

tangelAGRO

# DEFENDER

Activator of Natural  
Defenses

FERTILIZER



IMPORTED  
FROM EU



DEFENSES



## DEFENDER

Activator of Natural Defenses

## INTRODUCTION

Designed by Tangelagro it's established as an organic product from vegetable origin. Its great purity and quick uptake in different vegetable tissues DEFENDER make an essential product for the growth and protection of plants.

### WHY MUST OPERATE DEFENDER?

DEFENDER is a compound that provides numerous plants benefits. Thanks to its composition presents lignosulphate of aluminum, organic acids and microelements, triggers a rapid response of the immune system to different infectious agents. In the plants increases of antioxidants and fitoalexins.

Antioxidants are concentrated in the chloroplast, and protect the appliance photosynthetic when a plant is subject to stress and eliminate the radical free that they are harmful to the plant tissue.

On the other hand, increases the level of fitoalexins. The fitoalexins are metabolites side synthesized from new that they provide to the plant anti-microbial mechanisms.



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## COMPOSITION

Total Nitrogen  
Zinc (Zn) complexed  
Manganese (Mn) complexed  
Copper (Cu) complexed  
  
Organic Complexant

%W/V

4,8
1
2
2



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## ADVANTAGES THAT PROVIDES PROTECTOR TO ALL PLANTS



### IMPROVEMENT

- The growth
- Performance, efficiency.
- Production.
- Precocity.
- Fruit set.
- Stronger blades.
- Largest number of flowers.
- Fruit: Larger, uniform, reduces the cracking.
- Activated defenses.
- It provides essential micronutrients.



### CONTROL

- Fungi and infectious agents.
- Examples: Phytophthora,
- Verticillium...
- Vascular disease.



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## CROPS

### ALMOND TREE

### INCREASES YIELD AND CALIBRE HOMOGENEITY



1st foliar application: on swollen buds ( phenological state B ) up to state D.	0.3% ( 3L / 1000L )
2nd foliar application: from the beginning of flowering ( E ) to full flowering ( F )	0.3% ( 3L / 1000L )
3rd foliar application: in freshly fruit setting ( H ), approximately 20-25 days after the 2nd application.	0.3% ( 3L / 1000L )
Can also be applied through the soil at the same times.	5L / Ha

### POST HARVEST TREATMENT

We recommend a foliar application after harvesting. With this application, particularly important to overcome vascular diseases, we achieve a rapid healing of the microinjuries produced during harvest. Besides regulating flowering in the next vegetative cycle, resulting in increased formation of May clusters and mixed branches.

### APPLE

### SIZE UNIFORMITY. CONTROL PHYTOPHTORA



1st foliar application: 90% petal fall.	2,5 - 3 L/Ha.
2nd foliar application: About 40 days after the first application.	2,5 - 3 L/Ha.
3rd foliar application: 25-30 days before collection.	2,5 - 3 L/Ha.



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### ARTICHOKE



#### INCREASING NUMBER OF SECONDARY FLOWERS

1 st application: when the plant is 10 - 15 cm high.

2 L/Ha (foliar)  
5 L / Ha (soil).

2nd application: When the sprout of the second stem begins.

3 L/Ha (foliar)  
5 L / Ha (soil).

### BLUEBERRY



#### YIELD AND QUALITY

Application can be applied during a great part of the crop cycle, being especially recommended in the following moments:

- Vegetative development. Home sprouting.
- Appearance of floral buttons.
- Preparation and activation after pruning.
- Moments of stress in cultivation due to abiotic agents.

0.3% (foliar)  
5-6 L / Ha (soil)

### BROCOLI AND CAULIFLOWER



#### YIELD, QUALITY AND DISEASES RESISTANCE

1 st foliar application: In the first located irrigation.

5 L/Ha.

2nd foliar application: At 30 days after planting (when the maximum Nitrogen needs begin at the plant) It can be mixed with other products applied at the moment.



3 L/Ha.



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COTTON	INCREASES NUMBER OF CAPSULES	
	1 st foliar application: from the state of 3-4 knots (3-4 true leaves) to 8-10 knots.	2 L/Ha.
	2nd foliar application: from the first flowers to full bloom.	3 L/Ha.
CHERRY	UNIFORM MATURATION	
	1 st foliar application: from swollen bud to green button.	0,3 - 0,5%
	2nd foliar application: with 90% of fallen petals.	3 L / Ha
	3 rd foliar application: beginning veraison (15 days before harvest).	3 L / Ha
CITRUS	CONTROL PHYTOPHTORA. INCREASES YIELD	
	1st Application (SPRING): from sprouting start (2cms) until before flowering.	Dose: • Foliar: 0.3%. • Drip irrigation: 6 L / Ha. • Use at least 4 L / Ha with a volume of broth of 2,000 L.
	2nd application (SUMMER): at the beginning of sprouting in summer.	
	3rd application (AUTUMN): at the beginning of the color change in the fruit (from green to pale green).	



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## CROPS

CROP	APPLICATIONS	DOSE
<b>GARLIC</b> 	1 st foliar application: when the plant has three true leaves.	Dose: 1,5-2 L/Ha.
	2nd foliar application: 30 days after 1st application, at least 3 weeks before collection.	Dose: 1,5-2 L/Ha.
<b>GREEN BEAN</b> 	1 st foliar application: 10 days after planting.	Dose: 1,5 L/Ha.
	2nd foliar application: 15-20 days later.	Dose: 1,5 L/Ha.
<b>HAZEL NUT</b> 	1 st foliar application: with 80% open flower.	Dose: 0,25%.
	2nd foliar application: with 90% of fallen petals.	Dose: 0,25%.
	3 rd foliar application: 20-25 days after the 2nd application.	Dose: 5 L/Ha








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HORTICULTURAL	YIELD. HOMOGENEITY	
	1 st foliar application: when the plant has three true leaves.	Dose: 1,5-2 L/Ha.
	2nd foliar application: 30 days after 1st application, at least 3 weeks before collection.	Dose: 1,5-2 L/Ha.
KHAKI	MAXIMIZES THE ORGANOLEPTIC PROPERTIES	
	1 st foliar application: from first separate leaves to floral bud.	Dose: 3 L/Ha.
	2nd foliar application: in fruit growth (June).	Dose: 3 L/Ha.
KIWI	INCREASES FRUIT SIZE AND CALIBRE UNIFORMITY	
	1st Application: from bud break ( bud visible ) until young leaves are visible ( 15cm shoot )	Foliar application: 5L / Ha Irrigation application: 8L / Ha
	2nd Application: from 30cm shoots to visible flower buds.	Foliar application: 3L / Ha Irrigation application: 5L /
	3rd Application: before harvest ( approximately 45 days )	Foliar application: 3L / Ha Irrigation application: 5L / Ha





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LETTUCE	YIELD AND QUALITY	
	1 st foliar application: at 10 days after the plantation	Dose: 5-7 L/Ha
	2nd foliar application: At 8-9 days after the first application. It can be mixed with other products applied at the moment	Dose: 3 L/Ha
	3 rd foliar application: at 8-9 days after the second application. It can be mixed with other products applied at the moment.	Dose: 3 L/Ha

MELON-WATERMELON	EXTEND VEGETATIVE CYCLE	
	1 st application: 10 days after planting.	Dose: 5L/Ha. (soil)      Dose: 0,3% (foliar)
	2nd application: 15 days after the first application.	Dose: 5L/Ha. (soil)      Dose: 0,3% (foliar)
	3 rd application: after the curd.	Dose: 5L/Ha. (soil)      Dose: 0,3% (foliar)


OLIVE TREE	MAXIMIZES THE ORGANOLEPTIC PROPERTIES	
	1st foliar application: during the whole process of differentiation of buds of vegetative bud. It can be matched with the repilo treatment.	Dose: 0,3%
	2nd foliar application: From the flowering to the end of the fruit setting. Can be matched with spring treatment for sprays.	Dose: 0,3%
	3rd foliar application: From the flowering to the end of the fruit setting. It can be matched with the spring treatment for sprays.	Dose: 0,3%





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ONION		YIELD AND QUALITY
	1 st foliar application: when at least the plants with 4-6 leaves.	Dose: 5-7 L/Ha
	2nd foliar application: initiation of the thickening of the bulb.	Dose: 3 L/Ha

ORNAMENTALS		PLANT DEVELOPMENT. ANTI STRESS ABIOTIC
	1 st foliar application: 10-15 days after the Sprouting.	Dose: 200-400 ml /100 Liters of water.
	2nd foliar application: about 30-40 days after the first application or prior to flowering, according to species. para sprays.	Dose: 200-400 ml /100 Liters of water.
	3 rd foliar application: 30 days after the 2nd application or before the "summer stop".	Dose: 200-400 ml / 100 Liters of water.




PEACH		YIELD AND ANTICRACKING
	1 st application (Localized irrigation): 90% drop of petals (coincides with 5% drop collar).	Dose: 5 L / Ha
	2nd application (Localized irrigation): Before bone hardening.	Dose: 5 L / Ha
	3 rd application (Localized irrigation): Beginning of veraison (15 days before collection).	



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POTATO	ACCUMULATION OF STARCH IN TUBES	
	1 st application: when the plant has three to four leaves.	Dose: 1.5 L / Ha (foliar)      Dose: 5 L / Ha (soil).
	2nd application: between 20 and 30 days after the 1st application.	Dose: 3L / Ha (foliar)      Dose: 5 L / Ha (soil).
RASPBERRY AND BLACKBERRY	FRUIT NO DEFORMITIES. SIZE AND COLOR	
	1st foliar application: In seedling size, after the transplant to favor the Vegetative development.	Dose: 0,25% (2,5 L/1000 L).
	2nd foliar application: Before entering into production in the face of flowering, Fertilization and fruit set.	Dose: 0,25% (2,5 L/1000 L).
	3 rd foliar application: In full production, for fattening and homogeneity of the fruits.	Dose: 0,25% (2,5 L/1000 L).
RICE	YIELD AND QUALITY	
	1st foliar application: coinciding with the phenological state "Beginning of the tillering".	Dose: 1,5 - 2 L/Ha.
	2nd foliar application: coinciding with the phenological state - beginning coming into ear.	Dose: 1,5 - 2 L/Ha.



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### SUBTROPICAL FRUITS

CONTROL PHYTOPHTORA. INCREASES YIELD

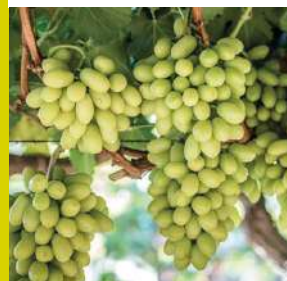


- 1 st foliar application: at the beginning of flowering, in "white bud" or after budding, according to cultivation.
- 2nd foliar application: After the setting, before the hardening of the bone, or at the beginning of the summer bud, depending on the type.
- 3 rd foliar application: in autumn, at the beginning of the color change of the fruit, or about 45 days before harvest.

- Dose: 2 to 3L /1,000 L of water.
- Dose: 2 to 3L /1,000 L of water.
- Dose: 2 to 3L /1,000 L of water.

### TABLE GRAPE

YIELD. UNIFORMITY AND SIZE



- 1st foliar application: in states B2 (yolk Swellen) to C (green tip).
- 2nd foliar application: in state F (visible clusters) to H (separate flower buds).
- 3 rd foliar application: in state K (pea-sized grain) to L (cluster enclosure).

- Dose: 4 to 5 L/Ha
- Dose: 3 L/Ha
- Dose: 3 L/Ha.

### VINE GRAPE

INCREASES POLYPHENOL INDEX. WOOD DISEASES



- 1 st foliar application: When the shoots are 15 to 20 cms.
- 2nd foliar application: From before flowering to pea size.
- 3 rd foliar application From the cluster enclosure to the beginning of the verge. May match Moth 3rd Generation Treatment.

- Dose: 1,5 L/Ha.
- Dose: 2,5 L/Ha.
- Dose: 2,5 L/Ha.



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