



## Defender P<sup>®</sup>

### PREVENTIVE AND CURATIVE CORRECTOR OF PHOSPHORUS DEFICIENCIES

#### Benefits of use

**DEFENDER P<sup>®</sup>** is a foliar fertiliser rich in phosphorus, combined with potassium and micro-elements for maximum plant nutrition.

Phosphorus plays a major role in the formation of the root system, and is one of the most essential elements during the early stages of plant development. The availability of this element in soil is affected by different factors such as pH and soil temperature. The decrease in the availability of phosphorus in soil leads to deficiencies, which may affect final crop yield. The use of **DEFENDER P<sup>®</sup>** enables sufficient levels of this element (P) to be available at times of peak demand for crops.

The use of **DEFENDER P<sup>®</sup>** enables optimal P levels to be maintained at peak times. The product is formulated so that it can be easily and quickly assimilated, whether it is applied via the leaves or roots, and it provides the nutrients needed for good crop development while improving crop yield and quality. The use of **DEFENDER P<sup>®</sup>** helps prevent and correct phosphorus deficiency in the soil, thus enhancing crop development. We recommend performing foliar applications or dissolving the product directly in irrigation water. It should be applied at 2-3 week intervals, using enough water to cover the entire crop.

#### How it works

Phosphorus (P) is the second limiting nutrient in plant growth (after nitrogen, N). It plays an essential role in plant energy metabolism, it is a structural part of several key cellular components and is essential for many physiological processes within a vegetable organism. On the other hand, its availability in soil depends on several factors, such as pH and soil temperature, which can easily transform P into forms which are not useful for the plant. Thus, the decrease in levels of P in the soil leads to the emergence of crop deficiencies, this being a particularly severe factor in cases where plant growth is very fast, such as in certain fruit and cereal crops, and also in the case of potatoes.

During the early stages of plant growth, good development of the root system is vital, as the roots are the main means of capture and entry of all the necessary elements for plant growth and development throughout its lifecycle. In this regard, P is very important for root formation, and therefore, available P levels are critical during the early stages of growth.



#### Composition

(%w/w)

<b>Total nitrogen</b>	5.0
<b>Urea nitrogen</b>	3.0
<b>Phosphorus (P<sub>2</sub>O<sub>5</sub>)</b>	20.0
<b>Potassium (K<sub>2</sub>O)</b>	5.0

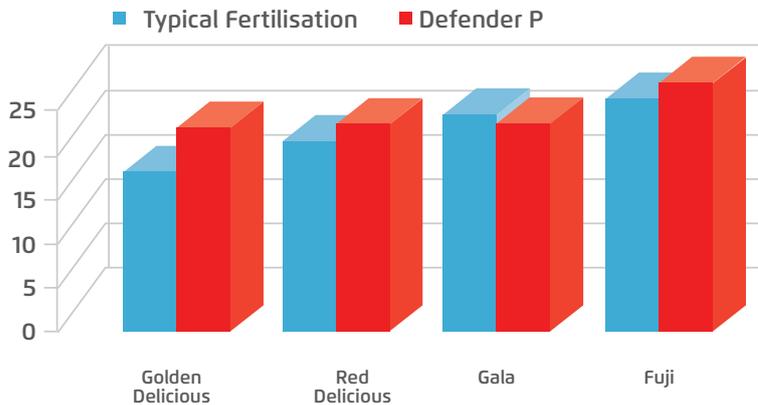
Contains 0.5% compounds with phytohormonal activity.  
Contains 0.15% micro-elements: B, C, Fe, Mn, Mo, and Zn.



## Efficacy Trials

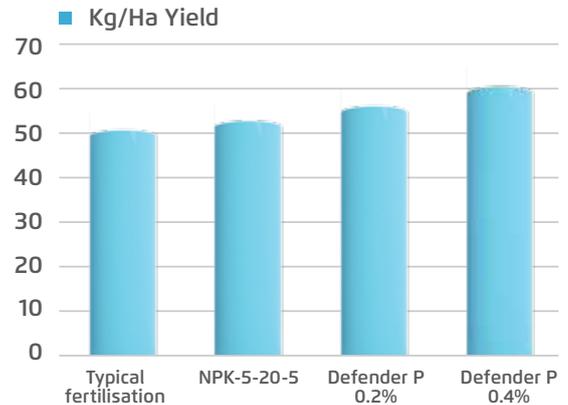
*Effect of Defender P on varieties of apples. (Ebro Valley, 2007-2009)*

Four applications of **DEFENDER P®** from pre-flowering onwards, every 20 days. Average yield of commercial orchards.



*Yield of beetroot crops treated with DEFENDER P. (Southern Spain, 2008)*

Use in irrigation water from the time of planting. Type E.



## System of application

**DEFENDER P®** is recommended for preventing and correcting phosphorus deficiencies and for enhancing crop development. Perform foliar applications or dissolve in irrigation water. Apply at 2-3-week intervals, using enough water to cover the crop.

## Stability and storage

**DEFENDER P®** is stable for at least 3 years from the date of manufacture.

Store in a cool, ventilated place at temperatures below 50°C.

Do not store for prolonged periods in direct sunlight.

Keep out of the reach of children.

Do not eat, drink or smoke during use.

## Dosage

CROP	FOLIAR (cc/100L)	RECOMMENDED DOSE
Vegetables	300-400	Apply depending on deficiency levels or to improve fruit quality and colour
Vine, kiwi	300	Apply when fruit setting begins at 15-20-day intervals. The last application must be 20 days before harvest
Citrus, avocado tree	300	Apply in spring and autumn during shoot growth
Cranberry, raspberry, strawberry	300-400	Apply from start of blooming and repeat at 7-10-day intervals
Potato	200-400	Apply from start of tuber formation at 15-day intervals

## Compatibility

**DEFENDER P®** is compatible with most phytosanitary products. However, manufacturers' recommendations must be followed before preparing any mixture. Where possible, a small volume compatibility test is to be performed. For further information, technical advice or any other enquiries, please contact your local distributor.