

PERFORMANCE OF POPLARS AND OTHER SPECIES IN CONJUNCTION WITH AGRICULTURAL CROPS

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To find out the comparative rate of growth of *Populus deltoides* I-63/51, *Eucalyptus citriodora*, *Dalbergia sissoo* and *Salmalia malabarica*, a study was planted in Peshawar on 13-2-1978. 120 plants of each species were planted in 16 sub-plots at a spacing of 4 x 4 m. In each sub-plot a randomised complete block design, replicated 4 times.

While one year old entire plants of *Populus deltoides* and tubed plants of *Eucalyptus citriodora* were planted, root shoot cuttings of *Dalbergia sissoo* and *Salmalia malabarica* were used in the study.

A variety of agricultural crops, one after other were planted in between the lines. These include *Sesamum indicum* (Til), maize and wheat.

Data on height and diameter were recorded on 23-2-1982 as under:—

Rep. No.	SPECIES							
	Semal		Shisham		E. citriodora		Poplar	
	Dia. (cm)	Ht. (m)	Dia. (cm)	Ht. (m)	Dia. (cm)	Ht. (m)	Dia. (cm)	Ht. (m)
I	17.5	7.3	13.0	9.0	10.7	10.7	16.3	14.0
II	13.0	6.1	11.2	9.0	11.7	12.2	18.8	15.0
III	15.2	6.1	11.9	8.0	10.7	11.0	18.8	16.8
IV	15.8	7.0	10.2	8.2	10.7	10.0	17.3	15.2
Total	61.5	26.5	46.3	34.2	43.8	43.9	73.2	61.0
Average	15.4	6.6	11.6	8.5	10.9	10.9	18.3	15.2

Conclusions:

- The diameters and heights attained by the species are highly significantly different.
- 't' test shows that dbh of *E. citriodora* and shisham and the heights of semal and shisham are not significantly different.
- Highest dbh and height was gained by poplar followed by semal in case of dbh and *E. citriodora* in height.
- Least dbh was gained by *E. citriodora* and least height by semal.

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