

EVALUATION OF EXOTIC PUMPKIN HYBRIDS WITH LOCAL PUMPKIN VARIETIES IN THE INTERMEDIATE LOW COUNTRY 1 (IL1) OF SRI LANKA

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Pumpkin (Cucurbitaceae) is mainly consumed as a vegetable. There are five species cultivated around the world. They are Cucurbita moschata Duchesne ex Poir, Cucurbita maxima Duchesne, Cucurbita ficifolia Bouché, Cucurbita pepo L. and Cucurbita mixta Pang. Twelve varieties (Cheonlima, Goldma, Peta, Arela, Shiba, Gilda, LA1557, Monica, Katana, Padma, MK Spanchy, Supreema) of pumpkin was planted under randomized complete block design (RCBD) with two replicas at Makandura research field in Kurunegala district, Sri Lanka to evaluate the adaptability in IL1(intermediate low country) in Sri Lanka. The objective of this study was to identify the best performing pumpkin variety/varieties for IL1 of Sri Lanka. Nine exotic hybrid pumpkin varieties were evaluated with two recommended local varieties and one farmer growing F1 hybrid variety in Yala season, 2017. This research was conducted by observing and recording the following parameters- Growth parameters: plant vigour (2 weeks after transplanting), reproductive parameters: days to 50% flowering in the plot, total yield of a plot, average fruit weight and pest and disease incidences. The ranking scale was adopted to gauge the visual status of plant vigour. Farmer growing F1 variety 'Supreema' was served as the control. The vigour of all the varieties was reported very good or good except for the variety 'Peta'. There were no significant differences in yield between farmer growing variety 'Supreema' and 'Katana' which belong to C. maxima. No virus damages were observed in 'Katana' while Supreema had over 15% of viral damage. The farmer growing variety Padma (C. moschata) which was introduced by the Department of Agriculture (DOA) Sri Lanka was not significantly different from other C. moschata varieties in the field trial. Overall, the Katana was the best performing variety according to this study.

Keywords: *Cucurbitaceae*, Intermediate Low Country (IL1), Yala season, Exotic hybrid pumpkin varieties, Plant vigor

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