

UMX

Conditions Soil & Improves Root Growth

Go with Globe

Barmac UMX is

- An effective soil enhancer
- A plant growth bio-stimulant
- A chelating agent
- High concentration of humic acid and carbon.
- Barmac UMX is highly beneficial to both plants and soil. In soil it can:
 - increase microbial and mycorrhizal activity
 - promote nutrient uptake
 - accelerate seed germination

Benefits of Barmac UMX

- Water soluble, easy to apply, economical and faster acting
- Increases turf health
- Substantially increases soil carbon
- Aids in root formation
- Stimulates plant enzymes and hormones
- Accelerates seed germination
- Improves soil fertility and soil microbial activity
- Promotes plant nutrient uptake
- Suppresses disease, heat stress and frost damage
- Promotes antioxidant activity
- Environmentally safe
- Safe for animals, plants and humans

Chemically the humic component of UMX contains more carbon and less hydrogen than does the animal and plant residues from which it has formed through extensive biological decomposition. Because humic acid is one of the end products of the biological decay of organic matter, it has great resistance to further decomposition. Estimates of its microbial decay rate are often in the range of 0.3 percent per year under ideal laboratory conditions. Properties of humic acid that have some benefit in turfgrass culture is its cation exchange capacity to form chelates with the metallic micronutrients, iron, copper, zinc and manganese. The cation exchange capacity (CEC) of commercially produced humic acid is in the range of 500 to 600 milliequivalents (me) per 100 grams. This is about five times greater than the CEC of good quality peat moss and twice as high as the CEC of soil humus.

UMX is formulated with high grade humic acids that promote plant health and growth. The importance of UMX humic acids lies in their ability to promote hormonal activity in plants. Plant hormones are chemical communicators, or agents, which help regulate a plants development and its response to its surrounding environment. UMX humic acids also promote antioxidant production in plants which, in turn, reduces free radicals. Free radical molecules result from stress such as drought, heat, ultraviolet light and herbicide use. Free radicals are damaging because they are strong oxidizing agents which damage lipids, proteins and DNA within plants cells. Antioxidants are metabolites and enzymes which seek out free radical molecules and protect plants from damage. They include lipid soluble substances like vitamin "E" and betacarotene and water soluble materials such as vitamin C and various enzymes. UMX contains humic acid, fulvic acid and proprietary constituents essential for plant growth. In high pH soils, where phosphate availability is a problem, UMX greatly increase the availability of phosphorus, iron, zinc and manganese. In addition, Humic Plus can complex nitrogen as ammonium and retain it in the root zone, preventing nitrification and leaching out of the root zone. UMX can be foliar applied with the aid of a conventional sprayer and soil applied with the aid of a liquid kit, irrigation or fertigation apparatus. UMX aids in degrading harsh chemicals in an environmentally safe manner.

2 UMX formulation options

UMX

Granular

ORGANIC GRANULAR SOIL AMENDMENT.

500g/kg organic carbon derived from humic acid.

RATE OF APPLICATION

5 kg/100m² for turf renovation

10kg/100m² for garden beds and turf construction

FUMXG20

UMX

Liquid

A high quality Humic/Fulvic formulation containing high levels of organic carbon. This product is very effective at preventing nutrient leaching from it's chelating/complexing abilities.

GENERAL RECOMMENDATION FOR FERTIGATION

Apply 10 – 20 litres of UMX Liquid per hectare

(100-200 ml/ 100m²) in a balanced nutrient program with

1000L of water per hectare. Use the high rate on sandy profile soil types or at times of high nutritional demand. Apply as necessary or as part of a 2–6 week program. Rates will vary between planting surfaces due to soil type variation.

FUMXL20

Globe



**For further information call
John Cooper 0439 808 840**

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Other Turf Management Products from



AUXINONE

A brown illustration of a root system with several main roots and many smaller fibrous roots extending downwards from the base of the word "AUXINONE".

NOCULATE™ LIQUID

Liquid Microbial Inoculant

UMX

Conditions Soil & Improves Root Growth

Globe



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