

EFFECT OF TREE ROWS ON WHEAT CROP

by

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Summary. A study conducted to find the effect of tree rows grown on the borders of wheat fields has indicated that there is no adverse effect on the yield even from the areas quite close to the rows.

Introduction. Most farmers believe that trees in agricultural fields reduce crop yields. But foresters claim beneficial effects of tree rows grown across the predominant wind direction. These observations were recorded in the vicinity of Changa Manga irrigated plantation, 64 km south west of Lahore, on three fields, one of them due south of a double row of trees, another one due south of a single row of trees and the third one due north of a single row of trees. Tree rows in all the three fields grew on water channels.

Methods. Three equidistant line transects were laid out in each field at right angles to the tree rows. On each transect observations on yield of grain were recorded in 0.1 m² quadrats at 2.5, 12.5, 17.5 and 22.5 metres from the tree rows.

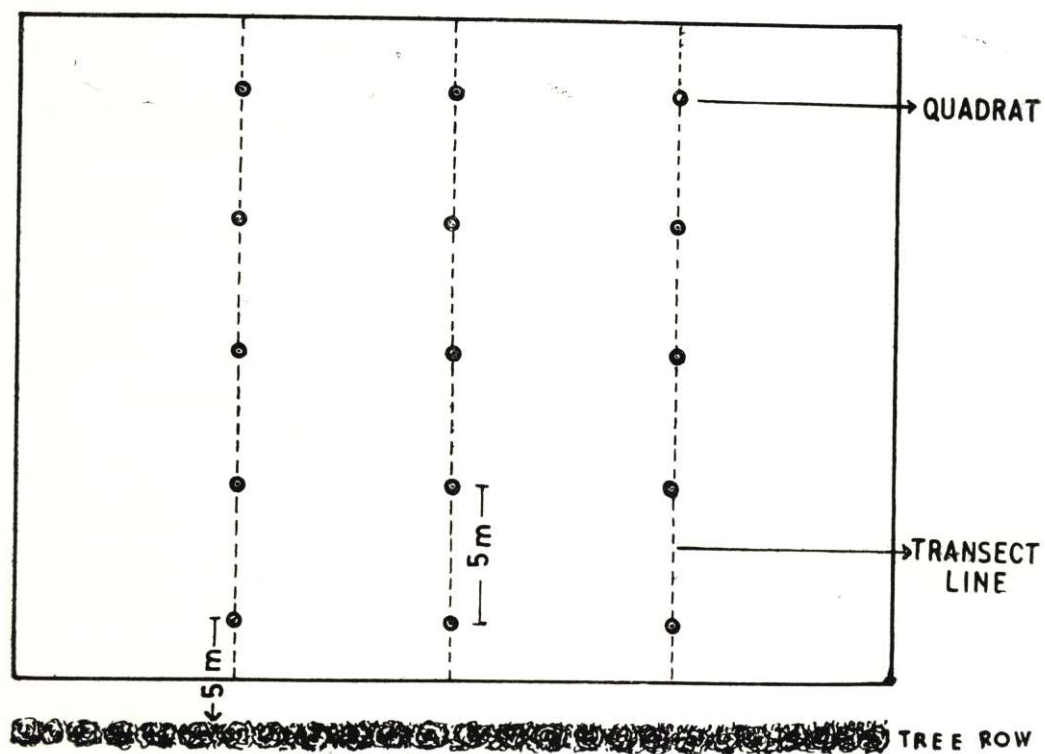
Results.

Field No.	*Location	Transect number	Weight of grain to nearest gram					Remarks
			Quadrats distance from tree line (m)					
			2.5	7.5	12.5	17.5	22.5	
1.	South	1	66	51	67	59		Shisham tree rows NE-SW. Average height 18m, rows spaced 10m, trees in rows 4.5m.
		2	69	53	47	75		
		3	47	65	61	63		
2.	North	1	59	65	65	48	44	Mulberry tree row E-W, average height 5m, trees in row 3 m.
		2	73	72	77	69	49	
		3	46	56	47	29	40	
3.	South	1	41	21	32	20	32	Alternating shisham and mulberry trees in the row running E-W, average height 8m, trees in the row 3m.
		2	30	32	13	32	33	
		3	44	28	37	73	40	

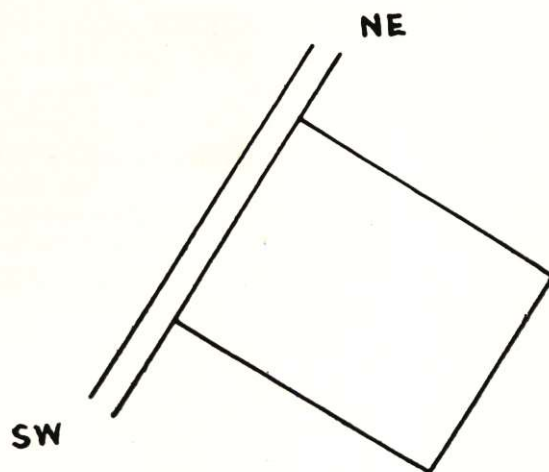
*with respect to tree rows.

Discussion. From the above data it is evident that single and double rows of shisham and mulberry growing on water channels and ranging in height from 5m to 18m did not depress crop yields at 2.5m distance from tree rows.

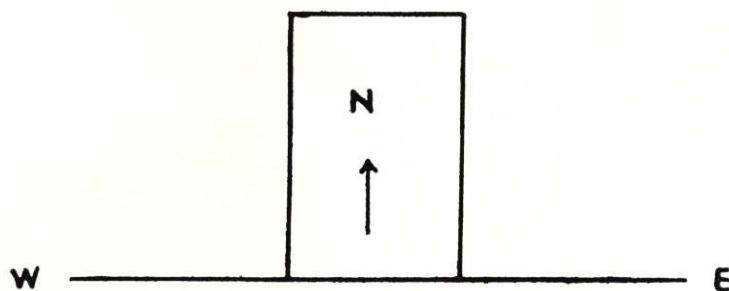
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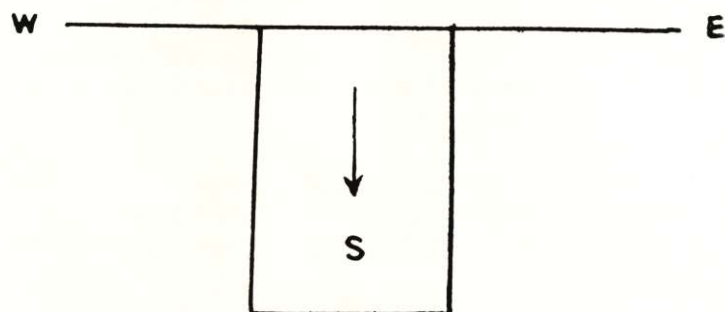
SAMPLING PLAN



FIELD No. 1



FIELD No. 2



FIELD No. 3