GRO GREEN SOLUBLE

FOLIAR GEL NPK

LIMA

FAST, ON-THE-SPOT NUTRITION

GROGREEN FOLIAR
GEL NUTRITION

Foliar feeding provides fast, on-the-spot nutrition to ensure high and top quality yields. It is an effective supplementary feeding to complete soil fertilisation and promptly correct nutrient deficiencies. Foliar application of nutrients at specific stages of crop development boosts yield and improves quality.

GROGREEN gel products have been present in the market for the last 15 years. With their very high concentration, low pH and added adjuvants, they represent the perfect product line to use for foliar feeding with a proven track record in the field. The advantages of both powder and liquid fertilizers merge in GROGREEN products combining the high concentration of powders with the useful additives used in liquid formulations. The gel formulation decreases the surface tension of the water drop that is formed when applied, increases retention of nutrients on leaves and favours stomatal opening for better and efficient absorption.

The gel structure optimizes the efficiency of the application by:

- Improving and increasing absorption and retention of nutrients on the foliage
- Reduction of surface tension of the spray solution on the leaves increases water retention and promotes stomatal opening
- Allowing better and easier dosage
- Facilitating the dissolution and, therefore, the assimilation of the nutrients in the plant's metabolism
- Improving efficiency of agrochemicals due to low pH
- Helping plants recover from stress impact
- 100% water-soluble even in cold or hard water
- Can be applied safely with most commonly used plant protection products

Mixture with agrochemicals in the tank

Water pH is a critical factor in the effectiveness of many plant protection products and growth regulators. Under alkaline conditions, alkaline hydrolysis occurs degrading the pesticide to inactive forms. The degradation of a pesticide can be measured in terms of its half-life (reduction of the active ingredient content by 50%).

As a general rule, herbicides, insecticides, and fungicides perform best in slightly acidic water, pH 4–6.5. The pH of the solution can influence how long a pesticide molecule remains intact, its stability and effectiveness. Buffering agents prevent pesticide hydrolysis during mixing in the tank.

Foliar gel can be used as a buffering agent in order to preserve the stability and enhance the efficacy of plant protection products and growth regulators in hard water conditions due to the acidic pH.

STARTER

pH 2.3

NPK 16-69-16 + TE

Packing size 200g, 1kg, 5kg

- **NPK formulation with very high phosphorous content with trace elements developed for foliar application.**
- **Suited for crucial times of phosphorous need during the growth cycle such as root development, flowering and fruit setting.**
- **Fully soluble in water and easy to use.**
- **The low pH of Starter makes it an ideal complement to pesticide application to safeguard the efficiency of agrochemicals in hard water conditions.**

Density: +/- 1.64 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	9.70 %	16.00 %
Ammoniacal Nitrogen ($N\text{-}NH_4$)	*2.50 %*	*4.10 %*
Ureic Nitrogen ($N\text{-}NH_2$)	*7.20 %*	*11.90 %*
Total Phosphorus Pentoxide (P_2O_5)	42.00 %	69.00 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*42.00 %*	*69.00 %*
Phosphorus Pentoxide (P_2O_5), soluble in water and ammmonium citrate	*42.00 %*	*69.00 %*
Potassium Oxide (K_2O), soluble in water	9.70 %	16.00 %
Boron (B), as boric acid , soluble in water	0.010 %	0.016 %
Copper (Cu), EDTA-chelated, soluble in water	0.002 %	0.003 %
Iron (Fe), EDTA-chelated, soluble in water	0.050 %	0.082 %
Manganese (Mn), EDTA-chelated, soluble in water	0.025 %	0.041 %
Molybdenum (Mo), as sodium salt, soluble in water	0.002 %	0.003 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.016 %

Recommendations

Foliar application:

Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l of water). 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.

Field crops (cereals, sugar beet, oil seed rape, cotton, etc..): Apply after germination on crops with 4 - 6 leaves; repeat before tillering for cereals.

Potatoes: Apply during the tuber initiation; repeat during the beginning of tuber development stage and 10 days later.

Vegetables: Perform 1 - 2 applications after transplanting till first flowers. Repeat on regular basis during the formation of new flowers (tomato, cucumber, strawberries, etc...).

Fruit trees: Apply before flower opening; repeat at post-harvest before leaf fall.

VEGETATIVE

pH 2.2

NPK 27-27-27 + 3 MgO + TE

Packing size 200g, 1kg, 5kg

- **Balanced NPK formulation with magnesium and trace elements.**
- **Multipurpose formula to prevent general deficiencies improving the nutritional status of the plant.**
- **Very high concentration of nutrients.**
- **Fully soluble in water and easy use.**
- **Can be used throughout the entire growth cycle.**

Packing size 200g, 1kg, 5kg

Density: +/- 1.63 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	16.60 %	27.00 %
Nitric Nitrogen ($N\text{-}NO_3$)	*3.60 %*	*5.90 %*
Ureic Nitrogen ($N\text{-}NH_2$)	*13.00 %*	*21.10 %*
Total Phosphorus Pentoxide (P_2O_5)	16.60 %	27.00 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*16.60 %*	*27.00 %*
Phosphorus Pentoxide (P_2O_5), soluble in water and ammonium citrate	*16.60 %*	*27.00 %*
Potassium Oxide (K_2O), soluble in water	16.60 %	27.00 %
Magnesium Oxide (MgO), soluble in water	2.00 %	3.30 %
Boron (B), as boric acid, soluble in water	0.010 %	0.016 %
Copper (Cu), EDTA-chelated, soluble in water	0.002 %	0.003 %
Iron (Fe), EDTA-chelated, soluble in water	0.050 %	0.081 %
Manganese (Mn), EDTA-chelated, soluble in water	0.025 %	0.040 %
Molybdenum (Mo), as sodium salt, soluble in water	0.002 %	0.003 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.016 %

Recommendations

Foliar application:

Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l). 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.

Field crops (cereals, sugar beet, cotton, etc..): Apply during the accelerated vegetative growth.

Potatoes: Apply at row closure and during the tuber bulking stage.

Vegetables: Apply during the accelerated vegetative growth; repeat the applications after fruit setting and during the fruit growth and bulking stages.

Fruit trees: Apply after fruit set; repeat during the fruit development and bulking stages.

CALCIPHOS

pH 2

NP 9-64-0 + 11 CaO + 1 MgO + B + Zn

Packing size 200g, 1kg, 5kg

- **NP fertilizer combining high levels of phosphorous with calcium and trace elements.**
- **Designed for critical growth stages such as tuber initiation in potato and flower preparation, fruit growth in fruit trees, tillering and preventing lodging in wheat.**
- **Decreases fruit decay and increases firmness, shelf-life resistance to mechanical damage and pest attacks.**
- **Enhances plant vigour, number of marketable fruits and yield.**

Density: +/- 1.63 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	5.50 %	9.00 %
Nitric Nitrogen ($N\text{-}NO_3$)	*0.50 %*	*0.80 %*
Ureic Nitrogen ($N\text{-}NH_2$)	*5.00 %*	*8.20 %*
Total Phosphorus Pentoxide (P_2O_5)	39.30 %	64.00 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*39.30 %*	*64.00 %*
Phosphorus Pentoxide (P_2O_5), soluble in water and ammonium citrate	*39.30 %*	*64.00 %*
Calcium Oxide (CaO), soluble in water:	6.75 %	11.00 %
Magnesium Oxide (MgO), soluble in water	0.60 %	1.00 %
Boron (B), as boron MEA, soluble in water	0.11 %	0.18 %
Zinc (Zn), EDTA-chelated, soluble in water	0.34 %	0.56 %

Recommendations

Foliar application:

Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l of water). 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.

Field crops (cereals, sugar beet, cotton, etc..): Apply after germination on crops with 4 - 6 leaves; repeat during the tillering in the case of cereals.

Potatoes: Apply during tuber initiation stage; repeat during the beginning of tuber development stage and 10 days later.

Vegetables: Apply twice after transplanting till first flowers appear. Repeat during the fruit development stage and during the formation of new flowers (tomato, cucumber, strawberries, etc...).

Fruit trees: Apply before flower opening; repeat after fruit set, during fruit development stage and at post-harvest.

FRUIT

pH 2.7

NPK 18-11-59 + 2 MgO + TE

Packing size 200g, 1kg, 5kg

- **NPK formulation with very high potassium content with magnesium and trace elements.**
- **Suited for crucial stages such as fruit development and maturation.**
- **Promotes fruit ripening and improves yield and crop quality.**
- **Enhances colour, sugar content and fruit hardness.**
- **Fully soluble in water and easy to use.**

Density: +/- 1.80 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	10.00 %	18.00 %
Nitric Nitrogen ($N\text{-}NO_3$)	*4.20 %*	*7.60 %*
Ureic Nitrogen ($N\text{-}NH_2$)	*5.80 %*	*10.40 %*
Total Phosphorus Pentoxide (P_2O_5)	6.00 %	11.00 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*6.00 %*	*11.00 %*
Phosphorus Pentoxide (P_2O_5), soluble in water and ammonium citrate	*6.00 %*	*11.00 %*
Potassium Oxide (K_2O), soluble in water	32.70 %	59.00 %
Magnesium Oxide (MgO), soluble in water	1.10 %	2.00 %
Boron (B), as boric acid, soluble in water	0.010 %	0.018 %
Copper (Cu), EDTA-chelated, soluble in water	0.002 %	0.004 %
Iron (Fe), EDTA-chelated, soluble in water	0.050 %	0.090 %
Manganese (Mn), EDTA-chelated, soluble in water	0.020 %	0.045 %
Molybdenum (Mo), as sodium salt, soluble in water	0.002 %	0.004 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.018 %

Recommendations

Foliar application:

Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l of water). 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.

Field crops (cereals, sugar beet, cotton, etc..): Apply during the beginning of the maturation stage.

Potatoes: Apply during the tuber bulking stage alternating with balanced formulations; repeat with 10 – 14 day intervals.

Vegetables: Apply on green fruits till the beginning of fruit maturity.

Fruit trees: Apply on green fruits till the beginning of the fruit coloration.

P-K-S

Patented technology

pH 2.8

NPK 7.7-47.4-44.3 + 3.2 CaO + 13.7 SO_3 + TE

Packing size 200g, 1kg, 5kg

- **NPK formula with micronutrients combined with high content of phosphorus, potassium, calcium and sulfur.**
- **Specifically designed as a 'starter' and 'finisher'.**
- **Increases fruit quality, colour, sugar content, shelf-life and the flowering rate.**
- **Suited to activate root development after transplanting or after germination.**
- **Fully soluble in water and easy to use.**

Density: +/- 1.75 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	4.4 %	7.70 %
Nitric Nitrogen (N-NO_3)	2.60 %	4.55 %
Ammoniacal Nitrogen (N-NH_4)	0.40 %	0.70 %
Ureic Nitrogen (N-NH_2)	1.40 %	2.45 %
Total Phosphorus Pentoxide (P_2O_5)	27.1 %	47.4 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*27.1 %*	*47.4 %*
Phosphorus Pentoxide (P_2O_5), soluble in water and ammonium citrate	*27.1 %*	*47.4 %*
Potassium Oxide (K_2O), soluble in water	25.3 %	44.3 %
Calcium Oxide (CaO), soluble in water	1.8 %	3.2 %
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 %	0.040 %
Molybdenum (Mo), as sodium salt, soluble in water	0.002 %	0.004 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.018 %

Recommendations

Foliar application: Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l of water). 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.

Vegetables: Spray 1 week after transplanting and repeat after fruit set and during the 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...

BRASSICA

pH 2.3

NPK 9-9-39 + 6.6 MgO + 53.9 SO_3 + TE

Packing size 200g, 1kg, 5kg

- **NPK formula with micronutrients combined with high levels of potassium, magnesium and sulfur.**
- **Specifically designed for Brassicaceae crops.**
- **Fully soluble in water and easy use.**
- **Suited for other horticultural and agricultural crops during the fruit development and maturation stages.**
- **Enhances plant growth, head diameter and yield.**

Packing size 200g, 1kg, 5kg

Density: +/- 1.75 kg/liter

Specifications	W/W	W/V
Total Nitrogen (N)	5.10 %	9.00 %
Ureic Nitrogen (N-NH_2)	*5.10 %*	9.00 %
Total Phosphorus Pentoxide (P_2O_5)	5.40 %	9.00 %
Phosphorus Pentoxide (P_2O_5), soluble in water	*5.40 %*	*9.00 %*
Potassium Oxide (K_2O), soluble in water	22.00 %	39.00 %
Magnesium Oxide (MgO), soluble in water	3.80 %	6.60 %
Sulphur Trioxide (SO_3), soluble in water	30.80 %	53.90 %
Boron (B), as boric acid, soluble in water	0.010 %	0.017 %
Copper (Cu), EDTA-chelated, soluble in water	0.002 %	0.003 %
Iron (Fe), EDTA-chelated, soluble in water	0.050 %	0.087 %
Manganese (Mn), EDTA-chelated, soluble in water	0.025 %	0.044 %
Molybdenum (Mo), as sodium salt, soluble in water	0.002 %	0.003 %
Zinc (Zn), EDTA-chelated, soluble in water	0.010 %	0.017 %

Recommendations

Foliar application: Apply 2 – 5 kg/ha/application. Never exceed a concentration of 0.5% (5 g/l of water). 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.

Field crops (cereals, sugar beet, cotton, etc..): Apply during the beginning of the maturation stage.

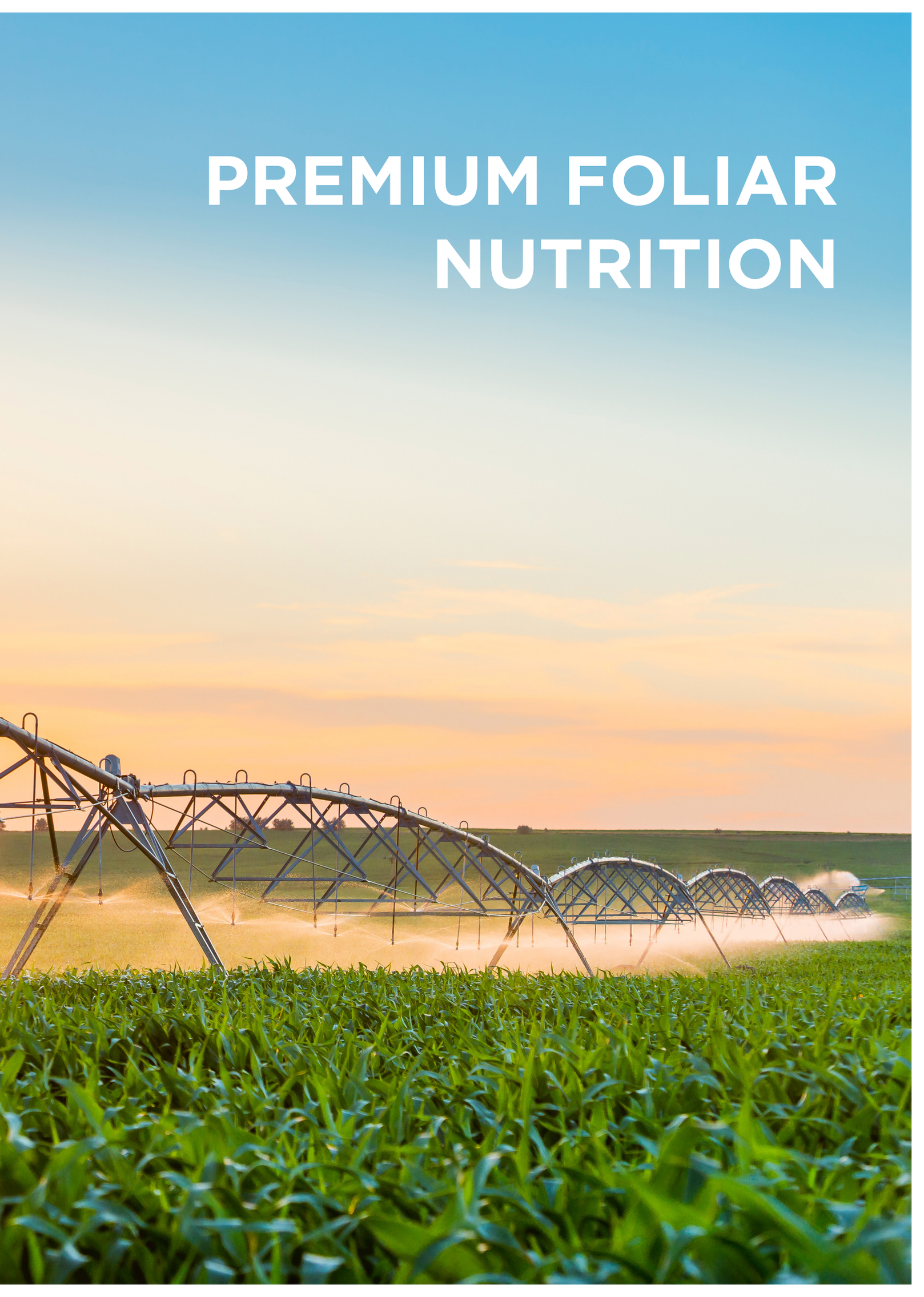
Oil seed rape: Apply at the stage of free buds (Stage D2); repeat after flowering (Stage E) and during pods development (Stage G).

Potatoes: Apply during the tuber bulking stage alternating with balanced formulations; repeat with 10 – 14 day intervals.

Vegetables: Apply on green fruits till the beginning of fruit maturity.

Fruit trees: Apply on green fruits till the beginning of the fruit coloration.

PREMIUM FOLIAR NUTRITION



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