



P-K-S

Patented
technology



HIGH PHOSPHORUS,
POTASSIUM AND SULFUR
FORMULATION

P-K-S

pH
2.8

P-K-S is a gel nutrition product highly concentrated in phosphorus, potassium and sulphur. It is specifically designed for use during root establishment after germination or transplanting, in spring for fruit trees, before flowering or at the end of the crop cycle.



Packaging size: 200g, 1 kg, 5 kg

Why use P-K-S

- NPK gel formulation with high content of phosphorus and potassium, combined with sulphur, calcium and trace elements for a complete plant nutrition.
- Fully soluble in water and easy to use.
- Specially designed as a 'starter' and 'finisher'.
- Suitable for root establishment and development after sowing or transplanting.
- Increases the flowering rate, improves the fruit setting, fruit colouration, sugar content (BRIX level) and enhances fruit shelf-life.
- Low content of nitrogen to avoid unnecessary vegetative growth and prevent delaying maturity.

Density: +/- 1.75 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	4.40 %	7.70 %
<i>Nitric Nitrogen (N-NO₃)</i>	2.60 %	4.55 %
<i>Ammoniacal Nitrogen (N-NH₄)</i>	0.40 %	0.70 %
<i>Ureic Nitrogen (N-NH₂)</i>	1.40 %	2.45 %
Total Phosphorus Pentoxide (P ₂ O ₅)	27.10 %	47.40 %
<i>Phosphorus Pentoxide (P₂O₅), soluble in water</i>	27.10 %	47.40 %
<i>Phosphorus Pentoxide (P₂O₅), soluble in water and neutral ammonium citrate</i>	27.10 %	47.40 %
Potassium Oxide (K ₂ O), soluble in water	25.4 %	44.3 %
Calcium Oxide (CaO), soluble in water	1.80 %	3.20 %
Sulphur Trioxide (SO ₃), soluble in water	7.8 %	13.7 %
Boron (B), as boric acid, soluble in water	0.01 %	0.018 %
Copper (Cu), EDTA-chelated, soluble in water	0.002 %	0.004 %
Iron (Fe), EDTA-chelated, soluble in water	0.05 %	0.088 %
Manganese (Mn), EDTA-chelated, soluble in water	0.023 %	0.044 %
Molybdenum (Mo), as sodium acid, soluble in water	0.002 %	0.004 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.018 %

Recommendations

Drip irrigation: The general dose varies between 5 – 10 kg/ha/application.

For continuous fertigation, the recommended concentration in feed solutions varies from 0.5 to 2 g/l (0.05 to 0.2 %). The standard recommendation for most cropping conditions is 1 g/l of water.



Foliar spray

Apply 2 - 5 kg/ha/application with an average concentration of 200 - 300 g/100 L of water. Never exceed a concentration of 0.5% (or 500 g/100 L).

Vegetables: Spray one week after transplanting. Repeat after fruit set and during fruit growth.

Cereals: Apply before tillering and before flowering.

Industrial crops (cotton, sugar beet, etc...): Apply at the beginning of vegetative growth and repeat on green boll or tuber bulking.

Fruit trees: Apply before flowering for citrus, grapes and after fruit setting for apple, pears, peaches, etc...

Always use in sufficient water volume to guarantee full coverage of the foliage. Do not apply during very hot weather or on crops under water stress. The best application time is early morning or in the evening when the moisture is high in the plant.

Crop	Dosage Rate	Application timing
Vegetables: Tomato, pepper, melon, w. melon	5kg/ha	After transplanting; repeat after fruit set and 2 weeks later.
Potato	10kg/ha	At tuber initiation; repeat with 5 kg/ha during tuber growth and 10 days later.
Apple/pear	5kg/ha	After fruit set and during the fruit growth; repeat with 10 kg/ha at post-harvest.
Grapes/berries	5kg/ha	In spring; repeat with the same dose after fruit set, and during the fruit growth stage. Apply 10 kg/ha at post-harvest.
Corn	10kg/ha	At the beginning of tillering and 10 kg/ha/application before silking.
Banana	10kg/ha	At the beginning of the cycle and at the beginning of fruit set. Repeat with the same dose after fruit set and during fruit maturation.
Cereals	5kg/ha	Before tillering; repeat with the same dose before flowering.
Citrus	10kg/ha	In spring; repeat with the same dose after fruit setting, then after the physiological drop. Perform a post-harvest application at the rate of 10 kg/ha.
Cotton	5kg/ha	2 - 3 times from vegetative growth up to green boll.
Sugar beet	5kg/ha	At 4 - 6 leaf stage and during tuber bulking.
Rice	5kg/ha	Before tillering.
Leafy vegetables	5kg/ha	At 4 - 6 leaf stage; repeat 2 - 3 times with 2 week intervals.

COMPATIBILITY

P-K-S is compatible with the majority of agrochemicals and fertilisers used. It is recommended to perform a small scale test before proceeding. Avoid mixing with alkaline substances, combustible materials, reducing agents and other sulphates. Always read the label of the partner product before mixing with P-K-S. Never exceed the recommended dosages.

STORAGE

Protect from frost, store between 5°C and 50°C in a suitable warehouse with good aeration. Store in the original packing away from heat or direct sunlight. Partly used or damaged packing should be kept well closed. Keep out of reach of children. Store away from food, drink and animal feedstuff.

Do not eat, drink or smoke during use.

EXPERIENCES IN THE FIELD

GROGREEN P-K-S trial on onions - Libya 2021

Test site information

Sowing date: 17/09/2020.

Transplanting date: 15/11/2020.

Application of GROGREEN P-K-S: 09/03/2021

Observation of the results: After 5 days from GROGREEN P-K-S application.

Dosage: GROGREEN P-K-S (foliar) application rate: 2 kg in 500 L water for 5000 m² (i.e 4 kg/ha in 1000 L water)

Conclusions

Growth assessment: Increased vegetative growth: healthy crops with strong green colour. Increased development of bulbs with big size.

Yield assessment: all treatments showed higher yield than untreated plots. A yield increase of 15% was obtained in treated plants compared to untreated.



Two weeks before Grogreen PKS application on onion.



One week after Grogreen PKS application on onion.



EXPERIENCES IN THE FIELD

GROGREEN P-K-S effect on damaged watermelon plants with blight - Libya

The watermelon plant was cultivated under low tunnels. Upon removing the tunnels, it was observed that the plants had been affected by blight, resulting in damaged leaves. To address the disease, a fungicide was applied to the affected plot, although some damage had already occurred.

A foliar application of P-K-S was administered at a rate of 2 kg per 1000 liters of water. After a span of 10 days, significant improvement was observed, as depicted in the accompanying images.

When we compared the plot treated with P-K-S to the control group, we noticed a clear difference. It is important to note that the entire field had received fungicide treatment, effectively halting the blight, while P-K-S aided in the swift recovery process.



Watermelon leaves damaged by blight attack.



Watermelon plants 10 days after the application of P-K-S.



Lima Europe NV

Doelhaagstraat 77/1,
2840 Rumst - Belgium
info@lima-europe.com
www.lima-europe.com