INNOVATIONS CATALOGUE

Rice Biofert A Microbial Metabolites-**Based Biofertilizer** for Sustainable **Rice Production**



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> Rice Biofert is based on utilizing substrate-dependent microbially released plant growth regulators for the betterment of agriculture industry. This novel and innovative approach has been proven to be very effective in promoting the growth and yield of various plants/crops. This approach consists of production of plant growth regulators (organic substances which coordinate and regulate plant growth when applied at concentration far below the nutrients) by

the inocula from the added substrate. These plant growth regulators are taken up by plant roots and regulate various physiological processes, which results in promotion of plant growth of rice. This approach is different from the conventional approach of biofertilizer formulations consisting of living cells of microbial bugs, which usually give very inconsistent results. These microbial metabolites can be used for seed or root treatment. After testing in the laboratory/growth room and wire house trials, an extensive work on rice was undertaken on farmer's fields to test the validity of this approach and encouraging extremely significant results were obtained (average up to 20% increase in yield).

75



Average yield of 20 farmers' field trials of rice

Application Method

- Take a tub or dig up a pit in the soil and spread a plastic sheet on it
- Pour a bottle of Rice Biofert in the tub or in the pit
- Add 9 liter (9 bottles) of water in it to get desired concentration
- Mix it well to get homogeneous solution of plant growth regulators
- Now remove the soil from rice seedlings
- Dip seedlings for one hour in the diluted Rice Biofert before transplanting into the field.
- Rest of everything remains the same as per recommended practices for rice