

Roof Gardening

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The fine art of creating and maintaining the greenery at the roof top is known as “Roof Gardening”. This is also known as Terrace gardening. The space available in the



roof top can be effectively utilized for growing fruit plants, vegetables, spices, homestead medicinal plants, flower plants and ornamental plants. Due to migration of peoples, most of the agriculture lands are converted into residential areas resulted with decreased peri-urban production of fruits and vegetables. This can be circumvented by roof gardening.

The main Advantages of terrace gardening is the year round supply of toxic free fruits and vegetables, effective utilization of space available at the roof top, working in the roof garden will relieve stress and strains and increase the work efficiency and maintaining the greenery through out garden roof garden reduces the pollution.

Site selection:

Open areas with plenty of sunlight (at least for 6 to 8 hours) and water (medium quality) supply is the prime requirement for establishing the roof gardening.

Method of cultivation in roof top:

Following are the different types of containers used for roof gardening.

Cement pots	Damaged bowls / water tanks	Tin boxes
Earthen pots	Unused water cans / oil cans	Drums of different sizes
Plastic barrels	Grow bags	Plastic covers
Wooden barrels	Trough/Benches	Empty cement/ Fertilizer bags
Boxes		Damaged wash basin
Plastic crates/jars		
Damaged buckets		

How to start :

- Wash the container thoroughly and remove the

clogs in the drainage holes. Place a broken tile piece over the drainage hole to avoid the erosion of soil from the drainage hole.

- **Soil mixture** : Mix 2 parts of red / loamy soil, 1 part compost and 1 part sand with the help of space / shovel. Fill the containers with the soil mixture loosely with a gentle tap. The soil should settle, bearing one inch head space at the top to facilitate irrigation.

- For the transplanted vegetables viz., tomato, brinjal, chilli and onion where the nursery has to be raised in protrays method.

- The seeds of certain vegetables crops viz., bhendi, radish, beet root, lab lab, cluster beans and cucurbitaceous vegetables can be sown directly in the selected pots/ polythene bags etc., the depth of the seed sowing should be about two and a half times of the seed size.

- After sowing, watering can be done regularly.

- Care must be taken to prevent the scavenging of seeds by ants.

Plants suited for growing in terrace gardening:

In order to avoid the roof damage, perennial fruits trees and

vegetables should not be selected for growing at the roof top.

Fruits crops	:	Banana, Papaya (needs proper staking)
Vegetable crops	:	Tomato, Brinjal, Chilli, Snake gourd, Ribbed gourd, Bitter gourd, Pumpkin, Water melon, Cluster beans, Vegetable Cow Pea, Annual Moringa, Radish, Small Onion, Chekurmanis, Curry leaf, Amaranthus
Spice crops	:	Tumeric, Coriander, Fenugreek
Home-stead medicinal plants	:	<i>Aloe vera</i> , <i>Coleus ambonicus</i> , <i>Cissus quadrangularis</i> , <i>Phyllanthus amarus</i> , <i>Eclipta alba</i> , <i>Solanum nigrum</i> , <i>Ocimum sanctus</i> , <i>Ocimum basilicum</i> , <i>Andrographis paniculata</i> , <i>Acorus calamus</i> , <i>Acalypha indica</i> , <i>Euphorbia hirta</i> , <i>Solanum trilobatum</i>
Flower crops	:	Rose, Jasmine, Chrysanthemum, Tube rose, Marigold

Seasons :

For home-stead cultivation, we need not rely on any particular season. The staggered showing/planting of vegetables at regular intervals of time enables us to get fruits and vegetables throughout the year.

Maintenance:

Watering and weeding should be done as and when required. Staking should be done depending on the growth stage of plants. In general, depending on the number of plants and volume of growing media, 5 to 10 grammes of complex fertilizers containing NPK mixture can applied in during 30th day, 45th-60th day and 80th – 90th day. Immediately after fertilizer application, the plant should

be watered. During the onset of summer season, shade nets can be erected by pandal system and this shade nets can be removed or rolled back at the end of summer season.

Plant protection:

- Pick and destroy the larvae found on fruits and vegetables and then spray Neem oil @ 4 ml/liter of water on Neem Seed Kernel Extract @3%.

- Avoid spraying of toxic chemicals.

Harvest :

Vegetables harvested at the peak of maturity will always superior in nutritional content, freshness, flavour and appearance.

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