Title Desiccation tolerance in *Phaleria macrocarpa* seeds

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Abstract

Phaleria macrocarpa is a popular medicinal plant in Indonesia and has recently been introduced in Malaysia in view of its commercial potential as health supplements. This species is primarily propagated by using seeds and hence, seed desiccation tolerance was studied for better handling of the planting material. Seeds extracted from fully ripe fruits with uniform size were dried in desiccators by using potassium acetate for periods ranging from 0 to 4 days. Seeds were drawn randomly daily for the determination of seed moisture content (Me), germination and electrolyte leakage. Seed MC was determined by using oven drying method at 103°C for 16 hours according to 1ST A. Germination was carried out with other seeds desiccated for the same duration on moistened sand sized 0.2-2.0 mm in enclosed plastic boxes and electrolyte leakage of the desiccated seeds was determined by using an electrolyte conductivity meter. Results obtained from this study indicated that seed germination was greatly reduced to below 80% when seeds were desiccated down to MC of 21 %. This was supported by the increased electrolyte leakage with these seeds. *Phaleria macrocarpa* seeds were concluded best to be sown fresh or after slight desiccation to avoid lost of planting materials.