Nutrica Biotechnology Company

Biofertilizer

The main purpose of bio fertilizer consumption is to increase soil fertility, production stability and prevent erosion of land inputs. By consuming bio fertilizer and supplying the plant's nutritional needs, the production efficiency and yield of the plant will increase and quality products will be offered to the market. Consumption of bio-fertilizers will reduce the plant's need for chemical fertilizers and will play an effective role in soil and water resources by reducing the leaching of soil minerals. The final product obtained from the use of bio-fertilizers is not only free of chemical residues, but also in terms of taste and aroma, it is significantly superior to the products obtained from the mere use of chemical fertilizers.

Characteristics of Iran Fertilizer 1

Due to the importance of using biological materials to reduce the use of fertilizers and chemical pesticides, the Iranian Institute of Agricultural Biotechnology affiliated to the Ministry of Jihad Agriculture has started a comprehensive and complete research on this issue since 1978. The results of 16 years of research in the field of isolation and study of native bacteria in the country has led to the production of biological fertilizer containing Streptomyces bacterial isolates with high adaptability to various climatic conditions in Iran with appropriate formulation and durability of more than 9 months.

Currently, the production and sale of fertilizers obtained from these researches in the form of technical knowledge is at the disposal of Nutrica Biotechnology Knowledge Foundation Company. To produce this product, only domestic natural resources are used and due to the high adaptability of this bacterium to heat, cold, salinity and dehydration stresses, its use is recommended for different regions of Iran.

Advantages of using Iranian Strept Fertilizer 1

Provide an average performance increase of 35%:

This fertilizer is classified as a plant growth promoter. Its effect on crops such as corn, rapeseed, rice, sugar beet, potatoes, wheat, barley, and greenhouse plants such as tomatoes, cucumbers, eggplants, squash, peppers and all kinds of leafy vegetables and garden products such as pistachios, almonds, apples, Peaches, walnuts, dates, citrus fruits, pears have been evaluated and approved.

As BIOCLATOR:

As a bioculture, this biofertilizer eliminates the need for chemical clusters to supply iron, copper, manganese and zinc to agricultural lands.

Reduce the consumption of absorbable phosphorus by 40%:

Streptomyces reduce the need for phosphate fertilizers by producing phosphatase enzymes and increasing the volume of plant root mass.

Record increase in salinity tolerance by 38%:

Bacteria used in Iran Strept 1 fertilizer by promoting the production of soluble organic matter soluble in plant cell structures, production of secondary metabolites effective in plant salinity tolerance and also by increasing root weight index leads to reduced uptake and transfer of sodium to plant shoots. Salinity becomes water and soil.

Record increase in dryness tolerance by 28%:

This bacterium increases water use efficiency by increasing the hormone auxin and by increasing root access to water sources. Increasing water use efficiency can significantly increase drought tolerance.

Reduction of soil fungal disease up to 80%:

Streptomyces, by producing the enzyme chitinase, a variety of antibiotics and biocides, causes 80% of soil-borne fungi such as pythium, Fusarium, etc. to be significantly inhibited.

History and production of Iranian Strept fertilizer 1

Streptomyces is a soil bacterium that plays an important role in various fields of agriculture and medicine. So far, more than 7,000 biologically active products have been obtained from these valuable bacteria. Streptomyces can be used as a nematode, insecticide, herbicide and plant growth promoter. Streptran 1 is produced from Streptomyces isolates native to arid and saline regions of the country with high plant growth stimulation power (PGPR). Streptomyces used in the formulation of this fertilizer by producing food metal chelators (iron, copper, manganese and zinc), producing mineral phosphate-soluble enzymes, producing growth hormones and increasing root size such as auxin and cytokinin, and by producing anti-fungal enzymes such as Chitinase has an effective role in increasing the production and inhibition of fungal and bacterial diseases of soil. This product has been produced and exploited after 10 years of research in the Ministry of Agriculture.