II. GROWING SPACE REQUIREMENTS OF BAMBOO

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To find out the correct spacing for planting of bamboo in conjunction with agricultural crops a study was laid out in the P.F.I. over an area of 0.3 ha in 1977. One year old tube plants of bamboo were planted at 2x2, 3x3 and 6x6 m spacing, replicated 3 times using 180, 84 and 24 plants in all the treatments respectively. In the first three years of the study, intercropping was done with maize, berseem and wheat. Afterwards it was not possible to do agriculture due to increase in the size of the bamboo clumps except in the 6x6 m spacing where it was continued for one more year.

Results and discussion

The sutdy was assessed in March, 1982 to see the difference in diameter of the bamboos and the number of bamboos available under each spacing. The results are tabulated below.

SPACING						
Replication	(2 x 2 m)		(3 x 3 m)		(6x6m)	
(milit	Dia(cm)	No.	Dia(cm)	No.	Dia(cm)	No.
≥I⊗	3.8	15	3.8	17	3.8	23
II	4.1	13	4.1	17	4.6	34
III	3.6	16	3.8	15	4.6	33
Average	3.8	14	3.9	16	4.3	30
1000						

It is quite indicative that although there is not much difference in diameter of the bamboos but the number of bamboos in one culm is much more in the widest spacing i.e. 6x6 m and almost double that of the other two spacing.

Following conclusions can be drawn from this study.

- 1. The farmer who wants to grow agricultural crops in conjunction with bamboos should plant bamboos at a wider spacing.
- 2. If number of bamboos planted initially in different spacings is taken into account, following number of mature bamboos were available after 5 years.

Spacing (m)	No. initially planted	No. available now				
6 x 6	24	$24 \times 30 = 720$				
3 x 3	84	$84 \times 16 = 1344$				
2 x 2	180	$180 \times 14 = 2520$				

It is indicated that if only bamboos are to be raised as a pure crop, these may be planted at 2x2m, especially when the species is *Dendrocalamus strictus* which does not attain much diameter.

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