

Variation of Selected Agronomic Characters of Traditional Rice Variety *Masuran* in Response to Different Planting Dates within a Year

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Determination of the effect of the environment on the agronomic characters of traditional rice would be useful for reintroducing them for Sri Lankan farmers. This study was conducted to determine the selected agronomic characters of accessions 4132 and 5530 of the variety *Masuran* in response to different planting dates within a period of one year. Seedlings were transplanted in a completely randomized design at a one-month interval from November 2018 to March 2019 in a uniform field condition with 10 replicates in Kurunegala district (IL1). Plant height (PH) and total tiller number (TN) at flowering and DF were recorded. The PH and TN were significantly affected by the planting date and there were significant interaction effects between accession and planting date for PH and TN. Planting in November and December 2018 resulted from the highest and the lowest PH (151.63 ± 1.1 cm and 85.7 ± 0.36 cm) respectively in the accession 4132. The PH varied from 105 ± 1.4 cm (in February 2019) to 149.3 ± 2.63 cm (in November 2018) in accession 5530. TN varied from 3 ± 1.5 and 4 ± 2.1 (in March 2019) to 8 ± 3.1 (in February 2019) and 16 ± 1.9 (in November 2018) in 4132 and 5530 respectively. The DF varied from 65 ± 4.23 and 75 ± 0.9 (in February 2019) to 104 ± 1.03 and 78 ± 0.3 days (in March and January 2019) in 4132 and 5530 respectively. Effect of planting date on DF was not detected in 5530, while only the planting date in March 2019 resulted in extended DF in accession 4132. The above results suggest that the two accessions 4132 and 5530 differently respond to the different growing periods due to monthly planting dates under Sri Lankan field conditions.

Keywords: days to flowering, planting date, traditional rice “*Masuran*”