

Effects of iron and molybdenum with dual inoculation of nitrogen fixing bacteria and phosphate solubilizing bacteria on growth of aerobic rice

ABSTRACT

Different levels of Fe (0, 2, 10, 50 ppm) and Mo (0, 0.05, 5, 10 ppm) with dual inoculation of N₂-fixing bacteria (NFB) and phosphate solubilizing bacteria (PSB) *Bacillus* sp. were tested in glasshouse on growth of rice in aerobic condition. Combination strains with different levels of Fe and Mo gave higher chlorophyll content (12.65 mg/cm²) (11.42 mg/cm²), leaf area index (1.41 cm²) (1.21 cm²), total root length (1159.88 cm²) (15169.19 cm²) and root volume (0.82 cm³) (0.68 cm³) as compared to control. Inoculated plants with combination strains showed better effects on growth of aerobic rice unlike single levels of Fe and Mo applied.

Keyword: Aerobic rice; N₂-fixing bacteria; P-solubilizing bacteria; Iron; Molybdenum