

# Biomex® Starter

Biostimulants & Quality Improvement

## Use

To stimulate the growth of roots and increase plant tolerance to abiotic stress through colonisation of plant roots.

## Crops

Potatoes

## Pack Size

1 litre

## Toxicology

Neither phytotoxic nor phytopathogenic effects have been observed in greenhouse and field trials.

## Function of Biomex® Starter

The product works by colonising the roots of the growing plant with spores of *Bacillus amyloliquefaciens*. The colonies secrete compounds in the vicinity of the root hairs that help to increase availability and uptake of nutrients, resulting in the following effects being observed:

1. Improved germination
2. Improved rooting leading to increased plant vigour
3. Resulting in Earlier bulking
4. Giving Improved yields

The benefits of *Bacillus amyloliquefaciens* are likely be reduced in soils with high humus content or naturally high microbial activity because of the higher levels of *Bacillus* already present in the soil.



## Composition

A natural water based liquid containing  $2.5 \times 10^{10}$  cfu/g (colony forming units per gram) spores of *Bacillus amyloliquefaciens*.

## ◆ Directions for Use

Biomex Starter is suitable for seed coating and mixing with soil. Efficacy will be optimised when soil temperatures exceed 10°C.

Shake the bottle before use. Apply the spray solution within 8 hours of mixing.

Seed Coating – apply immediately before or during the planting process by treating seed tubers in chitting trays, in bulk bins or in the planter hopper. Complete and even distribution on the tubers will aid efficacy.

Soil Application – incorporate within the ridge to ensure placement in proximity to the seed potato. It is not suitable for overall application.

| Crop                        | Timing                                | Rate                       | Comments  |
|-----------------------------|---------------------------------------|----------------------------|---|
| Potatoes - Seed Coating     | Immediately before or during planting | 1-3ml/kg of seed (1-3 L/t) | Complete and even distribution on the tubers will aid efficacy. Use the higher rate when planting in beds. Consult OMEX for detailed advice |
| Potatoes - Soil Application | During planting                       | 0.5-1 L/ha                 | Apply to tubers and soil surrounding tubers. Use the higher rate when planting in beds. See detailed application guidelines below           |

## ◆ Soil Application Guidelines

1. Biomex Starter can be applied with Organomex as a liquid placement fertiliser. This is the easiest application method and requires no additional equipment or adaptations. Dilute 0.5-1L of Biomex Starter in the volume of liquid fertiliser required per hectare. Maintain agitation, apply within 8 hours of mixing.
2. Alternatively, Biomex Starter can be applied using an on-planter fungicide applicator. If Biomex Starter is being applied alone, there is no need to avoid application directly to the planted tubers, and it would be possible to replace the normal dual nozzle system with a single, larger aperture nozzle to reduce the risk of blockages. Dilute 0.5-1L Biomex Starter in 25-50 L water per ha. Maintain agitation, apply within 8 hours of mixing.
3. In furrow applicators where the material is pre-mixed with water It is essential to provide agitation to the tank, and to take care only to mix and apply the correct quantities so that material is not left standing in the tank or spray lines.

## ◆ Storage

The formulation is stable for more than three years at 20°C. It should be kept fully sealed packaging during storage. Do not store and use opened packages in subsequent seasons.