



RESEARCH ARTICLE :

Effect of biopriming on seed quality parameters of blackgram (*Vigna mungo* L. Hepper.) seeds

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SUMMARY : The experiment was conducted in laboratory at Department of Seed Science and Technology, Madurai, Tamil Nadu. during 2015 in order to find out the effect of seed priming with biological agents on germination and seedling vigour were evaluated by given priming treatment with liquid formulation *viz.*, effective micro-organisms (EM), sulphur solubilising bacteria, pink pigmented facultative methylotrophs (PPFM), rhizobium + phosphor bacteria at 1 and 2 % concentration, coconut water at 1 and 2 % and cowpea sprout extract 3 % and seed quality parameters were recorded. It was found that all the priming methods showed significant differences with the control and the highest germination (93 %), root length (18.28 cm), epicotyl length (21.15 cm), hypocotyl length (9.76 cm), seedling dry matter production (0.279 g 10 seedlings⁻¹), vigour index (4573) and field emergence (92 %) were observed in the seed primed with PPFM 2%. The study helps to improve the quality of seeds with the help of seed priming treatments which are cost effective, economic, non-toxic and ecofriendly.

KEY WORDS :

Blackgram,

Biopriming, Seedling

growth, Vigour index

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