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# Center for Smart Agriculture

## Production management of medicinal and aromatic crops



**Module 3:** Nursery Raising

**Session 13** Pots/ containers used for raising seedlings



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# Plant Containers

## Plant containers

- A container is a small, enclosed and usually portable object used for displaying live flowers or plants.
- Plant containers have two distinct functions
- Growing of plants for transplanting to the field, garden, greenhouse.
- Growing of plants their itself upto maturity.



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## Flats

### Flats

- Commercial growers usually use standard dimensions 30cm×59cm×8 cm.
- Flats are shallow plastic, styrofoam, wooden or metal trays, with drainage holes in the bottom.
- They are useful for germinating seeds or rooting cuttings ,



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# POTS

2. Pots are used to raise transplants or raise plants to full maturity.

## **BANDS:**

- bands are square and are open at the bottom.
- these are easily attacked by micro organisms.

## **Clay pots**

- These are the oldest and most popular.
- Sizes varying from 5, 10, 13, 15, 25 cm in diameter.
- Usually used for growing young plants.

## **Fibre pots**

- These pots are made from compressed peat and held together with a biodegradable net.



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## Paper pots

Paper pots or paper tube pots are more popular with seedling propagation of ornamental and forestry species.

## Rubber pots

Recycled rubber parts used to make pots.

## Plug trays

- Small-sized seedlings grown in trays from expanded polystyrene or polythene filled usually with a peat or compost substrate.
- Plug plants are young plants raised in small, individual cells, ready to be transplanted into containers or a garden.





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## Polybags

The chief advantage of using polybags is that the seedling

- can be raised almost year the round under controlled conditions.
- Plantation programme will not suffer due to dry spell or shortage of labours.

### Advantages of plastic pots

- It can be re-useable .
- It maintains optimum moisture.
- No breakage of pots.
- Cheap cost.



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# Polybags

## Problems regarding to polybags

- It should be never placed straight onto soil because roots will grow into the ground and main roots break off when u lifting.
- Polybags arenot durable and can break prematurely.
- They are normally used only once.
- These are problem for nursery waste management, do not decay and often burn, it causes serious air pollution.



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## Root trainers

### Root trainers

- These are usually rigid containers with internal vertical ribs, which direct roots straight down to prevent spiral growth.
- The containers are set on frames or beds above the ground to allow air pruning of roots as they emerge from containers.
- It also encourage lateral air root pruning through vertical slits.
- Seedlings in this containers are more vigorous and rapid root growth than polybags.
- Plants in root trainer systems are ready for planting out compared to conventional polybags.
- Hanging pots Barrel containers Tub container





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**Thank You**