HoldPlus

Stoller Solution to reduce physiological fruit fall and maintain its firmness

HoldPlus is a unique product on the market, integrating properties based on Plant Physiology, allowing to regulate the ripening process of fruits.

How does excess ethylene affect the ripening phase?

Adverse weather conditions during the fruit growth and ripening phase, as well as, repetitive phytosanitary treatments, cause an increase in the normal concentration of ethylene. When the plant perceives abiotic stress, it increases the concentration of reactive oxygen species (ROS) and ethylene in its cells. Therefore, there is an accelerated ripening, softening and fall of the fruits.

Thanks to the **Stoller's Formulation Technology** designed for **HoldPlus**, molybdenum and cobalt reduce the high levels of ethylene produced by adverse situations. In addition, they prevent physiological fall and allow the fruits to remain on the tree for longer.

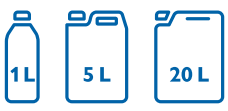
- ✓ **Improves fruit set and helps to prolong harvest**. It is the essential strategy to avoid unnecessary fruit drop.
- ✓ Fruits remain on the tree longer, thus improving their organoleptic quality without affecting firmness. **It does not affect or delay the appearance of fruit color**.
- ✓ **More efficient harvest management and longer harvest period**.
- ✓ Easy to apply, **compatible with other agrochemicals** and leaves no residues.
- ✓ **Certified for use in Organic Farming**.

Features	HoldPlus
Scientific evidence	Tested in scientific trials and field tests.
High quality formulation	Stoller's Formulation Technology has the essential nutrients to help plans improve absortion, translocation and assimilation capacity.
Cost-benefit ratio	High return on investment by improving productivity and profitability.
Green line	Certified for Organic Farming.

Stoller's Formulation Technology

Nutrients	Mo	Co	*Ascophyllum Nodosum* and *Ecklonia Maxima*
Content	3 %	2 %	0.2 % Mannitol
Physiological properties	Antioxidant effect (MoCo cofactor). Protein synthesis.	Blockade of ethylene synthesis. Delay of senescence.	Cytokinin formation. Resistance to abiotic stress.

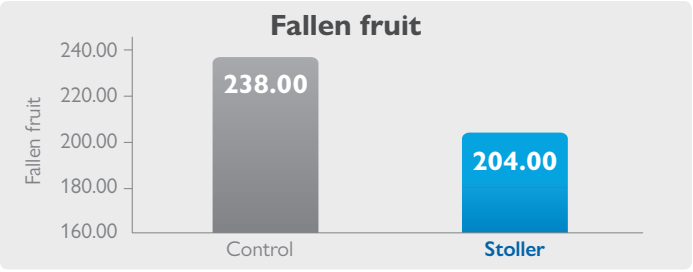
Density (kg/L): 1.23 ± 0.02
pH: 6.0 - 8.0
Conductivity (ms): 60 - 70



HoldPlus

Evidences:

- Cherry



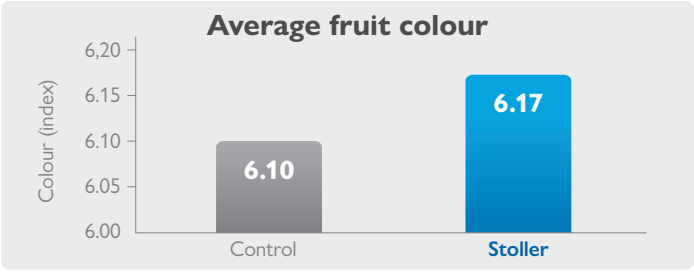
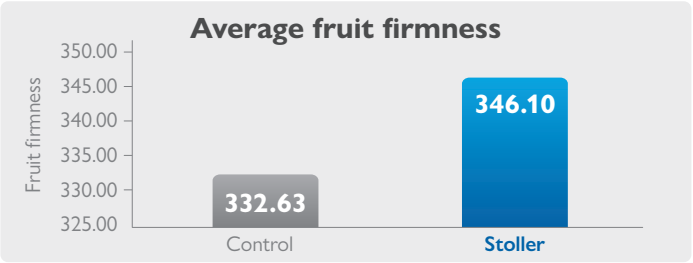
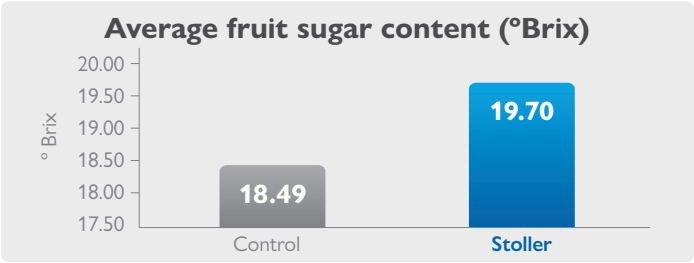


Fig. 1. We can see lower numbers of fallen fruits in areas treated with the **HoldPlus**, indicating a 16.4% improvement in fruit retention compared with Testimone areas.

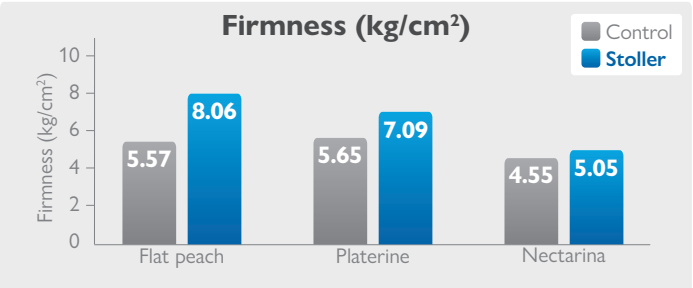


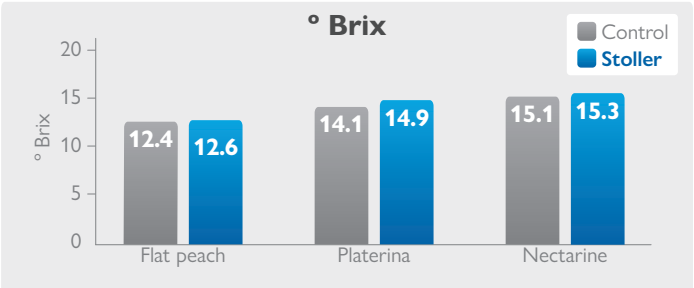


Quality parameters of fruit colour (Fig. 2), firmness (Fig. 3) and sugar content (Fig. 4) at the time of harvest were significantly better in the plots treated with **HoldPlus**.

- Stone fruit

In the pictures we can see hoy plants treated with **HoldPlus** keep the fruits on the tree for a longer period of time, avoiding physiological drop.





We can observe in the graphs how the fruits of the plants treated with **HoldPlus** show a greater firmness (Fig. 5) without affecting the ° Brix (Fig. 6).

Stoller Solutions: Stoller Solutions' value lies in our experience and understanding of plant hormone balance: how it relates to crop growth stages and the impact of the natural hormone activity on plant development and yield.

Our **patented technology** is effective to guarantee a optimal plant growth, getting every hectare, no matter what conditions or challenges we face during the season.