

Emergence and Growth of Arabica Coffee Seedlings as Influenced by Some Pre-sowing Seed Treatments

T. KUFA AND A. YILMA

Ethiopian Institute of Agricultural Research, Jimma Research Center, P. O. Box 192, Jimma, Ethiopia. E-mail: kufataye@yahoo.com

SUMMARY

A factorial experiment arranged in randomised complete block design with three replicates was used to undertake the experiment at Jimma Agricultural Research Centre (JARC) nursery site. The objective of the study was to examine the contributions of some pre-sowing seed treatments for enhanced coffee seed germination and subsequent seedlings growth. For this, removal of parchment and soaking coffee seeds in pure cold water (each at two levels) were examined. The results indicated that the initial stage coffee seed emergence was significantly influenced due to the main parchment effect with the maximum results obtained from sowing clean coffee seeds. Soaking treatment had also improved emergence and growth, though the results did not vary. The interaction effect was comparable, although maximum average values for seedling emergence and subsequent shoot and root growths were recorded due to sowing of clean coffee seeds and water soaking. In general, pre-sowing seed treatments were noted to have different amplitudes on seed emergence and thus, put the most imprints on the latter growth stages of coffee seedlings.

Keywords: Coffee seed, germination, soaking, parchment coffee