



## SICOBIO-P

# Biostimulant, containing Phosphate Solubilising Bacteria (PSB)

### 1. PRODUCT DESCRIPTION

**SICOBIO-P** is a product containing 25 billion CFU/Kg (CFU=colony forming units) of phosphate solubilising bacteria (PSB), including *Pantoea agglomerans* strain (P5), *Microbacterium laevaniformans* strain (P7) and *Pseudomonas putida* strain (P13).

Phosphate Solublising Bacteria (PSB) are a group of beneficial bacteria capable of hydrolysing organic and inorganic phosphorus from insoluble compounds. **Phosphate solubilisation ability of the microorganisms is considered to be one of the most important traits associated with plant phosphate nutrition.** It is generally accepted that the mechanism of mineral phosphate solublisation by PSB strains is associated with the release of low molecular weight organic acids through which their hydroxyl and carboxyl groups complex or chelate the cations bound to phosphate, thereby converting it into soluble forms. In addition, some PSB produce phosphatase like phytase that hydrolyse organic forms of phosphate compounds efficiently.

#### 2. PRODUCT SPECIFICATIONS

**SICOBIO-P** also contains soluble plant nutrients and sugars to provide rapid development of the CFU, along with humic acids to enhance transport and availability of the nutrients into the plant. Sicobio-P contains:

- · 25 Billion CFU/kg of phosphate solubilising bacteria
- · NPK 10-40-0
- · Sugars and materials to support the growth of the bacteria
- · 5% Soluble Humic and Fulvic acids

#### 3. APPLICATION & RECOMMENDATIONS

#### How does SICOBIO-P work?

It should be dissolved/dispersed in water by a sprayer with good agitation.

It is recommended to be used at 2.5 to 5kg/ha in a minimum of 200L water.

It may be applied at the 5kg rate to the soil surface at planting/sowing time, or directed into the seed deposition area as a banded treatment at the lower rate.

The CFU begin to develop immediately and will continue to spread and work for many weeks and months depending on local conditions, making additional phosphate available to the growing crop.

It is recommended for use on all crops but particularly potatoes (and other root crops) and maize. It may be used in conjunction with low-solubility suspension fertilisers as a sequential treatment.

See separate notice on Potato trial yield with **SICOBIO-TP**. (= adapted version of SICOBIO-P)

#### 4. PACKING

In 5 kg bags x 100 per pallet. Min. order: 2 pallets = 1000 kgs

