



Research
Paper

Evaluation of Asiatic liliium under sub-tropical mid hills of Meghalaya

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ABSTRACT

An experiment was laid out during 2008-09 with 8 Asiatic liliium cultivars, viz., Avelino, Botticelli, Farfalla, Brunello, Detroit, Gironde, Navona and Vermeer to evaluate cut flower production in Meghalaya. The plant height (52.86 cm), leaf length (8.64 cm), bud diameter (2.70 cm), petal breadth (5.12 cm), bulb diameter (5.40 cm) were higher in cv. AVELINO. Whereas, maximum number of leaves per plant (104.53), pedicel length (7.84 cm), bulb height (4.43 cm), number of scales per bulb (63.66) were higher in cv. BOTTICELLI. The flower diameter (17.36 cm), bud lengths before opening (10.07 cm), petal length (10.59 cm), bulb weight (56.66 cm) were longer in cv. DETROIT. However, number of leaves (101.13) and flowers (4.93)/plant were higher in Gironde, while plant girth was higher (6.19 mm) in Brunello and Vermeer recorded higher leaf breadth (1.74 cm).

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Lilium is one of the most handsome and popular ornamental bulbous plants. The appearance, beauty and colour of the bloom are very spectacular and attractive. Lilies are exceptionally useful as cut –flowers and pot plants. Many lilies also produce a charming effect when planted in front of shrubs in the garden in large beds or borders lilies produce a showy display. Liliium belongs to the family Liliaceae. It is a herbaceous perennial having scaly bulb. Stems are unbranched, smooth or pubescent, usually bright green, sometimes tinged purple or brown and generally clothed with leaves.

RESEARCH PROCEDURE

Considering the importance of crop and varied climatic conditions prevailing in northeastern region, an experiment was laid out with 8 Asiatic cultivars, viz., Avelino, Botticelli, Farfalla, Brunello, Detroit, Gironde, Navona and Vermeer to evaluate for cut flower production under natural conditions during the 2008-09 in Meghalaya.

The bulbs of 10/12 grade were planted on the raised beds of 1.5 m x 1.5 m with a spacing of 20 cm x 15 cm. Five randomly selected plants per replication were taken for recording observations on various growth, flowering

and bulb parameters. The experiment was laid out in Randomized Block Design (RBD) with three replications and the data were analyzed statistically.

RESEARCH ANALYSIS AND REASONING

Mean performance of cultivars for vegetative growth (Table 1) reflected the variation among the cultivars. Significantly maximum plant height (52.86 cm) was recorded in Avelino, followed by Botticelli (50.13 cm) where as minimum (33.86 cm) was recorded in Navona. Ideally short plants are suitable for small pot plant, medium plants for landscape and tall plants for cut flowers. Significantly maximum number of leaves/plant (104.53 and 101.13, respectively) was produced from Botticelli and Gironde. Maximum leaf length (8.64 cm) and breadth (1.74 cm) were noted in Avelino and Vermeer, respectively. Maximum plant spread (17.13 cm) was in Avelino, followed by Detroit (15.43 cm), whereas highest plant girth (6.19 mm) at centre of plant was recorded in Brunello, followed by Farfalla (5.83 mm). Variation in the vegetative parameters of Asiatic liliium has been reported by Dwivedi *et al.* (2002) and Pandey *et al.* (2008).

Significantly largest flower (17.36 cm) was obtained