

DWARF BRASSAIA STOCK BLOCK

Little information is available on yield of cuttings from stock block plantings of foliage plants under Hawaii conditions. A planting of Dwarf Brassia (*Brassaia arboricola*) was established at the Waimanalo Experiment Station during the summer of 1974 to evaluate various preemergent herbicides for weed control in stock block establishment. A total of 255 established, 6-inch container plants were set out at a spacing of 2 feet by 5 feet. The first cuttings were taken after 4 months by heading all plants back to 12 inches above the ground. The plots were then harvested every 2 months by removing all available 6-inch terminal cuttings.

Table 1. Yield of 6-inch, terminal cuttings of Dwarf Brassia (*Brassaia arboricola*) during the first year

	Harvest – Months after planting				
	4	6	8	10	12
Cuttings/plant	0.9	1.5	3.8	7.2	13.4
Cumulative total	0.9	2.4	6.2	13.4	26.8

The average yield per plant for each harvest is shown in Table 1. The average yield for the 255 plants for the first year in the field was 26.8 cuttings per plant. At the plant spacing used in this trial (2 feet by 5 feet), the plants had grown together in the row but still had ample room between rows for harvest operations. Continuing this harvest method of taking out terminal cuttings, it should be possible to maintain the plants for another 6 to 12 months. After that some plant removal or severe pruning may be required.

Making a few assumptions, the projected yield and returns have been calculated for various

Table 2. The projected yield and returns of one acre of Dwarf Brassica at various spacing

Spacing (feet)	1 Acre		1st year		2nd year ³ (projected)	
	Plants	Cost ¹	Cuttings	Return ²	Cuttings	Return
2 x 5	4356	\$3,267	116,741	\$5837	522,720	\$26,136
3 x 5	2904	2,178	77,827	3891	348,480	17,424
4 x 5	2178	1,633	58,370	2919	261,360	13,068
5 x 5	1742	1,306	46,686	2334	209,040	10,452
2 x 6	3630	2,722	97,284	4864	436,600	21,780
3 x 6	2420	1,815	64,856	3243	290,400	14,520
4 x 6	1815	1,361	48,642	2432	217,800	10,890
5 x 6	1452	1,089	38,914	1946	174,240	8,712

¹ Assuming \$0.75 for 6-inch plant.

² Assuming \$0.05 per unrooted cutting.

³ Assuming 20 cuttings/plant/harvest.

plant spacings as shown in Table 2. Using the spacing in this trial (2 x 5 feet), 4,356 plants would be required to plant one acre of stock plants at a cost of \$3,267 assuming 75 cents/plant. This would result in 116,741 cuttings harvested the first year with a return of \$5,837 assuming a selling price of 5 cents per unrooted cutting. These figures do not include any of the other start up costs such as labor and land preparation but it appears feasible to break even some time after the first year.