

## ARTIFICIAL VEGETABLE PROPAGATION

**Vegetative Reproduction** : Some plants produce new plants from a vegetative part like stem, leaves and roots. The resulting plants are clones of parent plant. (i.e. exactly similar to parent plant). e.g. potato, onion, ginger, mint

### Vegetative Reproduction by:

**Leaves** – These plants produce buds at the margin of the leaves, which grow into new plants. e.g. Bryophyllum.



### Stem

- **Sub aerial stems** – The nodes of sub aerial stem gives rise to one or two buds and tufts of root hair, which develop into new plant when dropped in soil. e.g. Chrysanthemum, wild strawberry, mint.
- **Underground stems** – Some plants produce buds, which grow into new plants. e.g. potato (tuber), onion (bulb) ginger (rhizomes).



**Roots** – In some plants, roots appear when kept in water. These roots develop shoots and grow into new plants. e.g. sweet potato, dahlia.



## Vegetative Propagation

### Cuttings

- Pieces of a root or stem that in certain conditions are made into new plants.
- Some examples are bananas, roses and sugar cane

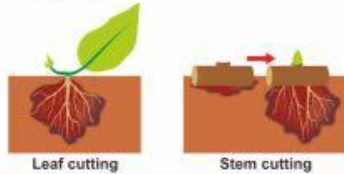


### Grafting

- Taking a part of a plant and connecting it to another one.
- Combining the two plants.
- Some examples are seedless oranges and grapes.



**Cutting** – A part of stem is cut and the cut end grows into new plant when placed in moist soil  
e.g. mango, guava, litchi, lemon, rose



**Layering** – The stem of a plant is bent down until it touches the soil. The stem is then cut once it develops roots and grows into a new plant.  
e.g. lemon, rose, jasmine



**Grafting** – The stem of a plant is cut and then fitted on another strong plant and covered with grafting wax.  
e.g. apples, oranges, water melon, ornamental plants



**Air Layering** – A slanting cut is made in the stem and kept separate with a toothpick. Moss and plastic is wrapped around it till roots grow. Then new plant is cut and planted separately.

