

Bioorganics for Crops Production

Bioorganics are plant extracts developed for the specific crops, as a seed treatment and foliar application for boosting vegetative growth and enhancing yield

RICE

Both for upland and lowland transplanted condition, all rice varieties can give good response to the bioorganics, crops grown under rainfed and dryland conditions are more responsive. 30-50 percent more root growth and effective tiller increased by 20-30 percent in bioorganic treated crops

Bioorganics: RCHE C-12L, RCHE724L, RF79L, RF37, F9

Methodology: Seed treatment @ of 8-10% concentration in clean water for 10-12 hrs for nursery rising. For upland condition, 6-8 hrs soaking in ready solution and seed should either be dried in shade or may be planted immediately. One foliar application @ 2% concentration at tillering stage of crop ensures better performance.

Economics: Input cost Rs 500-600/ha, yield 20-25% more grain yield Rs. 5000-7000/ha addition income.

MAIZE

Maize crop stimulated greatly by bioorganics application. The treated seed sprout early and establishes quickly. The leaf area and chlorophyll content increases with application. Lateral and horizontal root growth increased by 40-60% over control. Cob size and number of grains/cob improves with treatment. Grain yield increased by 15-20% with its application.

Bioorganics: RCHE 620L, MF 18, MF92, MF129

Methodology: Seed treatment @10% concentration in clean water for 3-4.hrs. Seed should either be dried in shade or may be planted immediately. One foliar application @ 2-3% concentration at knee height stage on active foliage of crop ensures better performance.

Economics: Input cost Rs 350-400/ha, yield 15-20% more grain yield Rs. 3000-4000/ha addition income.

WHEAT

High yielding varieties of wheat are found to be more responsive to bioorganic treatment. The treated seed sprout early and establishes at least 2 days ahead of non-treated seed. The treated plants are having more vigorous, crown root system. The secondary tillers are 20-30% more in treated plants

Bioorganics: RCHE 572L, RCHE 442L

Methodology: Seed treatment @5% concentration with RCHE 572L formulation in clean water for 2-3.hrs. Seed should either be dried in shade or may be planted immediately. One foliar application @ 1% concentration with RCHE 442L at tillering stage on active foliage of crop give 20-25% more grain yield under irrigated condition. Whereas, under rainfed condition the degree of response will be 60-70% higher in treated crop

Economics: Input cost Rs 550-600/ha, additional income Rs. 5000-7000/ha

PULSES AND OILSEEDS

Soybean, groundnut, green gram, black gram and mustard were tested with different formulations. The legume species responded profoundly with bioorganic formulations. In general, extensive root system with profuse nodulation recorded in all the four crops. Early sprouting and establishment were witness in treated crops

Bioorganics

Soybean: SF4, RCHE 538L

Groundnut: GF3, RCHE 737L

Green gram and Black gram: RCHE 726L, RCHE 596L

Mustard and Rapeseed: MHF 6,