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Center for Smart Agriculture

Protected floriculture



Module 2: Components Pre-requisites for protected cultivation of flower crops

Session 14: Types of benches used in protected structure



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Floor as benches

- Porous concrete floors may be expanded in width to serve as “benches”.





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RAISED BENCHES





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BENCH ARRANGEMENTS

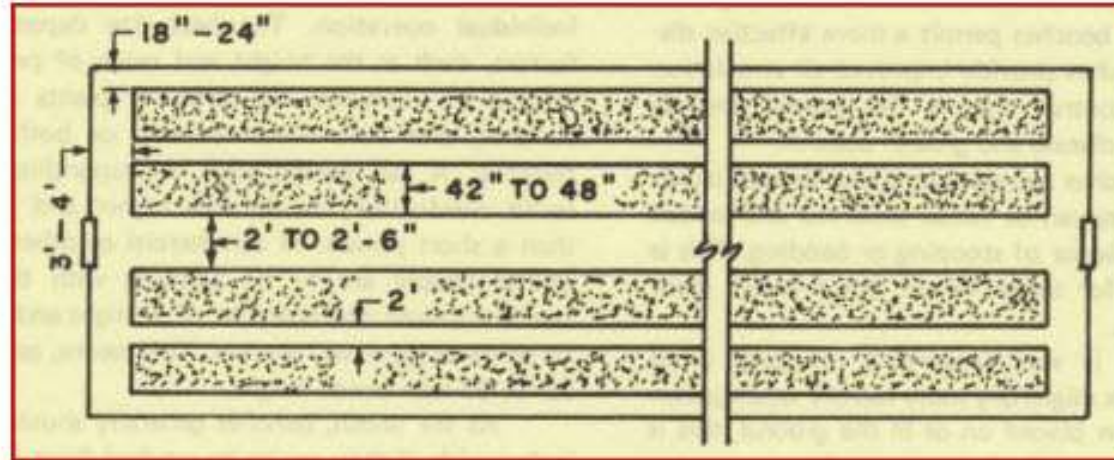
Types of arrangement:

1. Longitudinal arrangement.
2. Peninsular arrangement (greater growing area)
3. Movable bench arrangement (90 percent of the floor space.)

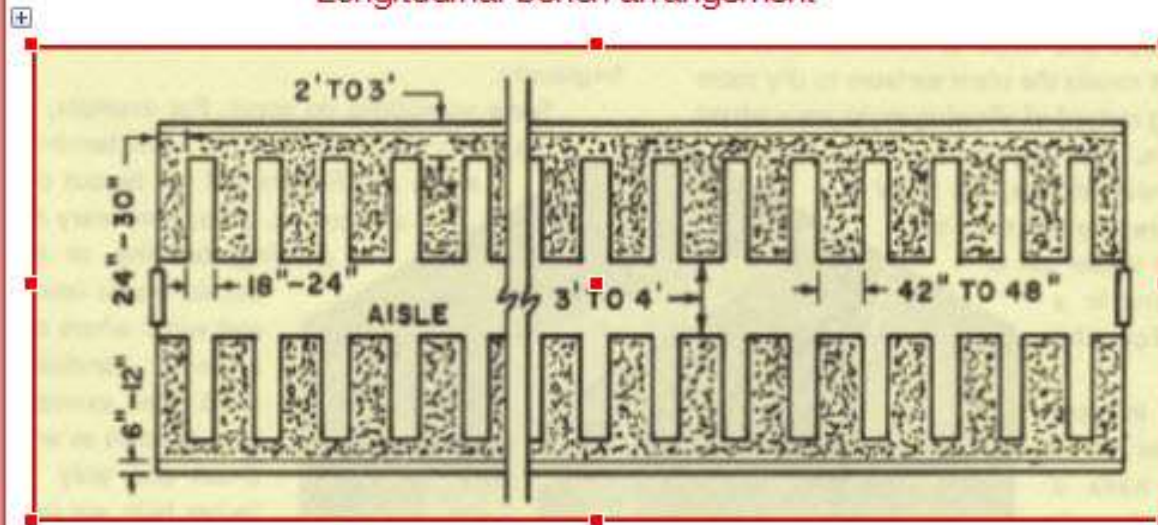


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Longitudinal bench arrangement



Peninsular bench arrangement



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Movable bench arrangement



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BENCH SPACE EFFICIENCY

- Benching efficiency is defined as the square feet of bench space to the entire greenhouse floor area.
- This number is expressed as a percentage.



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BENCH DESIGN

- An alternative to conventional benching systems is the ebb and flow (flood or sub irrigation) benches.
- This bench system should be given serious consideration with ever increasing restrictions on water and fertilizer runoff.





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MATERIALS USED FOR BENCHES



Wooden benches



Concrete benches



Metal benches



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TEMPORARY/PORTABLE BENCHES



Plastic benches



Pallets



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BENCH SUPPORTS

- Cement blocks
- steel poles
- Plastic bench supports
- wooden support (more chances of decay)



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THANK YOU