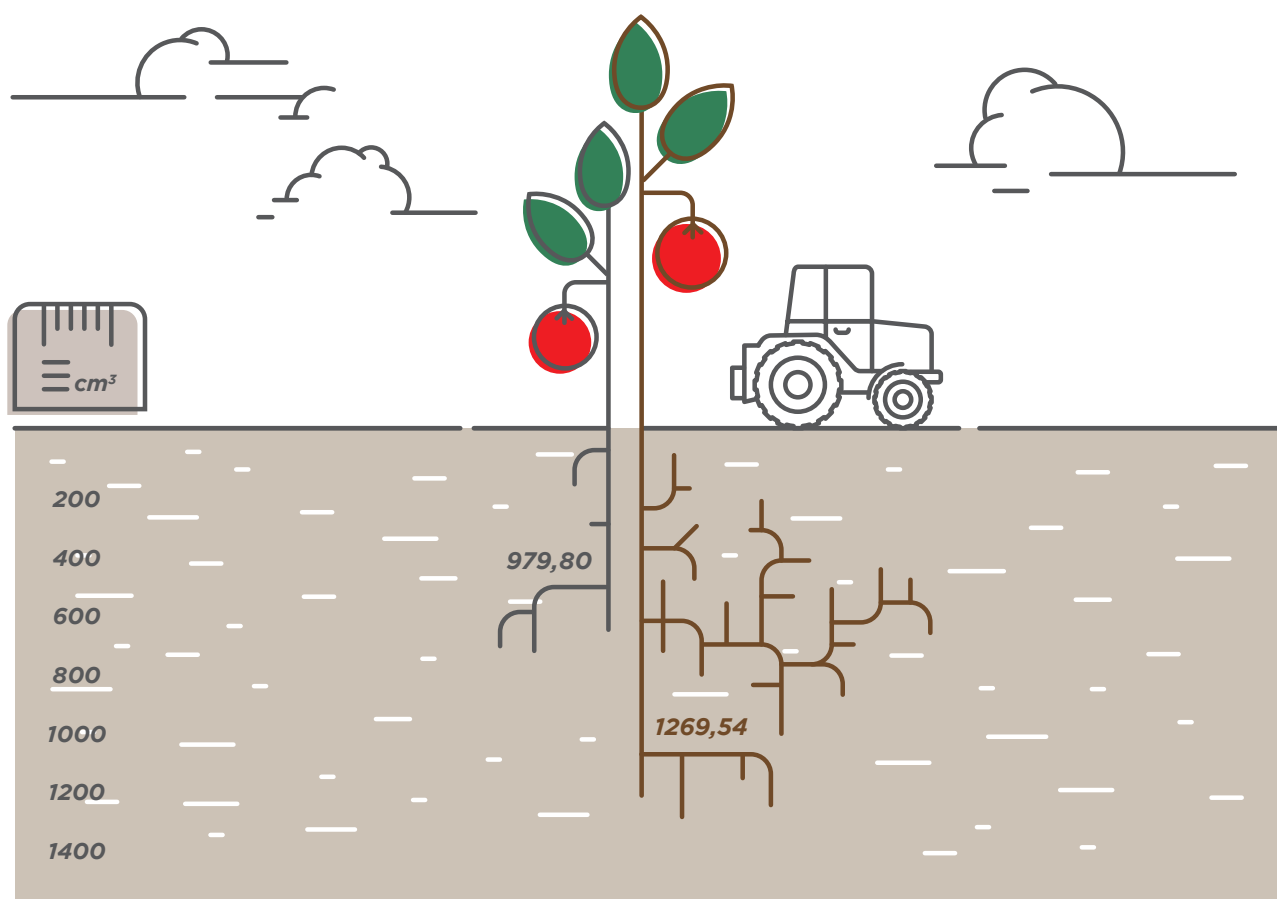


FIG 5 - Average volume of roots in two compared treatments.

ROOTS FRESH WEIGHT

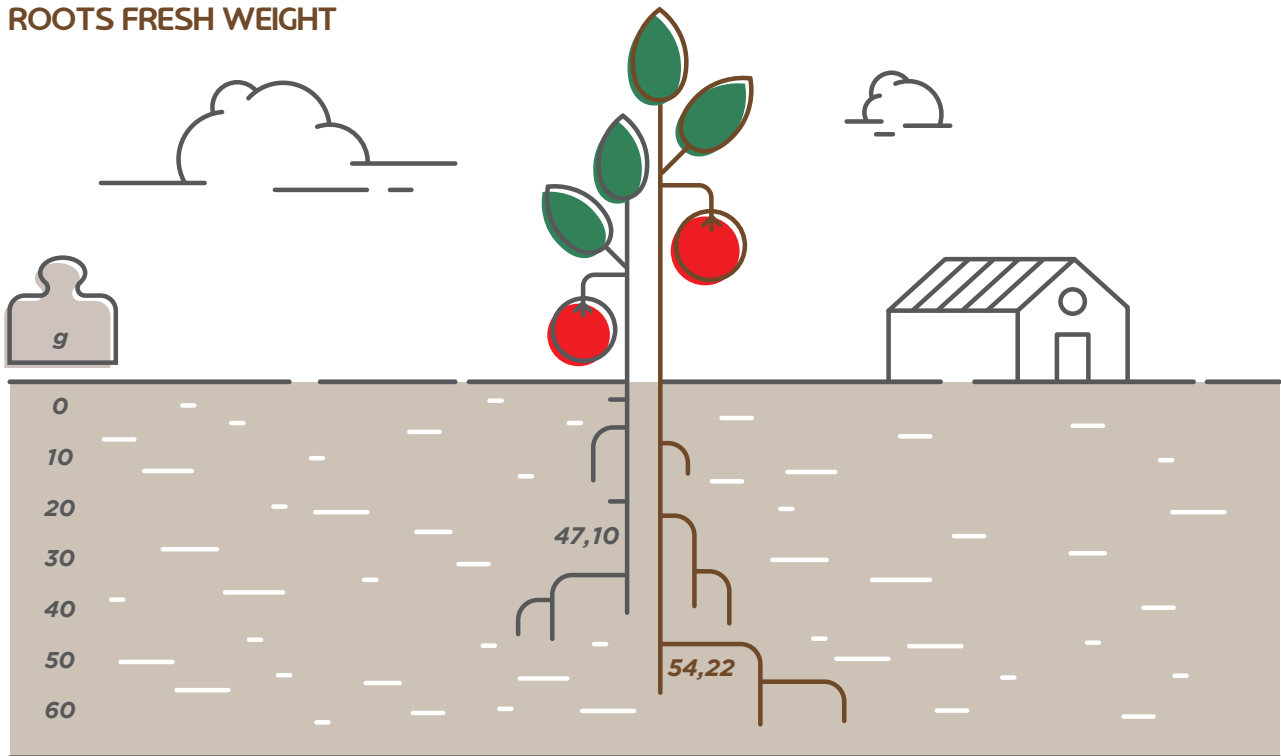


FIG 6 - Fresh weight of roots in two compared treatments.

Hydro Gold Veg improves the root system, proven by augmentations in width, length, fresh weight and volume values, compared to the untreated control, also thanks to its content of brown seaweeds.

A more expanded root system allows a better absorption of nutrients and, therefore, a higher plant resistance against biotic and abiotic stress.

FRUITS FRESH WEIGHT

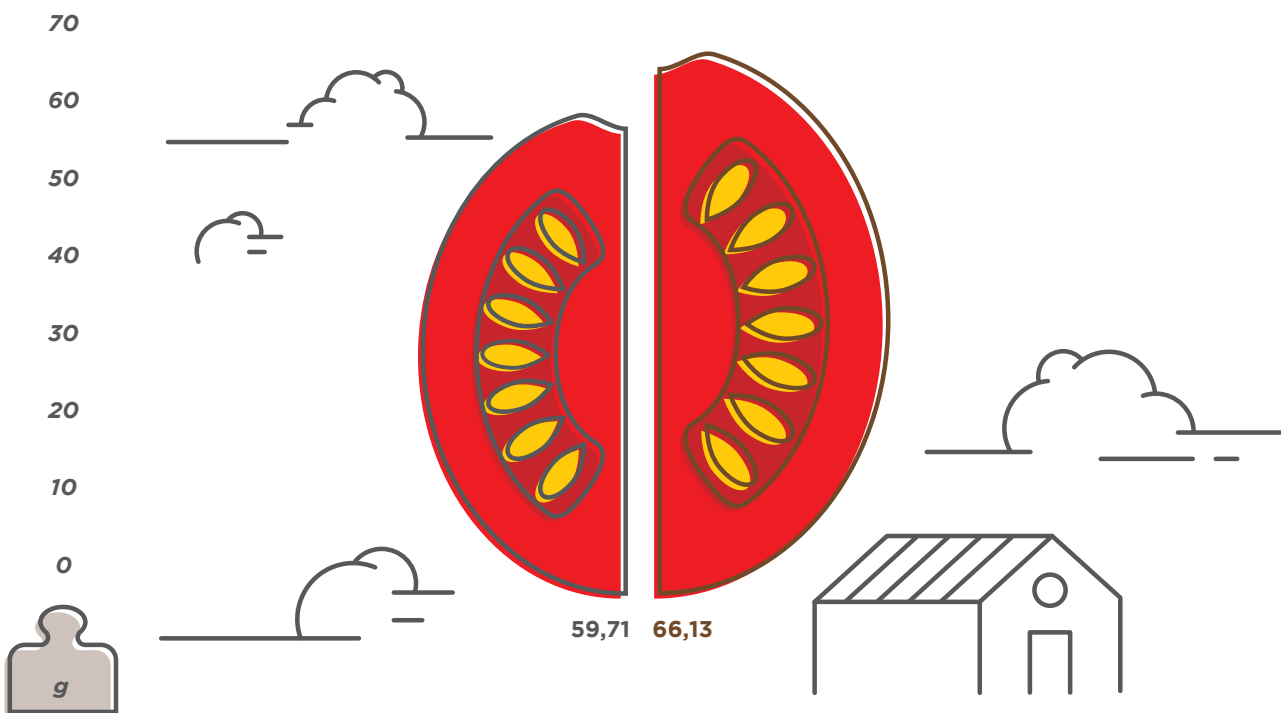


FIG 7 - Fresh weight of fruits in two compared treatments.

Hydro Gold Veg increases the fresh weight of fruits compared to the untreated control.

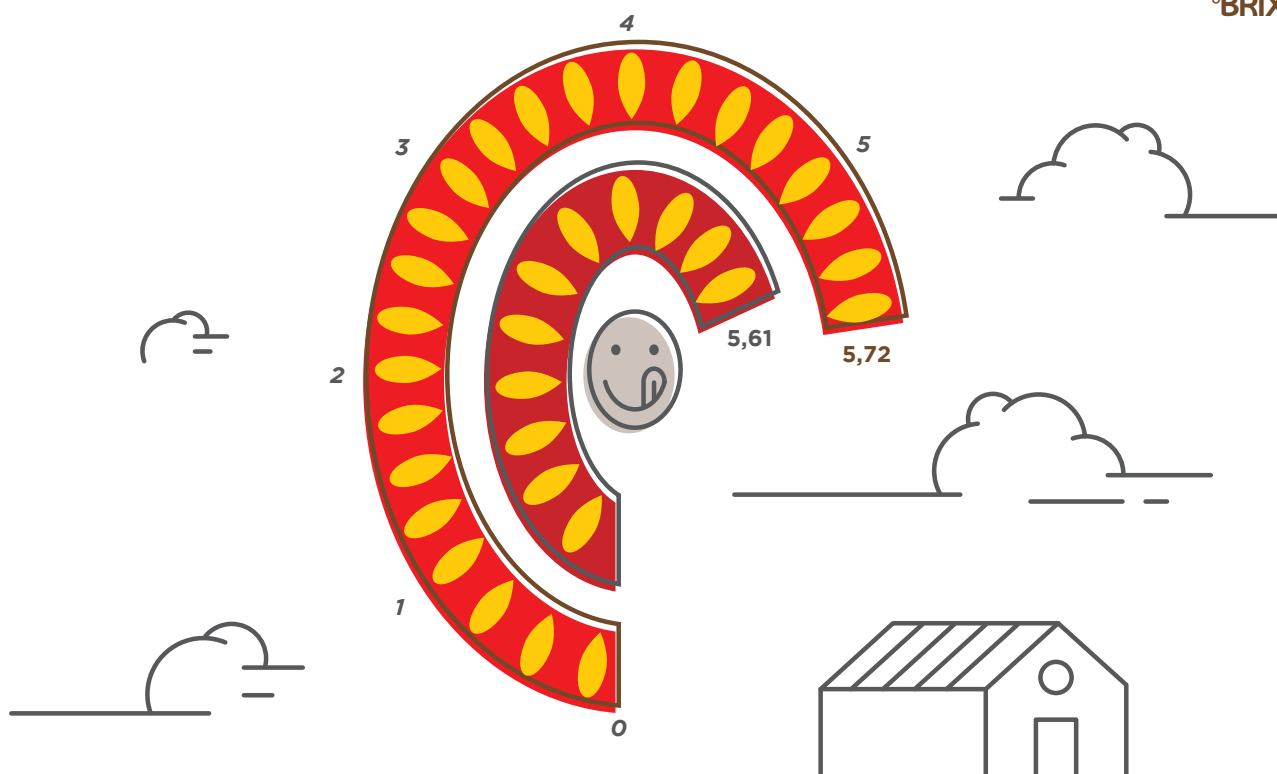


FIG 8 - °Brix in two compared treatments.

Hydro Gold Super increases the °Brix value compared to the untreated control, resulting in better quality yields.

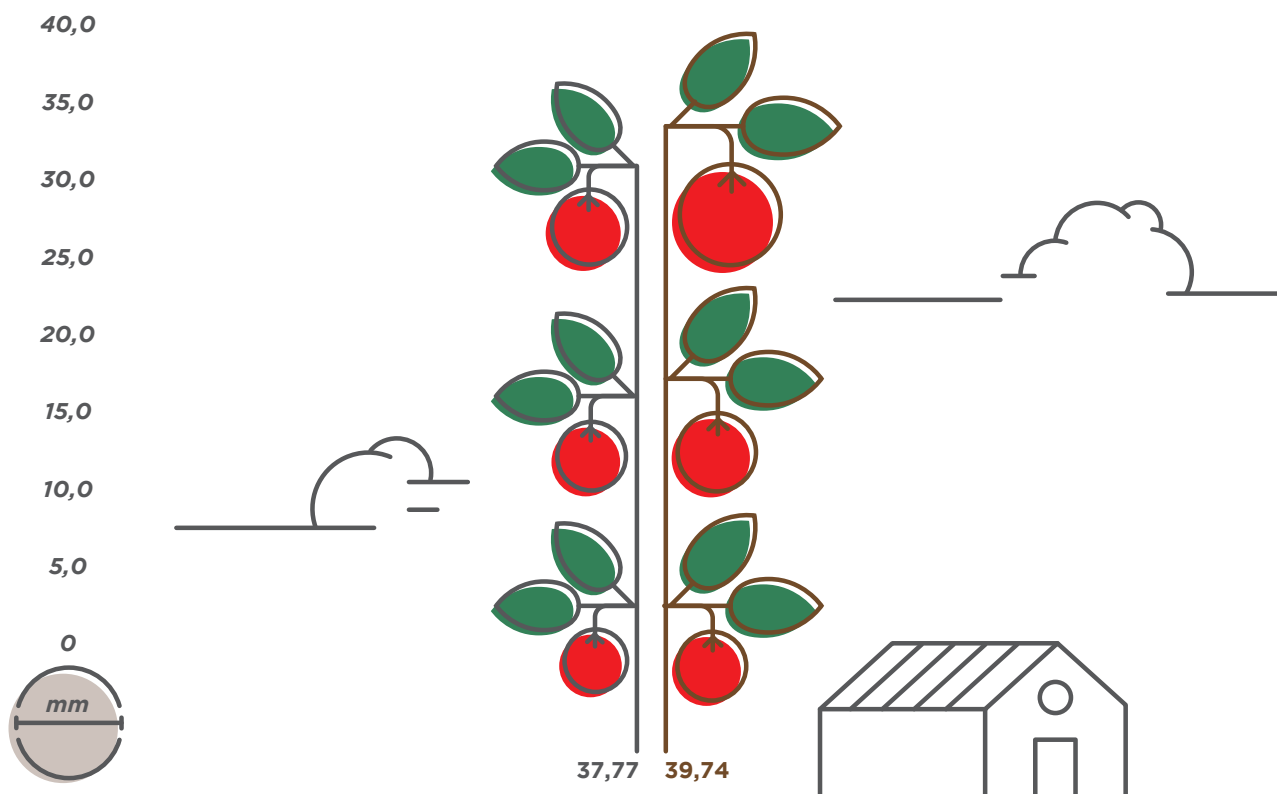


FIG 9 - Average size of fruits in two compared treatments.

Hydro Gold Veg increases the size of fruits compared to the untreated control.

FIRMNESS

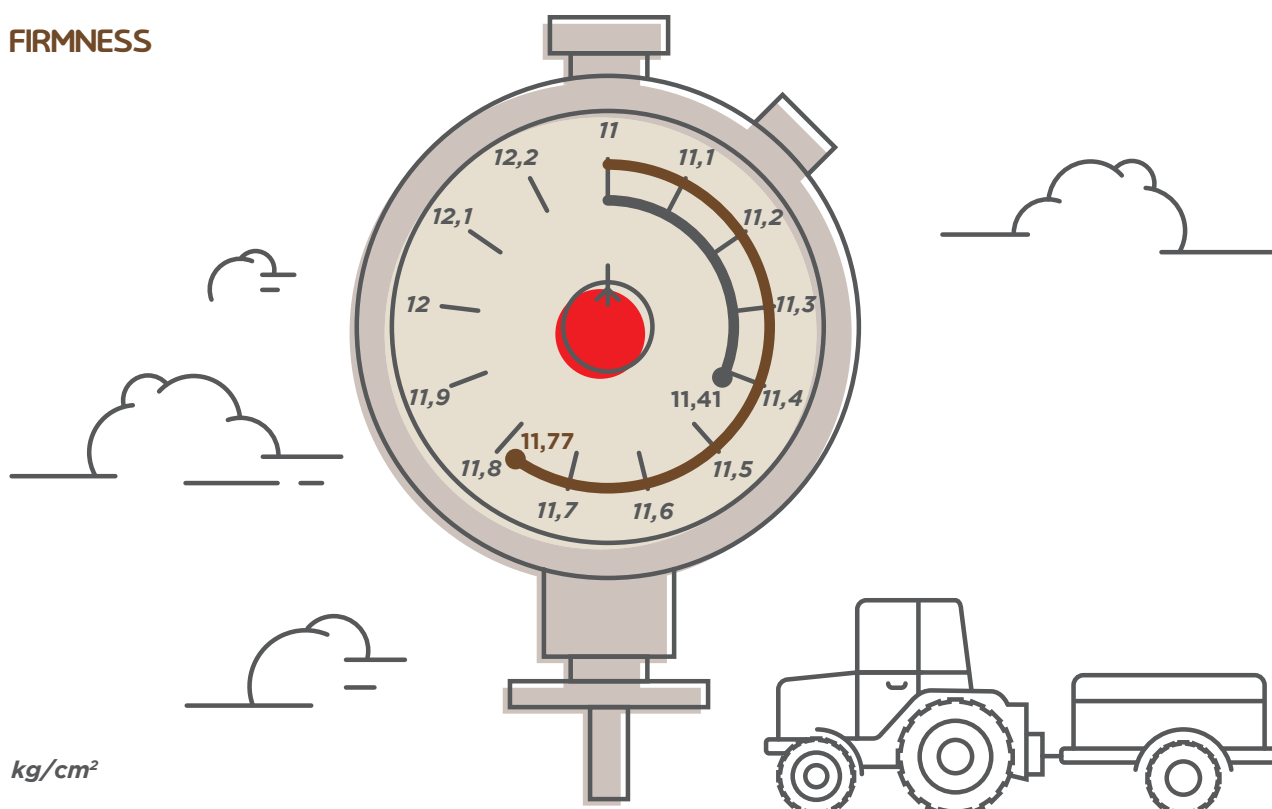


FIG 10 - Average firmness of fruits in two compared treatments.

The use of Hydro Gold Veg increases the firmness of fruits compared to the untreated control.



Tomato crops in growth chamber



MATERIALS AND METHODS

Species	<i>Solanum lycopersicum</i> var. Cuore di bue
Experimental design	Fully randomized blocks
Test Duration	4 weeks
Temperature	19 °C (night) and 23 °C (day-time)
Relative humidity	65-75%
Light	14 hours
Substratum	Peat
Method of administration	Fertigation
Compared treatments	Control and Hydro Gold Veg (20 l/ha)
Number of applications	3 (once a week)

ROOTS VOLUME

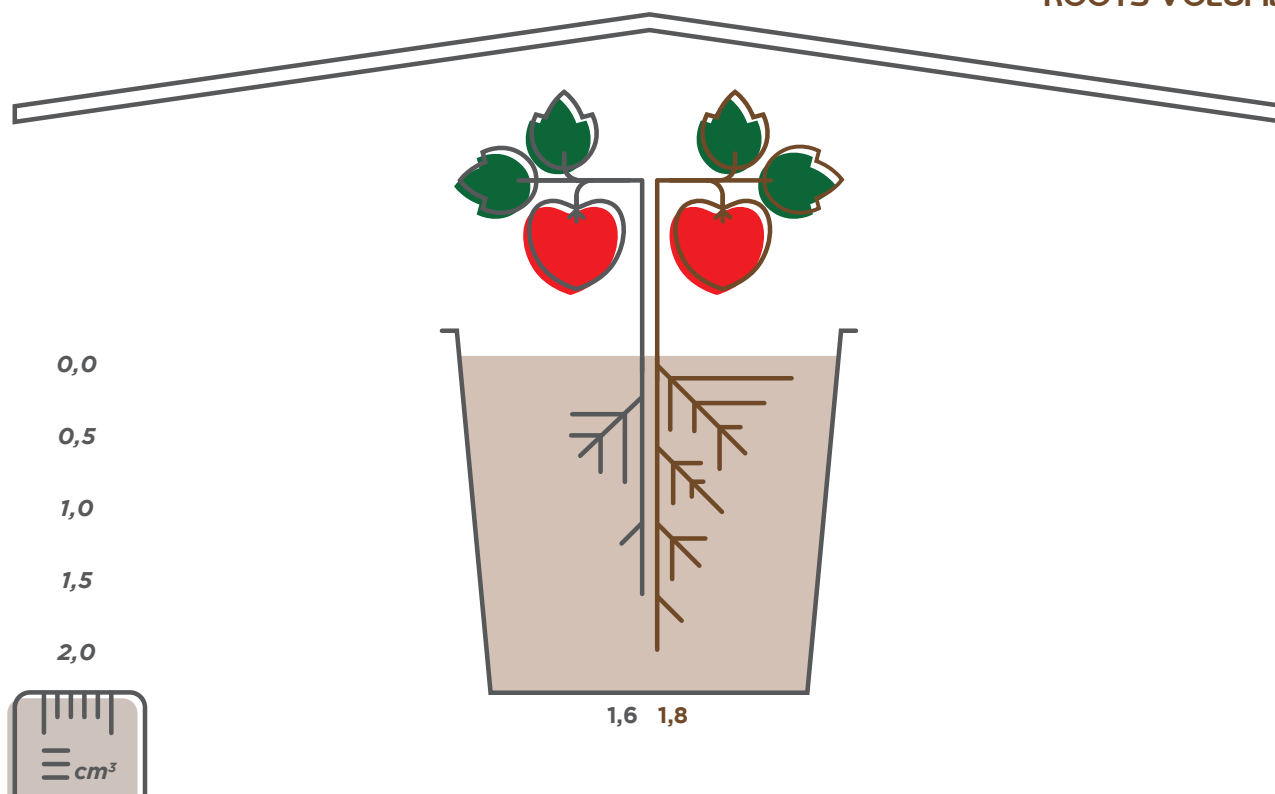


FIG 1 - Average roots volume in two compared treatments.

Hydro Gold Veg increases roots volume thanks to the presence of brown seaweeds and amino acids, which favour a major expansion of roots and, consequently, a better soil exploration.

Zucchini

in growth chamber



MATERIALS AND METHODS

Species	<i>Cucumis melo</i> var. Ortano
Experimental design	Fully randomized blocks
Test duration	4 weeks
Temperature	22,5 - 23 °C
Relative humidity	65-75%
Lights	14 hours
Substratum	Mixture of peat and perlite (10:1)
Method of administration	Fertigation
Compared treatments	Control and Hydro Gold Veg (20 l/ha)
Number of applications	3 (once a week)

ROOTS LENGHT

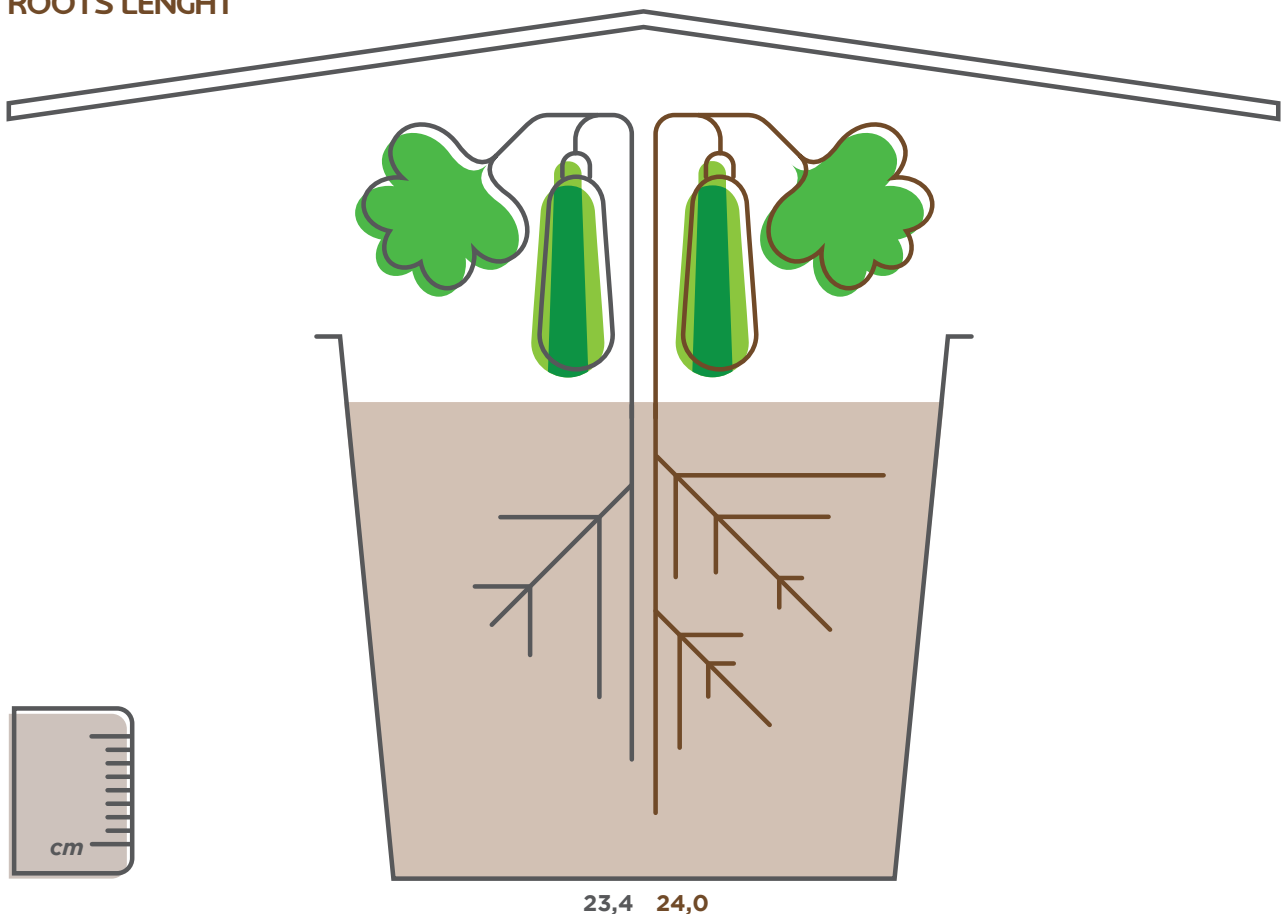


FIG 1 - Average length of roots in two compared treatments.

ROOTS VOLUME INDEX

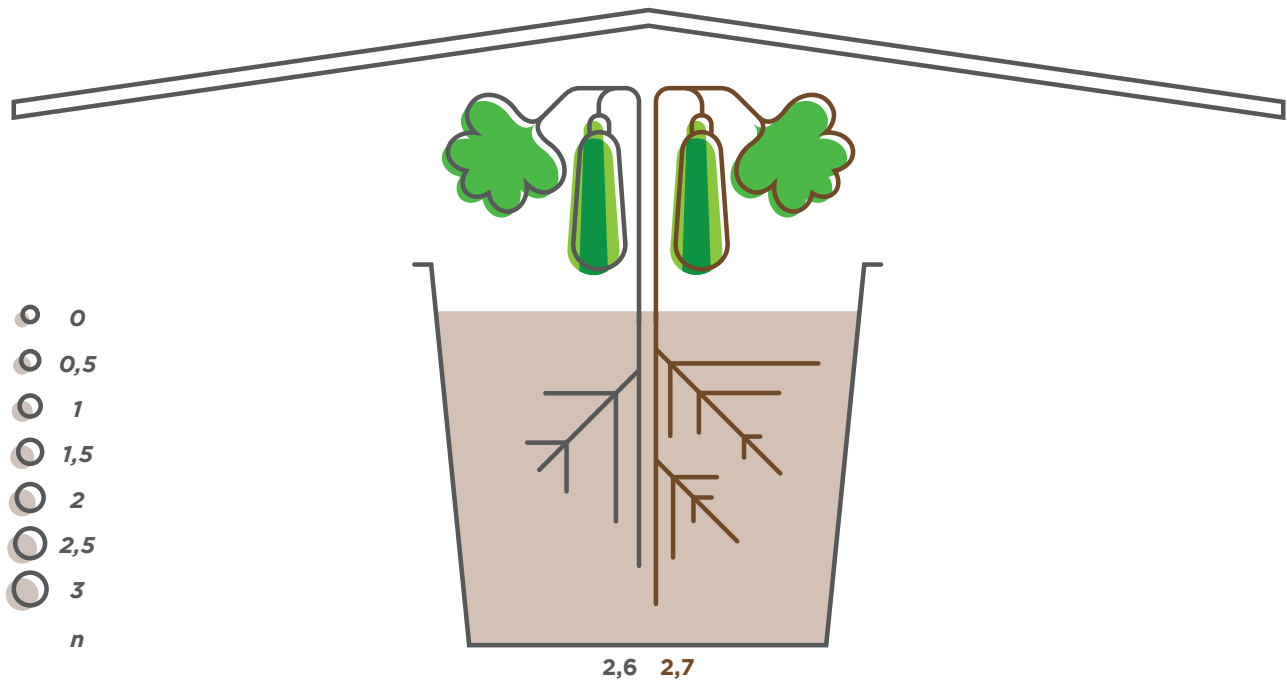


FIG 2 - Roots volume index in two compared treatments.

Hydro Gold Veg, thanks to its content of brown seaweeds and amino acids, favours a major roots expansion, thus resulting in a better use of the NPK supplied. Plants with a more expanded root system are stronger against biotic and abiotic stress.

FLOWERS NUMBER

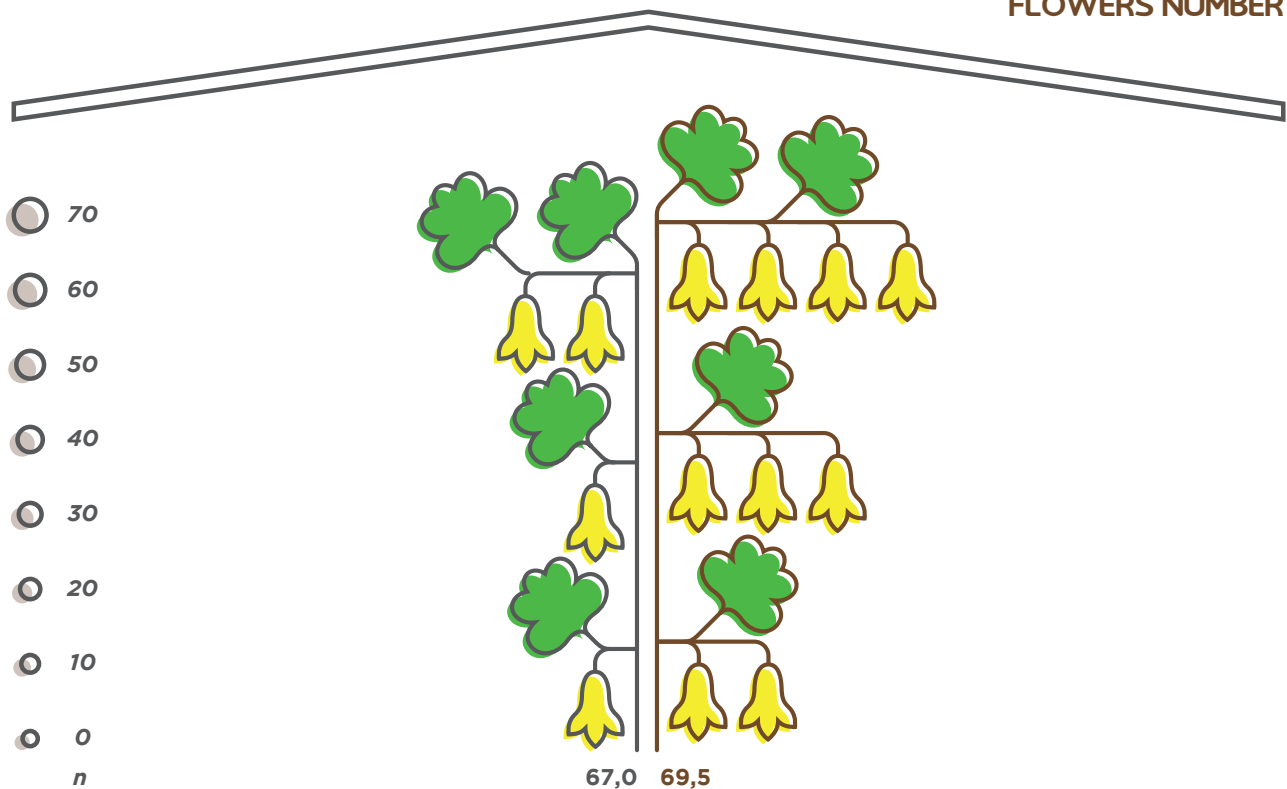


FIG 3 - Average number of flowers per plot in two compared treatments.

Hydro Gold Veg favours a higher flowers number per experimental plot, thus increasing the final production.

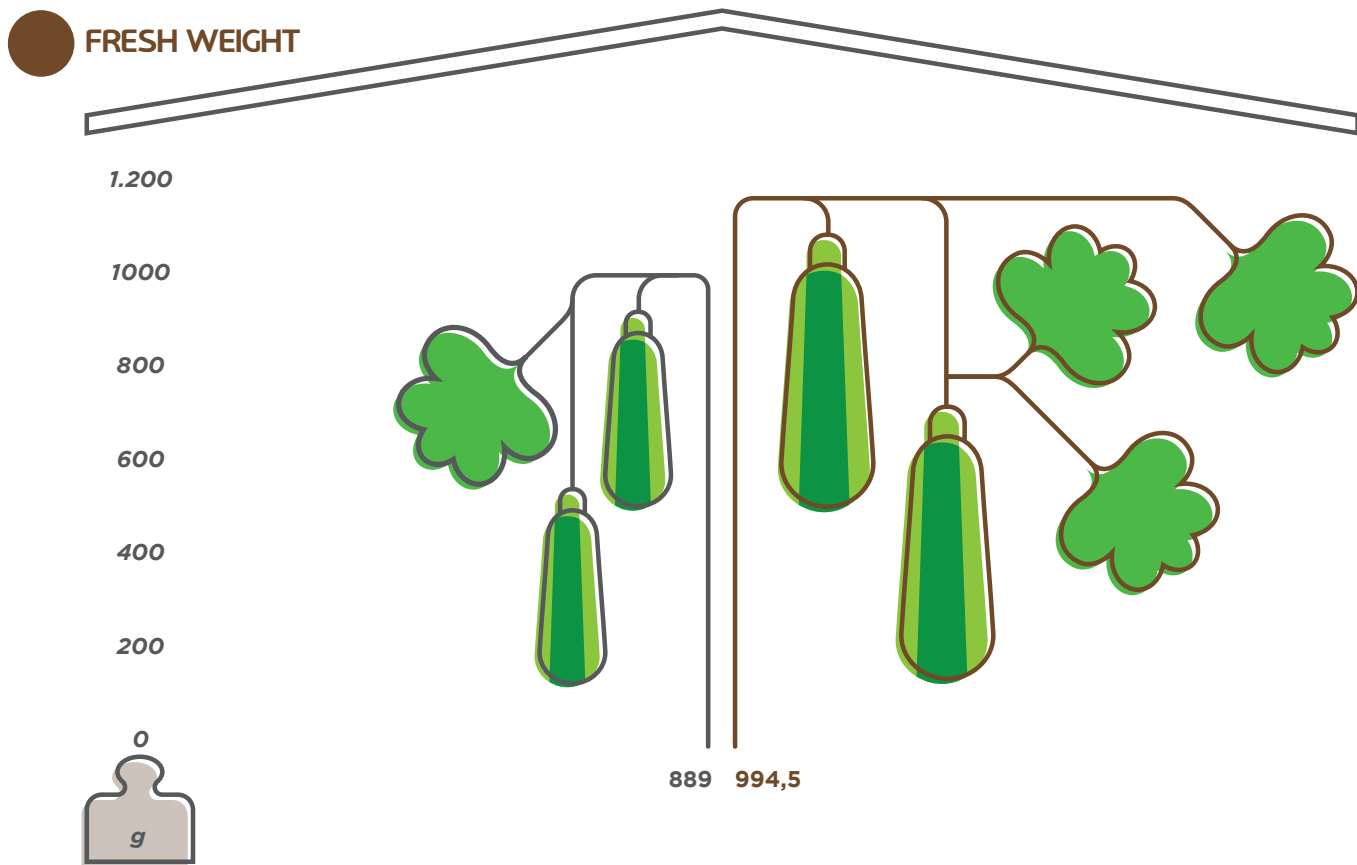


FIG 4 - Fresh weight per plot in two compared treatments.

Hydro Gold Veg increases the fresh weight per experimental plot compared to the untreated control.



LEGEND



Bottle



Jerrycan



Foliar application



Fertigation



BIO Allowed in organic agriculture



RS Technology

