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Effect of Ageing (Storage Period) on Onion (*Allium cepa* L.) Seed Quality

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ABSTRACT

This study was conducted to find how far onion (a local cultivar Kamleen Yellow) seed quality was affected by ageing or storage period under natural tropic conditions. Four seed lots of four different storage periods (1, 2, 3 and 4 years) under normal storage conditions (33^0C -22^0C temperature and 29% relative humidity) were tested for quality (germination percentage, mean germination time, germination uniformity and vigour as emergence percentage, mean emergence time and emergence uniformity) in a complete randomized design with four replications. The results showed that ageing significantly reduced both onion seed germination (86% - 16%) and emergence (85% - 40%)ability. After two years storage both germination and emergence percentages were below 70%. A high correlation coefficients between germination % and emergence attributes (r= 0.85308, 0.8748 and 0.8522, respectively) and also between germination uniformity and emergence attributes (r = 0.7698, 8349 and 0.8241, respectively) were recorded. It could be concluded that onion seeds quality will be greatly reduced after 2-3 years storage under normal tropical conditions. Germination test may be adequate for assessment of