
Effect of osmopriming and coating seed with captan and metalaxyl on the germination and seedling growth of field corn

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Abstract Priming of corn seeds with 0.4 g of KNO₃ did not affect germination percentage and speed of germination. On the contrary, it promotes better shoot length, root length and total seedling length than other methods. Priming with 0.4 g of KNO₃ followed by any coating methods, with or without fungicide, did not affect germination percentage and speed of germination but resulted in higher shoot length when tested under laboratory condition. However, the same seed treatments under the greenhouse condition, though did not affect germination percentage and speed of germination, but resulted in higher coleoptile emergence percentage when compared to control. In addition, coating corn seeds with 0.5 g.ai. of metalaxyl gave rise to the highest shoot length. Therefore, corn seed treatments which involved priming with 0.4 g of KNO₃ followed by coating with 0.5 g.ai. of metalaxyl was the most suitable for field corn.

Keywords: Seed enhancement, Seed priming, Fungicides

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