



Research Paper

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Effect of fertigation on flowering and yield of tissue culture pomegranate (*Punica granatum* L.) cv. MIRDULA grown under ultra high density planting (UHDP)

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ABSTRACT : The study was conducted during 2011-12 and 2012-13 to find out the effect of fertigation on flowering and yield of tissue culture (TC) pomegranate (*Punica granatum* L.) cv. Mirdula grown under ultra high density planting (UHDP). The experiments were laid out in Randomized Block Design with five treatment of fertigation levels viz., 50, 75, 100 and 125 % recommended dose of water soluble fertilizers (applied twice in a week) including soil application (control) and replicated four times and to test various yield attributes of 2-3 years old TC pomegranate (*Punica granatum* L.) cv. Mirdula was grown under UHDP. The investigation indicated 50 % recommended dose of fertilizers through fertigation (T₂) resulted in maximum number of hermaphrodite flower (63.05), number of male flower (55.95), number of fruits per tree (52.38), fruit set percentage (83.57 %), average fruit weight (211.43 g), fruit volume (228.75 cc), peel weight (62.83 g), total aril weight (127.53 g), 100 aril weight (22.31 g), total seed weight (14.87 g) and fruit yield / plant (11.1kg) as compared with soil application of recommended doses of NPK and higher doses of NPK applied through fertigation. Therefore (T₂) 50 % recommended dose of NPK in the form of water soluble fertilizers can be recommended for getting increased flowering and the highest yield for two to three years old TC pomegranate cv. MIRDULA.

KEY WORDS : TC pomegranate, UHDP, Fertigation, Flowering, Yield

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