



May be used in organic crop production in accordance to the NPOP



**multiplier**<sup>®</sup>



# SUNRISE<sup>®</sup>

## Rhizobium

A symbiotic beneficial bacterium for legumes



**BIO-FERTILIZER**

Available in Packing

Liquid: 100 ml, 250 ml, 500 ml, 1 Ltr

Powder: 1 kg



*Farmers' first choice since 1974*



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## Rhizobium

### BIO-FERTILIZER



## A symbiotic beneficial bacterium for legumes

The earth's atmosphere contains almost 80% nitrogen. It cannot be used by most of living organisms until it is fixed. Nitrogen is required by all living organisms for the synthesis of proteins, nucleic acids, and other nitrogen-containing compounds. Multiplex Sunrise contains an efficient bacterial stain of Rhizobium leguminosorum that helps in fixing of aerial nitrogen by establishing a symbiotic association with leguminous plants. Normally the bacteria enter the root hairs, multiply there and forms a characteristic nodule like structure in the root system and convert fixed nitrogen into plant-usable form i.e., ammonia which is easily absorbed by the plant for its growth and development. Thereby, application of Multiplex Sunrise significantly reduces the quantity of inorganic nitrogen fertilizers in Legume crops

**ACTIVE INGREDIENT:** *Rhizobium leguminosorum* (Min.  $1 \times 10^8$  CFU /ml for Liquid Based and min.  $5 \times 10^7$  CFU/gm for Carrier Based)

**TARGET CROPS:** Leguminous crop like Beans, Soybean, Cluster Beans, Cow Pea, Red Gram, Green Gram, Black Gram, Ground nut and many more legume crops.

### DIRECTION FOR USE

**DOSAGE:** Liquid based - 1 to 2 liters/ acre and Carrier based - 2 to 5 kg/ acre

**SEEDS TREATMENT:** Mix 100 ml or 500 g Multiplex Sunrise in 500 ml of rice starch (ganji)/500 ml of jaggery syrup and coat the seeds required for one acre. Keep the treated seeds for shade drying for an hour before sowing.

**SEEDLING ROOT DIP:** Mix 250 ml of Multiplex Sunrise in 50-liters of water and dip the roots of seedlings for 10 to 20 min. before sowing.

**NURSERY:** Mix 1 kg or 200 ml Multiplex Sunrise with 10 kg dried farmyard manure/ Multiplex Annapurna and apply for nursery which has seedlings for one acre.

**MAIN FIELD/ SOIL APPLICATION:** Mix 4 to 5 kg or 2 liters of Multiplex Sunrise mix in 100 kg dried farmyard manure/ Multiplex Annapurna and then broadcast to one acre of land.

**DRIP IRRIGATION:** Mix 2 liters Multiplex Sunrise in 200-liters water and irrigate through drip for 1 acre.

### BENEFITS OF MULTIPLEX AADHAR

- ◆ In crops like Ground nut, Bengal gram, Cow pea, Green gram and Soya bean it leaves behind 40 to 150 kg nitrogen per hectare for succeeding crop
- ◆ It increases the yield by about 15 to 20 %
- ◆ Multiplex Sunrise treated Legume plants not only effectively fix atmospheric nitrogen but also enhances soil fertility

**PRECAUTIONS:** Multiplex Sunrise shouldn't be mixed with any insecticides, fungicide or weedicides during application



Manufactured by

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