

GERBERA **(Gerberajamesonii Bolus ex Hook F)**

Gerbera is an important cut flower ranked fifth in the flower trade, belongs to family

Asteraceae. The genus Gerbera consists of about forty species, out of which only Cerbera jamesonii is commercially grown.

Varieties

Suitable varieties identified for the north eastern region are Pink Elegance, Sangria, Red Monarch, Piton, Goliath, Rosalin, Tiramissu, Salvador, Tropic Blend, Savannah for polyhouse and Alesmara, Black Heart, Divas Memory, RCGH-117, RCGH-113, RCGH- 114, RCGH-76, RCG - 86 for open grown.



Growing environment

Gerbera is normally grown under open conditions. For commercial purpose it requires shade net of 60-70 percent to control light and solar radiation. The ideal temperature for initiation of flowering is 23°C. It is necessary to keep humidity level below 70 % during the day and below 85 % at night. Good internal air circular in the greenhouse at night and ventilation during the day is essential.

Soil

Well-drained loamy soil rich in organic matter having adequate moisture holding capacity is beneficial. A soil pH of 5.5 - 6.5 is ideal.

Nursery raising

Gerbera is grown on 1 m wide and 30 cm high raised beds of convenient length, leaving 30-40 cm space between beds. The beds should be prepared by mixing of FYM (8-10 kg/m²) and sand (3-4 kg/m²) into prepared beds or beds may be prepared by mixing FYM, sand and cocopit in 2: 1: 1 ratio.

Propagation

It is propagated by seeds, suckers and through tissue culture methods. The commercial method of multiplication of gerbera is through tissue culture to get disease free planting material.

Nutritional requirements

Application of 10: 15:20 g NPK/m² during first 3 months of transplanting is helpful for establishment and growth of plants. From fourth month onwards, when flowering start

Application of 15: 10:30 NPK/month/m² in two splits at 15 days interval is desirable. Besides major nutrients application of micronutrients like boron, calcium, magnesium and copper @ 0.15 % each is desirable at least once in a month.

Transplanting

A few days before transplanting neem cake @ 1 kg/m² Can be incorporated into prepared beds. Plants should be planted in such a way that their crown is slightly 2-3 cm above the surrounding soil. Planting can be done at a spacing of 30 cm x 30 cm, in 3 rows per bed on 1 m width accommodating 9 plants/m². Plantlets are transplanted without disturbing the root ball.

Irrigation

Immediately after transplanting, watering should be done using overhead sprinklers, watering can, watering hose fitted with a rain nozzle up to one month. Generally one dripper per plant is required. On an average, water requirement may be 700 ml/plant/day depending on season, soil texture, and light intensity and crop stage. Watering can be done in a 2- shift a day.

Plant protection

Leaf miner: The larvae bore into the leaf and make irregular shaped tunnels that are generally light yellowish to brown in color. Spray Abamectin 0.5 ml/l to manage pest.

Mites: The visual symptoms include curling up of older leaves, deformed and leathery appearance of younger leaves and deformed flowers or missing petals. Spraying of Endosulfan 2ml/l or Abamectin 0.5 ml/l.

Crown or root rot: The entire plant wilts and the crown of the plant become black. Soil should be sterilized, avoid over watering. Spraying with Bavistin 2g/l or Trichoderma 3-5g/l has been found to be effective.

Botrytis: This occurs when the relative humidity of air is more than 85%. The visual symptoms are grey spots on the petals and rot in the heart of the flower. Application of Thiram 2 ml/l helps to control the disease.

Powdery mildew: White powdery coating on foliage is observed under warm and damp conditions. Leaves, petioles and flower heads are mostly affected. Spraying of Carbendazim (0.1 %) is required to control it.

Harvesting and yield

Harvesting of flowers should be done when outer two rows of disc florets have fully developed or when outer row of disc florets are perpendicular to the stalk. The flower should be pulled rather than cut. The average yield under low cost naturally ventilated polyhouse comes 30-55 flowers/plant/year. Properly managed healthy plants provide cut blooms for 2-3 years.