

TREE PLANTERS NOTES

I. EFFECT OF CULTIVATION ON THE GROWTH OF POPLARS

M. I. Sheikh*

Two studies have been conducted to find out the effect of cultivation on growth of poplars:

1. A study was laid out to find the effect of agricultural crops on the growth of poplars. One year old plants of *P. euramericana* CV-1-214 were grown for four years with and without agricultural crops. In the control plots no agricultural crop was grown but nevertheless, soil cultivation was done.

After four year, the following data were available:

Reps.	T R E A T M E N T S					
	Berseem + Poplars		Wheat + Poplars		Soil Cultivation+Poplars	
	Dia(cm)	Ht(m)	Dia(cm)	Ht(m)	Dia(cm)	Ht(m)
I	10.5	9.8	13.7	10.4	10.0	8.5
II	15.2	11.3	15.0	9.7	17.2	11.0
III	15.3	12.2	14.7	9.4	14.0	11.0
IV	15.4	10.7	12.2	10.7	12.7	10.0
V	16.8	11.9	15.2	10.3	16.5	11.0
VI	17.0	10.0	15.7	11.0	16.0	12.0
Total	90.2	65.9	86.5	61.5	86.4	63.5
Average	15.0	11.0	14.4	10.2	14.4	10.6

It is indicated the sowing of agricultural crops in conjunction with poplars did not have any adverse effect on their rate of growth.

2. In another study, weeds were allowed to grow in one set of plots while the second set was regularly ploughed. The average height and diameter after three years were 5.85 m, 4.3 cm for the control plots, these were 7.71 and 5.6 cm for the ploughed plots. Necessity of soil cultivation in poplar plantations is therefore quite evident and we should not expect normal growth if soil cultivation requirements of poplars are not kept in view.

* The author is Director General, Pakistan Forest Institute, Peshawar.