

CUT GREENS IN FLORICULTURE INDUSTRY

Savita and Deepak Kumar
 Department of Horticulture,
 College of Agriculture, CCSHAU, Hisar

Cut greens or cut foliages (leaves and stems), refer to ornamental foliage and branches with or without decorative fruits, seed pods etc. to be used as fillers. These floral produce have various other uses in making attractive fresh floral designs and floral arrangements, such as bouquets, wreaths, decoration of house interiors, etc. Some of the cut foliages in demand are asparagus, ferns, thuja, cupressus, eucalyptus, etc. The mostly used varieties are evergreen plants with glossy green, silver or variegated leaves. The foliage which are attractive in form, colour and freshness and are long lasting, are preferred. Ferns and asparagus are widely used as foliage plants. Cut greens have certain advantages over cut flowers such as production is year round and minimum risk of damage during transportation with long shelf-life. Plants that can be used as cut green are:



Category	Examples
Trees	<i>Grevillea, Callistemon, Thuja, Eucalyptus, Salix</i>
Shrubs	<i>Aralia, Acalypha, Hedera helix, Muraya</i>
Creepers	<i>Monstera, Asperagus</i>
Pot plants	<i>Dracaena, Aspidistra, Ruscus</i>
Grasses	<i>Typha, Arundo</i>
Ferns	<i>Asparagus, Rumohra, Nephrolepis</i>
Palms	<i>Areca, Cycas revoluta, Livistonia, Rhaphis</i>



Bird's Nest Fern



Lemon Button Fern

The plants which are cultivated for production of cut greens must possess certain quality characteristics:

- Foliage must be healthy i.e. free from insect pest and disease
- Quick growing and respond to regular cutting
- Long vase life
- Withstand long transportation and storage
- Should be without undesirable characteristics like thorns, unpleasant odour
- Should provide mass effect in background



PRODUCTION TECHNOLOGY

Soil must be porous and well drained, soil pH 6.0-6.5 with EC of 0.5-1.0 mmhos/sec and bulk density less than 0.75 g/cm³. Balanced fertilizers of N, P and K are needed for proper growth. Plants should be grown under 50-75% shade. Most of these plants perform well if RH is above 50%. The least cost net houses could be used for growing foliage plants.



POST-HARVEST FACTORS

Foliage plants after harvesting are sprinkled with water prior to the market. The foliage must be fresh until they reach the market. The RH in the cold store is in the range of 85-95% to avoid desiccation.

CHEMICAL TREATMENTS

Chemical treatments involves holding solutions with pH of 2.0 or 3.0, 800 ppm 8-hydroxyquinoline citrate, 200 ppm citric acid that increase water uptake subsequently resulted in increased vase life.

STORAGE

Crop	Storage temperature (°C)	Packing	Storage duration
<i>Asparagus</i>	2-4	20 stems	2-5 days
<i>Chamaedorea spp.</i>	7	25 stems	2-3 weeks
<i>Codiaeum spp.</i>	2-4	20 leaves	-
<i>Dracaena spp.</i>	2-4	10 leaves	-
<i>Nephrolepis</i>	4-5	75 fronds	1-2 weeks



PROBLEMS

Major two types of post- harvest problems occur in the cut greens i.e. wilt and yellowing of fronds. These are because of an insufficient water supply or excessive water loss from frond.

STAGE OF HARVEST

Stems should be harvested when leaves are mature, dark green and fully expanded. Stems should be given slanting cut while harvesting to provide more surface area for water absorption. Only 5-7 cm basal portion of the stem should be dipped in water and leaves from dipping portion of the stems should be removed because dipping leaves start rotting and decrease the vase life.