

RESEARCH ARTICLE

Quantity and quality of bulbs and bulblets as influenced by plant spacing in *Polianthes tuberosa* at farmers field of Tumkur district

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SUMMARY

A field experiment was conducted on quantity and quality of bulbs and bulblets as influenced by spacing in *Polianthes tuberosa* at farmers field of Tumkur district. The experiment consisted of three different plant spacing viz., 45cm x 30cm (S₁), 30cm x 30cm (S₂) and 30cm x 15cm (S₃) with seven replications at farmers field and Randomized Block Design. The result of three year data showed the significant difference on growth, bulb quality, bulbs and bulblets yield as affected by spacing. The spacing of 30 x 30cm was found to be optimum for better growth and recorded significantly highest plant height (53.57 cm) at 180 days after planting, maximum number of leaves per plant (111.78) and side shoots per pant (21.13) at 360 days after planting, which was at par with 45 x 30cm spacing. Bulbs and bulblets characters such as maximum number of bulbs per plant (16.80) and bulblets per plant (14.02), size of mother bulb (4.68 cm), daughter bulbs (3.77 cm) and clump weight (455.10 g) were recorded significantly at wider spacing (45 x 30cm), whereas lowest was recorded at a closer spacing 30 x 15cm due to lesser competition between plants for source of light, moisture, space and nutrient and as consequence showed better physiological activities, which in turn reflected improvement of bulb yield.

Key Words : Bulbs, Bulblets, Clump, Multiplication, Productivity, Spacing, Yield

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