

EFFECT OF POPLAR (*POPULUS DELTOIDES*) SHELTERBELT ON THE YIELD OF AGRICULTURAL CROPS AND SOIL PROPERTIES IN SEMI ARID REGION OF HARYANA

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Received-28.05.2021, Revised-12.06.2021, Accepted-23.06.2021

Abstract: The study was conducted in 2 year old east-west and north-south directions bund plantation at CCS HAU, Hisar during 2016-2017 to evaluate the effect of *Populus deltoides* bund planting on the yield of agricultural crops and soil properties in Haryana. Total biomass yield of dhaincha was recorded non significant at different distance from tree line of both east-west and north-south planted rows of eucalypts. Different aspects also had no significant effect on total biomass yield of dhaincha. Same pattern of grain yield of wheat (*T. aestivum*) was recorded in both east-west and north-south planted eucalypts. Poplar planted in east-west direction has attained 8.8 cm girth and 8.7 m height whereas in north-south direction it has attained girth of 3.9 cm and height of 6.0 m. The soil organic carbon and available N, P and K content were recorded maximum in bund planted poplar compared to control in different aspects.

Keywords: Crops, Poplar, Soil, Region Yield

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