



Influence of Mother Bulb Weight and Spacing on Quality Seed Yield of Onion

T. Das, J. Mandal and S. Mohanta

*Department of Horticulture and Post-Harvest Technology, Institute of Agriculture
Visva-Bharati (A Central University), Sriniketan-731 236, India
E-mail: joydip.mondal@visva-bharati.ac.in*

Abstract: The present study was conducted to investigate the effect of mother bulb weight and spacing on onion seed production under Red and Laterite Zone of West Bengal, India. The mother bulbs were produced from botanical seed, were graded and stored under ambient condition up to November 2016. In *Rabi* 2016-2017, three levels of spacing [S1 (22.5 cm × 30 cm), S2 (30 cm × 30 cm) and S3 (45 cm × 30 cm)] and three levels of mother bulb weight [B1 (30-50g), B2 (51-65g) and B3 (66-80g)] were assessed. Maximum leaves per plant, umbel diameter, flowers per umbel and seeds per umbel was observed in wider spacing and also when larger bulbs were planted. The planting of bigger sized bulbs produced maximum number of scape per plant. Maximum seed yield (857.80 kg/ha) was obtained by following 30cm x 30cm spacing, which was similar to closely spaced plants of 22.5 cm × 30 cm. High seed yield (923.35 kg/ha) of good quality was also recorded by planting large sized bulbs (66-80g), which was superior than planting of medium and small sized bulbs. The combination of planting medium size bulbs (51-65g) in 30cm x 30cm spacing resulted in high seed yield. However, planting of large sized bulbs (66-80g) following any spacing ensures high seed yield with high seed germination.

Keywords: *Allium cepa*, Bulb size, Spacing, Growth, Seed yield
