



Research Paper

Article history :

Received : 09.04.2013

Revised : 03.09.2013

Accepted : 18.09.2013

Root distribution pattern of walnut (*Juglans regia* L.)

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ABSTRACT : Root distribution pattern of walnut trees grafted on seedling rootstock was studied on at three radial distances from tree trunk and soil depth. The length and mass of fine roots (diameter less than 1mm) was maximum (2633.52 cm and 19.43 g, respectively) within the tree canopy *i.e.* at a distance 2/3rd from tree trunk to drip line. It was significantly low near the tree trunk and towards the drip line. The length and mass of the fine roots was more in the surface layer (2498.65 cm and 14.22 g, respectively). As the soil depth increased the RLD and RMD of the fine roots decreased significantly. RLD of thicker roots was not significantly influenced by the radial distance from the tree trunk but the RMD decreased significantly from the tree trunk to the drip line. Thicker roots were significantly more in the surface layer of the soil.

KEY WORDS : Walnut, Root distribution, Soil depth, Radial distance

HOW TO CITE THIS ARTICLE : Dar, K.R., Wani, M.S., Najar, G.R., Peer, F.A., Chattoo, M.A., Simnani, S.A. and Ali, Angrej (2013). Root distribution pattern of walnut (*Juglans regia* L.). *Asian J. Hort.*, **8**(2) : 452-455.