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Center for Smart Agriculture

Protected floriculture



**Module : 2: Components Pre-requisites for
protected cultivation of flower crops**
**Session 10: Land preparation in protected
structures**



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WEED REMOVAL





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Pulverizing the soil



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SOIL MIXES

- Soil mixes used for greenhouse production use a combination of these organic and inorganic components as an artificial soil mix.
- It improves the water holding capacity and aeration of the potting soil.





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Making Your Own Potting Soil



1 PART COCONUT COIR
Pre-soak and expand
the dehydrated brick.



**1 PART VERMICULITE
(grade 3 size)**
Adds aeration to your
potting mix.



**2 PARTS COMPOST
(sieved)**
Adds essential
nutrients to mix.



**1/2 - 1 CUP WORM
CASTINGS**
Adds extra nutrients
and beneficial
microorganisms .



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PREPARATION OF THE NURSERY BED

Sunken bed

- This type of nursery bed is prepared in dry and windy areas.
- The bed is kept 10–15 cm below the ground level.





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Level bed

- A flat bed is 1m wide and has length as per the availability of land.
- Act as drainage channels in case of heavy rain or excess irrigation.





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Raised bed

- The bed is prepared about 15 cm high from the ground level. The width is kept at 1-1.5 m and length 3-5 m.
- It checks water stagnation.





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SOIL TREATMENT

- **Soil solarisation** is a method of heating soil by covering it with transparent polythene sheeting during hot periods to control soil borne diseases.
- Temperatures commonly reached by soil solarisation are 35-60°C.





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SOIL TREATMENTS

Soil disinfection

- Beds are drenched with 4% formaldehyde (4lit/m²) and covered with polyethylene sheets.
- Four days after the treatment the sheets are removed and the soil is raked repeatedly everyday.



Drenching with formaldehyde and covering the bed



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FERTLIZER APPLICATION





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THANK YOU