



Defender Ca[®]

CALCIUM DEFICIENCY CORRECTOR

Benefits of its use

DEFENDER Ca is a foliar fertiliser developed to prevent and correct calcium deficiencies in any kind of crop. **DEFENDER Ca** contains amino acids and organic acids, which work as complexes with calcium, in order to increase the absorption capacity and its assimilation and transport.

Calcium is an essential microelement and plays an important role in all phenological stages of plants. For instance, calcium is indispensable for the integrity of cell walls and membranes, and it is directly related to tissue's resistance that avoid the entrance of pathogen agents. Among other of its functions, Calcium regulates the osmotic balance required for cell expansion especially during root growth and, participates in important processes such as protein synthesis and cell division.

Since calcium mobility in plants is limited, calcium deficiency will appear in younger leaves and in fruits, because they have a very low transpiration rate. Therefore, it is necessary to have a constant supply of calcium for continued growth. Most of the negative effect caused by calcium deficiency are manifested in fruits such as the apical necrosis of tomato, bitter pit in apple and fruit cracking. The use of **DEFENDER Ca** prevents from these anomalies and helps to maintain fruit firmness and quality, contributing to a better harvest and good post-harvest conservation.

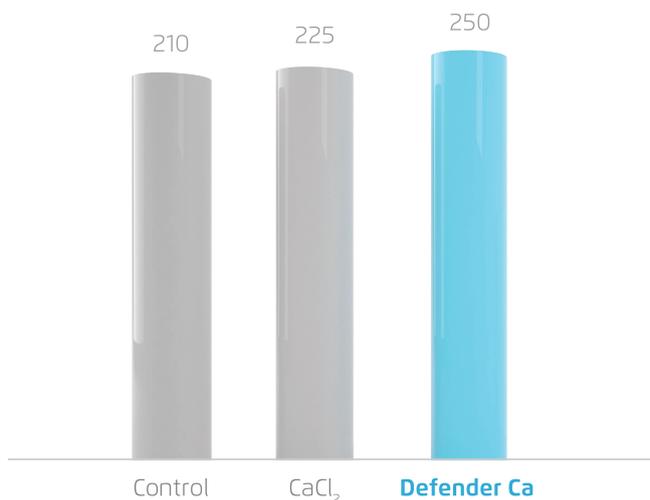
Efficacy trials

Fruit firmness.

Apple tree "Golden", (Chile).

Application:

pre-flowering, beginning and end of fruit setting
DEFENDER Ca 0-0.4 % foliar (total 8-10 L/Ha)

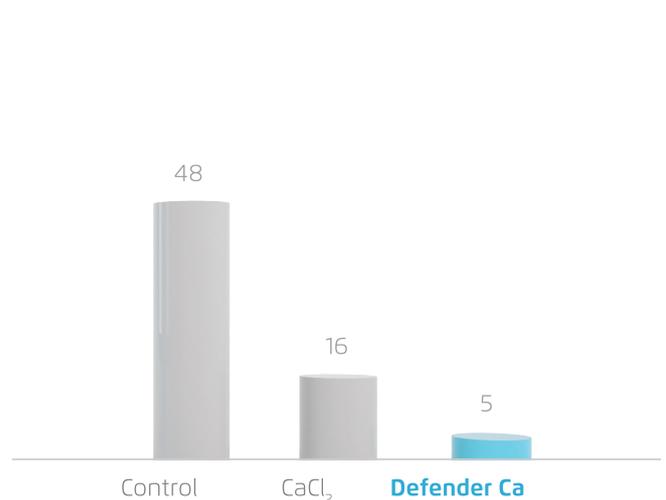


Apical necrosis.

Tomato "Melero F1", (Chile).

Application:

each 15 days, since fruit fitting to final growth.
DEFENDER Ca 0,4% foliar



Composition

(%w/w)

L-free amino acids	6,0
Total nitrogen	1,0
Calcium (CaO) soluble in water	14,0



Effects of calcium deficiency on cultures
Apical necrosis on pepper



Bitter pit on apple



Apical necrosis on tomato



Application system

DEFENDER Ca is highly recommended to prevent and correct calcium deficiencies to stimulate crop development and growth. Defender Ca should be applied by foliar spray or irrigation.

Stability and storage

DEFENDER Ca is stable during at least 3 years from manufacturing date.

Keep in a fresh and ventilated place with temperatures below 50°C.

Do not store for long periods under direct sunlight.

Keep away from children.

Do not eat, drink, or smoke while manipulating the product.

Dosage

CROP	DOSE (L/Ha)	APPLICATION TIME
Horticultural	3 – 6	1 – 2 applications during vegetative growth, followed by 2 -3 applications after fruit set
Strawberry, berries	3 – 6	1 – 2 applications during vegetative growth, followed by 2 -3 applications after fruit set
Lettuce, Cabbage, Celery, Broccoli	3 – 5	2 – 3 applications during all crop cycle
Fruit trees	5 – 10	1 application each 20 days after setting
Banana, Cotton	4 – 6	3 applications during all the cycle

Compatibility

Do not mixing with products containing phosphorus. For mixing with any other product, it is necessary to conduct a compatibility test, in small volume. For further information, technical advices, or any enquiries, please contact your local distributor.