

# Gladiolus

## Harvesting

Gladiolus spikes are ready for harvesting when the first bud shows the colour of the variety. Normally, early varieties start producing spikes from 75<sup>th</sup> day while the late season varieties from 85-90<sup>th</sup> day after planting. Spikes should be cut in the tight bud stage, with one or two pairs of leaves and 1-3 floral buds showing colour. The plant should be left with 3-5 leaves on the stem for the development of new corms and cormels. If the spikes are to be used as fresh flowers, then they should be cut with 3-4 open florets, but without any sign of withering. The spikes are cut with a sharp knife either early in the morning or in the evening. Slant cut should be given at the base of the harvested spikes and immediately placed in a bucket with cold water.

### Harvesting, Curing, Grading and storage of Corms :



Gladiolus Corm

### Lifting of Corms and Cormels :

Corms planted during September-October are ready for lifting during March-April in the North-Indian plains and upto August in hills. Corms are matured when 25% cormels have become brown which generally take 30 to 45 days from flowering when the leaves also start yellowing. Plenty of moisture, followed by a dry period, before lifting ensure the formation of large corms. After flowering, when the leaves start turning yellow, plants are twisted down to ground level for allowing the corms to mature. No irrigation should be given thereafter.

Corms and cormels should be dug out with the help of a spade. Soil should be dug deep in order to take out all the cormels. The corms are checked for any disease infection and the affected corms are discarded.

### Curing :

Curing is one of the essential post harvest operations for successful storage of corms. After lifting and removing the adhering soil, the corms and cormels of each cultivar are kept in trays in a shady but well ventilated place for about a fortnight. For curing, the layers of corms should not exceed three, which may be cured for five weeks at 21°C.

### Cleaning, Grading and Storage :

After the corms are fully cured, these are cleaned and diseased ones discarded. The old withered corms are taken out and cleaned. Treating the corms with 0.2% Captan 15 days before storage or dusting with 5% Cythione dust and Dithane M-45 protects them from insects, pests and diseases during storage. After cleaning, the corms and cormels are graded in different grade-sizes.

The corms are stored in perforated trays in a well-ventilated cool and dark room with temperatures not exceeding 27°C. Being smaller in size, the cormels are stored in plastic trays having fine perforations. It is advisable to keep on turning corms and cormels periodically, for preventing their

rotting due to poor aeration. The corms are periodically checked during storage and the decaying ones are removed.

The cormels of exotic cultivar vary considerably in respect of hardiness, depending upon their size. The small sized cormels (<0.5cm dia) are fairly hardy and may be stored at room temperature, without decay. However, the large ones (>0.5cm dia.) of exotic cultivar require low temperature during storage and should be kept in cold storage. To avoid chances of mixing, the cormels are packed in hessian cloth bags before putting them in perforated trays for keeping them in the cold storage. Like corms, the cormels should also be taken out of the cold storage in the first week of October and kept at room temperature for a week before planting them in the ground.

### **Yield :**

The yield of flower spikes and corms in gladiolus depends on variety, corm size, planting density and management practices. Gladiolus planted at a spacing of 30 x 20 cm yields approximately 1,50,000 marketable spikes per hectare. Additional income can be obtained from the sale of about 3.5 lakh corms.