



AGRIVA HOLLAND B.V.

VAN NOORD ROOT



VAN NOORD ROOT consisting of Nitrogen fixers (Azospirillum sp., Rhizobium sp.), Phosphate solubilizers (Bacillus sp. Pseudomonas sp.), Potash mobilizer (Fraturia sp.) and Vesicular Arbuscular Mycorrhizae (VAM).

Nitrogen fixers

Nitrogen fixers (Azospirillum sp. and Rhizobium sp.), converts atmospheric nitrogen gas into plant usable ammonium forms and fulfills of plants nitrogen requirements. Nitrogen fixers produce plant growth promoting substances viz, vitamins, auxins and gibberellins which influences plant growth to a large extent. Nitrogen fixer enhances seed germination, early seedling vigor and increases the crop yield.





AGRIVA HOLLAND B.V.

VAN NOORD ROOT

Phosphate solubilizers

Phosphate solubilizers (*Bacillus megaterium* var. *phosphaticum* and *Pseudomonas striata*) dissolve fixed tricalcium phosphate into plant utilizable monocalcium phosphate form. Phosphate solubilizers produce organic acids (viz, citric acid, succinic acid, lactic acid, etc.), hormones (viz, indole acetic acid, gibberellins etc.) and enzymes (viz, phytase, nuclease, lecithinase etc.) that help, in solubilisation of insoluble phosphates into plant utilizable form. Phosphate solubilizers improve plants growth and increase the crop yield.

Potash mobilizer

The microbe, *Frateuria aurentia* is a beneficial bacterium capable of mobilizing soil available Potash into near the root zone of plants. It works well in all types of soil especially, low K content soil. Use of such bacteria in powder form can increase the availability of more potash in usable form to the plants.

Vesicular Arbuscular Mycorrhizae (VAM)

Mycorrhizae, mobilizing major nutrients like, nitrogen, phosphorus and potassium and also certain micronutrients like zinc, calcium, iron, magnesium and manganese. Mycorrhizal inoculation enhanced absorption water, storage and movement back into plants enhances tolerance to drought. Mycorrhizae produce specific antibiotics, which immobilize and kill soil borne pathogens. Mycorrhizal inoculation reduces the chemical fertilizer application and enhances the crop yield

Recommended Dosage

Soil application: 1 litre /acre

Seed treatment: @ 10 ml per kg of seeds as per standard wet treatment.

Seedling treatment: @ 10 ml/litre of water prior to planting.

