

# ULTIMATE N

**NPKS 40-0-0-0**

**+ activated humic acid & bio effectors**

Highly concentrated liquid Nitrogen and Humic acid complex complemented with bio effectors for reduced leaching, boosting Nitrogen levels of plants, enhanced root growth and improved plant health

## BENEFITS OF ULTIMATE N

- The bio effector present in this product enters plants cells and triggers pattern recognition receptors which affects several bio mechanical pathways and enhances gene expression whilst regulating the way these genes are converted to proteins. 74 genes are triggered by the Bio effector enhancing root development, protein development, nutrient uptake and stress tolerance such as heat stress, drought stress and salinity stress.
- Activated Humic acids and bio effectors for enhanced Nitrogen uptake, plant growth & soils health.
- Reduced volatilization, for greater Nitrogen use efficiency.
- Fortified with nitrogen stabilizers to reduce nitrate leaching.
- Boosts protein levels in plants.
- Activated Humic acids maintain and improves soil physical and chemical properties.

## THE IMPORTANCE OF NITROGEN

Nitrogen forms proteins and increases the yield of all crops. It is the essential building block of plant structure and is vital to plant growth but can be a limiting factor in uptake of other nutrients. Nitrogen is often leached from the soil therefore regular small applications will ensure efficient uptake without excessive losses.

## THE IMPORTANCE OF ACTIVATED HUMIC ACID

Activated Humic acid assist the penetration of nutrients into plant roots more efficiently therefore reduce applications can be maintained throughout the growth period. Humic acid, the active constituent of humus, plays an important role in nutrient availability, cation exchange, microbial activity, water-holding capacity and soil structure improvement.

## WHY ULTIMATE N?

Ultimate N is a stabilised high nitrogen product which sustains rapid growth in the initial stages after the plant has established a good root system. Ultimate N is designed to stimulate vigorous vegetative growth in all ground and tree crops. The use of high nitrogen fertiliser levels should be discontinued at least 10 days prior to budding and flowering (except cereal crops, cotton etc). Ultimate N will also boost protein levels in cereals with application prior to flowering. One major advantage of this product is that no follow-up rain irrigation is required after application, because of its liquid formulation and high absorption rate in soils.

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**CHARACTERISTICS:** pH: 7.0 - 8.0; Specific Gravity: 1.33 - 1.34

**AUS Analysis W/V%:** 40.4% N, Activated Humic acid, bio effectors (proprietary)

**International Analysis W/W%:** 30.1% N, Activated Humic acid, bio effectors (proprietary)

## APPLICATION

**BROADACRE:** Such as Barley, Canola, Cotton, Grain legumes, Maize, Oats, Rice, Sorghum, Triticale, Wheat & Pasture crops. **Aerial:** 5 – 7.5 L/ha in a minimum of 30 - 50 L final spray volume. **Ground rigs:** 10 - 15 L/ha in a minimum of 50 - 75 L final spray volume. **Fertigation:** 15 – 20 L/ha. **Canola:** Apply at full cabbage, repeat as required. Use the higher rate for irrigated crops. **Cereals:** Apply from early/mid tillering to booting. 2nd application at milky dough may help in protein boost. Use the higher rate in irrigated situations. **DO NOT** apply whilst flag leaf is emerging or during 5 - 90% flowering. Application can take place after the flag leaf is fully unfolded. **Maize:** 1st spray, 5 – 6 leaf (stage 3), 2nd spray at boot (stage 5).

**CUT FLOWERS & ORNAMENTALS OPEN FIELD:** Such as Carnations, Gypsophylla, Roses & Statice. **Foliar:** 10 ml/L. Wet foliage evenly to drip. When practical use higher (more dilute) water rates. **Fertigation:** 15 – 20 L/ha. Apply as required. Fertigate during growth periods to replenish nitrogen.

**DECIDUOUS TREE CROPS:** Such as Apple, Almond, Cherry, Nectarine, Peach, Pear, Pistachio and Walnut. **Foliar:** 3 – 5 L/ha in a minimum of 300 – 500L final spray volume. **Fertigation:** 15 – 25 L/ha. Apply as required. **Post-harvest application:** Apply through fertigation before leaf fall. **DO NOT** apply as a foliar to stonefruits particularly apricots, nectarines and some varieties of peaches during leaf growth. Can be applied foliar at post harvest but before leaf drop.

**EVERGREEN TREE CROPS:** Such as Avocado, Banana, Citrus, Macadamia, Mangoes, Lychee. **Foliar:** 3 – 5 L/ha in a minimum of 300 – 500L final spray volume. **Fertigation:** 10 – 20 L/ha. Foliar post-harvest treatment. Can be applied monthly from each flush to stimulate roots. Fertigation rates should be adjusted to suit tree size. To prevent fruit drop, fertigate 20 L/ha 3-weeks starting post 1st flush.

**FRUITING VEGETABLES:** Such as Capsicum, Cucurbits, Eggplant, Tomatoes, Watermelons, Pumpkins, Zucchini. **Foliar:** 5 – 8 L/ha in a minimum of 500 – 800L final spray volume. Wet foliage evenly to drip. When practical use higher (more dilute) water rates. **Fertigation:** 10 – 20 L/ha. Apply as required. Fertigate during growth periods to replenish nitrogen.

**LEAFY VEGETABLES:** Such as Endive, Fennel, Lettuce, Broccoli, Cabbage, Cauliflower, Kale and Herbs. **Foliar:** 5 – 8 L/ha in a minimum of 500 – 800L final spray volume. Wet foliage evenly to drip. When practical use higher (more dilute) water rates. **Fertigation:** 15 – 20 L/ha. Apply as required. Fertigate during growth periods to replenish nitrogen.

**ROOT VEGETABLES:** Such as Beetroot, Carrot, Leek, Onion, Potato, Radish, Sweet Potato. **Foliar:** 5 – 8 L/ha in a minimum of 500 – 800L final spray volume. **Fertigation:** 15 – 20 L/ha. Apply monthly post emergence or 21 days post-transplant, 6 x applications.

**VINE and BERRY CROPS:** Such as Blueberry, Strawberry, Raspberry, Wine and Table Grapes. **Foliar:** 2 – 4 L/ha in a minimum of 300 – 600L final spray volume. Foliar 4 x applications from bud burst to flowering. Apply in cool of day, do not apply to berries or exceed per Ha rate. **Fertigation:** 10 – 15 L/ha. Fertigation from shoots 10 cm to veraison: Apply 4 applications. Post-harvest: 2 applications, this is the most important time.

Fertigation rates are dependent on seasonal nutrient demand. Agitate contents well prior to application.

**WARNING:** DO NOT mix or apply with copper based fungicides or apply to crops with copper fungicide residue. Test a small area prior to application.

**DO NOT** apply foliar in the heat of the day.

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NOTE: The suggested rates of application of the Product are designed for typical Australian conditions and should be used as a guide only. Each farmer's climatic conditions, water quality, soil types, application processes and practices may differ and therefore necessitate corrections to ensure optimum results. Good agricultural practice requires that application be avoided under extreme weather conditions such as temperatures over 28°C, high humidity, frost, rain etc. It is recommended that when applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total spray. Where possible, it is recommended that regular leaf tests are conducted to determine actual plant nutrient availability during each growth cycle. Soil tests at least once per year are essential.