Cost of Single Stem Versus Pinched Pompons

Arthur Bing
Dept. of Floriculture, Cornell University
Ithaca, New York

Considerable difference of opinion exists as to the value of pinching pompons. High grade stock can be produced by growing single stem or by pinching. The method chosen depends upon the relative costs and the crop schedule you have set up to meet your requirements.

First, let us compare the costs of single stem and pinched chrysanthemums at different costs for the cuttings. We may assume 5 cents is the cost per cutting for old varieties and 9 cents for newer introductions and we may assume it costs $2.08 per square foot of greenhouse space per year or 4 cents per square foot per week $(\frac{2.08}{52})$.

In the summer, pinched chrysanthemums take only 10-14 days longer than single stem but in winter this time difference for some varieties is around 21-28 days. By the use of the following formulas we can calculate the costs of producing pompons per square foot and per bunch.

$$\text{Cost per sq. ft.} = \frac{144 \times \text{cost of a cutting}}{\text{square inches per stem}}$$

+ weekly cost per sq. ft. of bench x weeks crop is in bench.

$$\frac{\text{Cost per}}{\text{bunch}} = \frac{\text{Cost per sq. ft.} \times \text{no. stems per bu.}}{\text{Stems per sq. ft.}}$$

Comparing a 5" x 6" single stem winter crop with an 8" x 9" winter crop pinched and then suckered to 3 stems, we have the following results.

Growing plants 5" x 6" single stem requiring 15 weeks and with a cutting cost of 5 cents:

$$\frac{\text{Cost per sq.}}{\text{ft. per crop}} = \frac{144 \times \$.05}{5 \times 6} + 15 \times \$.04 = \underline{\$.84}$$

$$\frac{\text{Cost per bu.}}{\text{of 6 stems}} = \frac{\$.84 \times 6}{4.8*} = \underline{\$1.05}$$

For an 8" x 9" pinched crop that takes 18 weeks and at a cutting cost of 5 cents we get:

$$\frac{\text{Cost per sq.}}{\text{ft. per crop}} = \frac{144 \times \$.05}{8 \times 9} + 18 \times \$.04 = \underline{\$.82}$$

$$\frac{\text{Cost per bu.}}{\text{of 6 stems}} = \frac{\$.82 \times 6}{6} = \$ \underline{.82}$$

Using similar calculations for the 4 x 6 single stem planting and repeating all the calculations for 9 cents cuttings, we get the cost figures shown in the following table.

$$* \quad \frac{144 \text{ sq. inches per square foot}}{5 \times 6 \text{ the planting distance}} \quad 4.8$$

Method		Cost per sq. ft. in dollars	Cost per 6 Stem bu. in dollars
$.05 cuttings	5 x 6 single stem	.84	1.05
	4 x 6 single stem	.90	.90
	8 x 9 3-stem	.82	.82
$.09 cuttings	5 x 6 single stem	1.03	1.29
	4 x 6 single stem	1.14	1.14
	8 x 9 3-stem	.90	.90

Recalculating the costs per bunch at a greenhouse bench cost of 3 cents per square foot per week and using 5 cent cuttings did not appreciably alter the relative values of these figures although the costs per bunch decreased to 64 cents for 8" x 9" three-stems, 75 cents for 4" x 6" single stems, and 86 cents for 5" x 6" single stems.

There are certain conclusions that can be drawn from these data. The 5" x 6" planting is too expensive unless it produces a quality which could demand a much higher price. Comparing the 4 x 6 single stem and the 8 x 9 three-stem costs per bunch, we see that the difference in cost with 5 cent cuttings is 90 cents minus 82 cents or 8 cents. When the cutting cost goes up to 9 cents the difference becomes $1.14 minus 90 cents or 24 cents. This shows that with higher cutting costs it is more economical to pinch but if cutting costs were cheap enough it would be more economical to use single stem plants. Again, assuming a bench cost of 4 cents per square foot per week, the cost of cuttings would have to be less than 3 cents to make it cheaper to produce a 6-stem bunch with a 4" to 6" single stem planting rather than an 8" to 9" three-stem planting. Of course, if bench space were more expensive than 4 cents per square foot per week ($2.08 per year), it would tend to favor single stem plantings. A smaller difference between the time a pinched crop and a single stem crop are in the bench would favor pinching and a larger difference in time would favor the single stem method. The space allowed per stem is the same for both methods of growing in these calculations. Perhaps a slight quality difference would result favoring one method over another.

By the use of similar calculations the grower can figure out which method fits his own requirements.

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