

TECHNICAL NOTE

INTERIM RESULTS ON THE PERFORMANCE OF NEW POPLAR CLONES

In 1978 some new poplar clones were received from Texas USA for trial in the climatic conditions obtaining in Pakistan. The cuttings were planted in the nursery and after one year it was decided to lay out a comparative study in the Research Garden of Pakistan Forest Institute, Peshawar (average rainfall 300 mm).

One year old plants of 4 different clones viz. S4C1, S7C4, S7C3 and I-18/62 were planted in 40 cm deep pits on 15th February, 1979 at a spacing of 3 x 3 m in 4 replications in a randomized complete block design. In all 100 plants of each of the 4 clones were planted. Plants were irrigated with canal water just after planting.

In the first week of June, 1979, Changez variety of maize was sown for intercropping. In the winters of 1979-80 and 1980-81 wheat was sown in between the lines. On the average 18 irrigations of 10 cm depth each were given during the years 1979 and 1980. In the spring of 1979, *Melanophila picta* a bark borer appeared on all the plants of all the clones. The entomologist treated the plants in the first week of June with Tamick granules applied at the base of individual plants. Later laybacid was sprayed on 7-7-1979 but the attack continued. Again on 14-7-1979 Carbicron systemic insecticides was sprayed. It seems none of these insecticides helped.

In spring of 1980, the attack appeared again Carbicron was sprayed. None of the plants died due to the attack but obviously some were weakened and had to be replaced in 1981. The entomologist attributed the attack to lack of irrigation during the ripening period of wheat and subsequent fortnight. However, arrangements were made that the plants got adequate irrigation water in April 1981 by removing the wheat crop from plots. Growth data were recorded at the end of growing season in 1980 with the following results:

Replica- tion	I-18/62		S7C3		S7C4		S4C1	
	Dia (cm)	Ht. (m)	Dia (cm)	Ht. (m)	Dia (cm)	Ht. (m)	Dia (cm)	Ht. (m)
I	12.7	9.03	11.2	9.32	7.3	7.88	11.4	9.11
II	9.4	9.91	9.5	10.21	8.5	9.31	10.6	9.16
III	8.8	9.14	7.5	7.84	8.1	8.51	7.3	8.31
IV	8.0	8.46	7.9	7.84	7.4	8.12	8.5	8.53
Total:	37.9	36.54	36.1	35.21	31.3	33.82	37.8	35.11
Av.	9.5	9.13	9.0	8.80	7.8	8.45	9.4	8.78

None of the clones showed significant superiority over the others either in height or diameter except that I-18/62 was the best out of the four.

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