

Studies on double type varieties of tuberose (*Polianthes tuberosa* L.)

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ABSTRACT

An experiment was conducted to study double type varieties of tuberose under Konkan conditions. Among the three varieties studied, the variety Hyderabad Double was found superior with respect to most of the plant characters (plant height, number of leaves, emergence of spike and number of florets per spike) whereas variety Pune Local and Suvasini were moderate in their character.

Key words : Tuberose, Double type, Plant characters

Tuberose (*Polianthes tuberosa* L.) is an important leading commercially florist's flower for its multipurpose uses. It is native to Mexico and belongs to family Amaryllidaceae. The commercial cultivation of tuberose is found in the warmer parts of India like West Bengal, Karnataka, Andhra Pradesh, Tamil Nadu and Maharashtra (Misra *et al.*, 2007).

In India tuberose occupies a prime position because of its popularity as a cut flower, loose flower as well as its potential in perfume industry.

The selection of suitable cultivar depends on the purpose for which crop has to be grown, that is use as loose flower, cut flower, extraction of essential oils, pot culture and beautification of surroundings, and also adaptability to specific growing place. 'Single' petalled cultivars are more suitable for loose flower and essential oils, while 'Double' petalled are more popular as cut flower trade. (Gurav *et al.*, 2006) The present investigation was carried out to test the performance of double cultivars of tuberose under Konkan conditions.

MATERIALS AND METHODS

The present investigation was carried out during the year 2007-2008 at Floriculture Unit of Department of Horticulture, Dr. Balashaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (Dist. Ratnagiri). The experiment was laid out in Randomized Block Design with three treatments replicated five times. The Three Double type Tuberose varieties were identified for this trial, viz. Pune Double, Suvasini and Hyderabad Double. Healthy bulbs of 1.5-2

cm was selected for planting with standard spacing of 30 x 30 cm and 5cm depth. The net plot size for each treatment was 1.08 sqm.

The well rotten FYM @ 30 tonnes / ha was added at the time of preparation of beds and mixed properly with the soil. The bulbs were treated with 0.1 % bavistin for 30 minutes before planting in the field. The fertilizers were applied @200:150:200 NPK in the form of urea, Single Super Phosphate and muriate of potash, respectively. Whole dose of phosphorus and potash and one third dose of nitrogen is applied at the time of planting, while remaining two third nitrogen was applied as top dressing at 30,60 and 90 days after planting, in equal split doses. Uniform cultural operations were followed during the course of investigation.

The harvesting of spikes commenced after 75 days of planting. The flower stalks (spikes) were harvested at bud burst stage, preferably in the morning hours by clipping with sharp knife that gave a clean cut. The harvested flowers spikes were further used for recording different observations. The bulbs maturity varied according to the variety. The irrigation was stopped one month prior to removal of bulbs. Removal of bulbs was done when the leaves turned yellow. After complete yellowing and drying of the leaves, bulbs were lifted by digging the soil with pick-axe. The bulbs were treated with 0.1% bavistin solution for 30 minutes and then dried under shade before storage.

RESULTS AND DISCUSSION

It can be seen from the Table 1 that the variety