

Evaluation of Field Performance and Storage of some Tropical Short-Day Onion (*Allium cepa* L.) Cultivars

D. G. Msuya^{1*}, S. O. W. M. Reuben, L. B. Mbilinyi, A. P. Maerere², T. Msogoya¹, L. S. Mulungu⁴ and R. N. Misangu²

¹*Department of Crop Science and Production, Sokoine University of Agriculture, P. O. Box 3005, Chuo Kikuu, Morogoro, Tanzania*

²*Sokoine University of Agriculture Pest Management Centre, P. O. Box 3110, Chuo Kikuu, Morogoro, Tanzania*

**Correspondence author; E-mail: dmsuya@suanet.ac.tz*

Abstract

The storage of bulbs of onion (*Allium cepa* L.) is very crucial to ensure its availability throughout the year. Experiments were conducted at Sokoine University of Agriculture to evaluate the growth and yield characteristics of some tropical short-day onion cultivars and the storability of their bulbs after harvest. The first experiment in 1994 involved 21 cultivars evaluated for their growth and yield variables. The second experiment, involving six cultivars, was carried out in 1996 and in addition to performance evaluation, the storability of bulbs was investigated. Results showed significant differences among the cultivars in yield, yield components and storability. Granex 429 had the highest yield among cultivars in both trials, but had very poor storability. Serrana and XPH 6074 had long storability and maintained more than 50% of their weight after 5 months of storage. These two cultivars are promising as good sources of genes to incorporate storage traits in other cultivars of onion.