

Dahlia Cultivation

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Introduction:

Among the tuberous flowering plants, dahlia occupies a pride place due to its intriguing shape, forms, vibrant colour and size ranges from 2.5 cm – 40 cm in diameter which made the flowers to use in different purposes i.e. in pots, beds, cut and loose flower, borders in garden. Large sized flowers are popular in terrace gardens and verandah. These flowers possess good keeping quality which makes them to use in flower arrangements and vases.

Soil: Dahlias grown in soils with friable, well drained and with a pH range of 6.5 – 7.0. To facilitate the tuberous roots formation fine tilth up to 40 cm and a good drainage is essential since inadequate drainage accelerates tuber rotting and degrades tuber quality.

Light: Adequate growth, development and superior flower output require 8 to 10 hours of either direct or indirect sunshine. When the plants are subjected to shade which results lanky growth and production of few or no flowers. Photoperiod influences shoot growth, flowering and control the spread of tubers.

Temperature: Dahlia prefers a temperature of 18 and 23 °C, relative humidity of 75 to 78%. The maximum fresh weight of tuberous roots occurs at a temperature range of 16 and 21 °C and it was inhibited at 100 °C. Propagation.

Division: Propagation by division of tuberous roots by splitting the tubers each of which has a portion of stem. It is essential that each division has at least one bud otherwise the shoot will not develop. The ideal weight range for tuberous roots is 80–120 g for healthy bud development.

Cutting: Stem cuttings are used in the commercial propagation of dahlias. Cuttings made of the terminal stem, measuring 7 to 8 cm in length and having two to four leaves are made with a knife, coated with IBA powder, and placed in washed coarse sand for rooting.

Planting: Dahlias are usually planted in September - October. Plants with enormous flowers should be spaced 75 cm apart, medium-sized plants should be spaced 60 cm apart, and dwarf types should be spaced 30 to 45 cm apart. In the plains, dahlias bloom in the winter, whereas in the hills, they bloom in the summer. In the plains, rooted stem cuttings are utilized for planting, whereas sprouted tubers are typically utilized in the hills.

To achieve high-quality and visually striking flowers, dahlias are planted in pots. In a potting mixture, 100 g of oil cake and charcoal, 50 g of steamed, and a small amount of garden lime is well mixed with equal portions of sandy loam soil, decomposed cow dung, and leaf mold.

Dahlia tubers should be planted 4 to 6 inches deep. Except for miniatures and pompons plant tubers have only one eye. Plant the dahlia tuber on a little slope, with the growing bud(s) toward the surface. Apply bulb dust around the tuber and sprinkle it over the soil surface.

Irrigation: Water is crucial to growing dahlias. Plants grown in containers often receive regular irrigation, while plants grown in fields typically receive three to four-day intervals. Avoid overwatering as this can lead to bud bursting, weak root systems, and fast yet slow expansion.

Special practices:

Staking: The stalks of dahlias are extremely fragile and break quickly. Delicate and heavy stems can be supported by bamboo cane or other sturdy stakes. Elegant, huge, unusual flowers may require separate stakes for each side branch. Supporting stakes aid the plant in vertical growth. For pompons and other little flowering varieties, rings made of bamboo or polythene may be utilized.

Disbudding: Generally, dahlia plants produce three flower buds. To produce a high quality large sized bloom removal of two other buds are done during pea stage leaving the central bud. Sometimes it is essential to keep one side bud in proper location if the crown bud is destroyed.

Harvesting: Fully opened flowers are harvested along with a stalk length of 30-40 cm which can be used as a potted plant and other decorations like flower exhibitions.

Lifting and storage of tubers: After the plant has completed flowering and the leaves turned yellow, it is trimmed, leaving only a 15 cm stem above ground. A fork hoe is then used to remove the tuberous roots, which are then let too dry in a shaded area for three to four days.

Lifted tubers are stored during summer until June when they are planted again. The eyes that are located in the ring surrounding the collar of roots should be examined during lifting. The tubers should be treated with 0.2% Captan for half an hour prior to storage. During storage, fungal infections can be effectively checked by copper fungicide.

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