

## **TUBEROSE**

Tuberose (*Polianthes tuberosa* L.) is one of the most important tropical ornamental bulbous flowering plants known for its attractive and fragrant long lasting flower spikes. It is popularly known as Rajanigandha or Nishigandha and belongs to the family Amaryllidaceae. It is a native of Mexico. It is an important commercial cut as well as loose flower crop due to pleasant fragrance; cut flower crop due to longer vase-life of spikes, higher returns and wide adaptability to varied climate and soils. The flowers are attractive and elegant in appearance with sweet fragrance. It blooms throughout the year and its florets are rich in fragrance; florets are star shaped, waxy and loosely arranged on spike. Its essential oil is an important component of high grade perfumes. Florets of the Single type (single row of perianth) are used for extraction of essential oil, loose flowers, making artistic garlands, floral ornaments, buttonholes, gajras, as offering at social and religious functions etc. Double types (more than two rows of perianth) are used as cut flowers for table decorations, floral arrangements, garden display, floral arrangements and interior decoration.

### **Propagation**

Tuberose are propagated by bulbs, bulblets and seeds. Multiplication by bulb-segments and *in vitro* micro propagation from scale stem-sections is also practiced.

### **Soil and Climate**

It can be grown on wide variety of soils ranging from light, sandy loam to a clay loam. The soil should be at least 45 cm deep, well drained, friable, rich in organic matter and nutrients with plenty of moisture. Crop is sensitive to water stagnation and cannot tolerate water logging. Fertile, loamy and sandy soils having a pH of 6.5- 7.5 are ideal for tuberose cultivation.

### **Planting**

Well-developed spindle-shaped bulbs, with diameter 1.50 cm and above are considered ideal for planting. Tuberose are generally planted in March - April in the plains and April-May in the hills. To obtain flowers almost throughout the year, sequential planting can be practiced.

### **Yield**

Flowers are ready for harvest in about 3-3.5 months after planting. One hectare of tuberose plantation yields 4-5 lakhs of spikes/year for cut flower purpose. About 14-15 tonnes/ha of loose flowers can be harvested in case of single varieties. In addition, 20-25 tonnes / ha of bulbs and bulblets can be harvested at the end of 3<sup>rd</sup> year.