

## BENCH ARRANGEMENTS FOR CUT FLOWERS

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Efficient use of greenhouse space was discussed in the April 1963 issue of the N. C. Flower Growers Bulletin. Pot plant production was primarily considered then, with a promise that cut flowers would be considered in a later issue.

The data for the bench arrangements for cut flowers are from the same source as for the pot plants. Three houses, with the same greenhouse area (3,131 sq.ft.), are shown in Figure 1. Only 53.6% of greenhouse space in Arrangement A can be used for production, while 68.8% of Arrangement B and 73.5% of C can be called "production area". The savings in space is achieved by allowing less room at the ends of the house (95.5-foot benches in A, 98-foot benches in B&C), decreasing the width of the walks, and using benches of different widths.

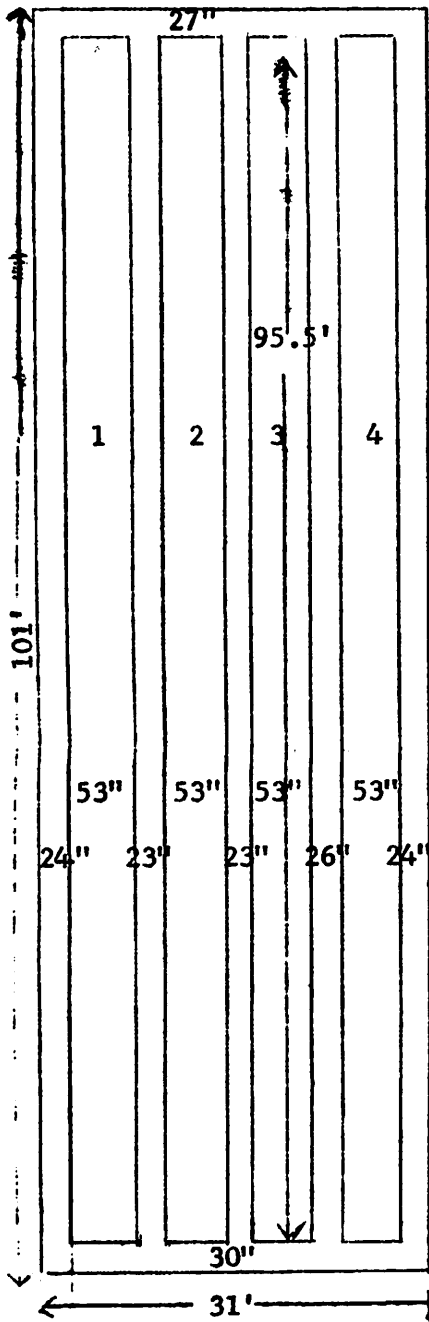
A grower has to consider the following items, in arranging his benches:

- 1) Walks must be wide enough to be functional, but not so wide that space is wasted. An 18" walk will give you an extra row of production per bench, when compared with a 23" walk.
- 2) A person should be able to reach the middle of a bench, from the walk. A bench wider than this will cause a great deal of inconvenience.

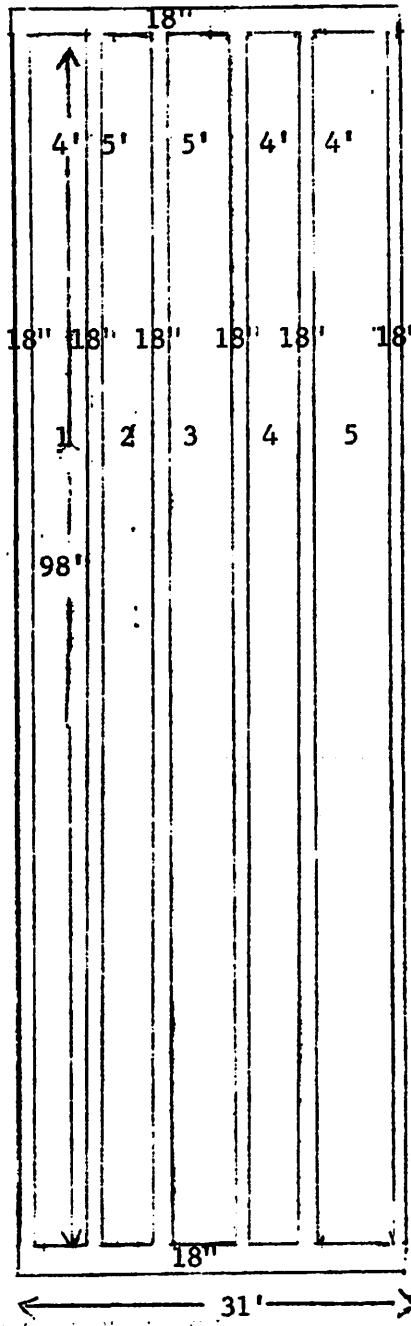
These points are obvious, and there are more obvious points that could be mentioned. The object of this article was not to point out the obvious, but to prompt the greenhouse operator who is expanding his range to give bench arrangement more consideration. The fact the arrangement in the rest of the range is satisfactory does not necessarily mean you are realizing maximum returns from your greenhouse area.

If you are planning to construct a new house, or modify or remodel an old one, give an hour or two of thought to the bench arrangement. It could be two of your most productive hours.

**A**  
Present  
Bench Arrangement



**B**  
More Efficient Bench  
Arrangement Using  
2-5' & 3-4' Benches



**C**  
More Efficient Bench  
Arrangement Using  
3-6' & 1-5.5' Benches

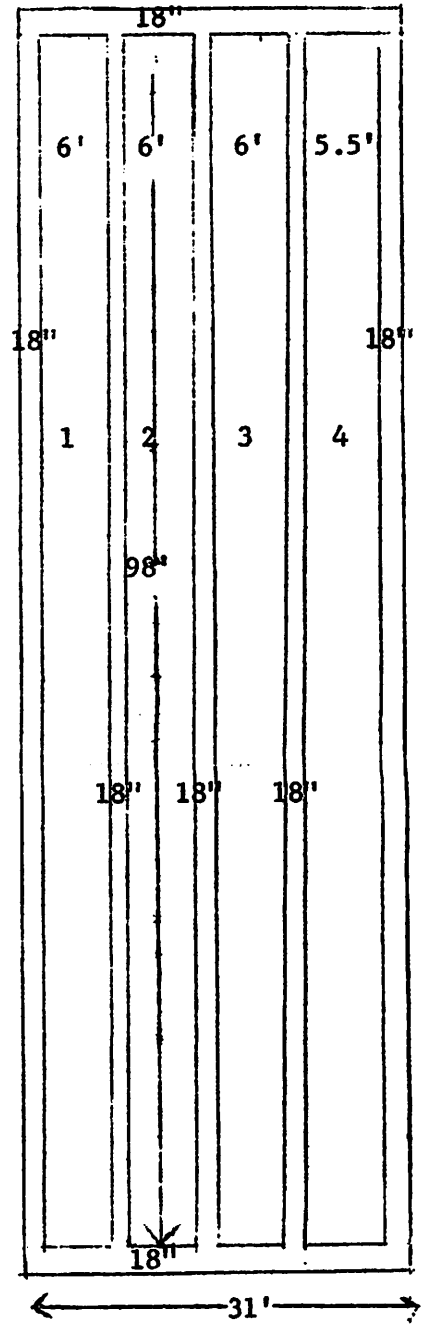


Fig. 1.

Total Production Area =  
4-4.42' x 95' benches @  
420 sq. ft. = 1680 sq.ft.  
Total Ground Area = 3131  
sq. ft.  
Production Area = 53.6%  
of Ground area.

Total Production Area =  
3-4' x 98' benches =  
1176 sq. ft.  
2-5' x 98' benches =  
980 sq. ft.  
Total 2156 sq. ft.  
Total Ground Area =  
3131 sq. ft.  
Production Area = 68.85%  
of Ground Area.

Total Production Area =  
3-6' x 98' benches @ 588  
sq. ft. = 1764 sq. ft.  
1-5.5' x 98' bench @ 539  
sq. ft. = 539 sq. ft.  
Total Prod. Area = 2303  
sq. ft.  
Total Ground Area = 3131  
sq. ft.  
Production Area = 73.5%  
of Ground Area (with doors  
at end of each aisle - 36  
sq.ft. additional - 2339  
sq. ft. 74.7%).