Influence of soilless potting media on growth and vegetative traits of immature rubber (Hevea brasiliensis Müll. arg.)

ABSTRACT

The resuts assessed growth and vegetative traits of rubber based on physic-chemical properties of newly produced soilless potting media. The treatments consisted of three soilless potting mixes coded as M1, M2 newly produced, a commercial-based medium M3 and soil-based M4 as a control. The treatment (M2) that contained coconut husk 15%, empty fruit bunch (EFB) 15%, sugarcane bagasse 15%, urea-N 10% and proportions of other materials noticeably showed the highest and significant N concentration. It significantly increased growth traits; scions stem diameter, the number of leaves, leaf area and leaf area index. Other vegetative traits such as total fresh weights and total dry weights are significantly improved. Most of the root morphological traits on the M2 was significantly higher when compared to the other media. Materials used in its preparation relatively induced rootstocks of the seedlings due to their water and nutrient absorptive capacity and could be an alternative to many poor soils when establishing rubber nursery.

Keyword: Soilless potting media; Hevea brasiliensis; Vegetative traits