Dormancy breaking in jute mallow (Corchorus olitorius) seeds.

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Jute mallow (Corchorus olitorius L.) is an important African leafy vegetable in Kenya. It is highly nutritious and has commercial importance. Jute mallow seeds exhibit dormancy, reducing seed germination and adversely affecting field performance but limited research has been done on appropriate dormancy breaking methods. In this study, the efficacy of various dormancy breaking methods was tested. Treatments included mechanical scarification, soaking in boiling water for 5 min, leaching, soaking in water for 24 h at room temperature, applying wood ash paste on the seeds, soaking in 1% KNO3 and a control. Analysis of variance and Scheffe’s multiple comparison procedure were used to identify methods that significantly differed in inducing seed germination from the control. The most effective treatment was mechanical scarification, followed by leaching and lastly soaking in hot water. The rest of the methods did not significantly differ from the control. It is therefore recommended that farmers use mechanical scarification to break dormancy in jute mallow seeds before sowing.