Influence of different organic waste materials on hardening of micropropagated tea (Camellia sinensis L.) clone 'Iran 100'

Abstract

In order to reduce mortalities of the tea plantlet Clone Iran 100 during the hardening stage after acclimatization from tissue culture, the effect of different organic materials on rooting of acclimatized plantlets was investigated. Organic materials used were urban waste material, farm yard manure, mushroom media and tea waste at the level of 0, 25, 50 or 75 % (v/v) per pot mixed with soil. Completely randomized block design with factorial arrangement was used and replicated thrice. During the acclimatization period, dry and fresh weight of the root and shoot, length of the root and shoot, number of leaves and roots along with survival rate were measured and recorded. The final outcome showed that tea waste treatment at the level of 25 % had the highest survival and is considered as the best treatment for hardening of tea.

Keyword: Acclimatization; Media; Tea; Tissue culture; Survival.