STUDY ON DIFFERENT FRUIT PEEL ON THE GROWTH PERFORMANCE AND FLOWERING OF LOCAL ROSE VARIETIES

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ABSTRACT

Rose is a popular cut flower in Sri Lanka and mainly cultivated for the export market. A pot experiment was carried out to evaluate the effect of application of banana, orange and pomegranate fruit peel powder on the growth and flowering of 'Local' rose variety. The experiment was carried out in a Completely Randomized Design with eight treatments having four replicates during March to June 2024 at the crop farm, Faculty of Agriculture, Eastern University, Sri Lanka. Treatments were, recommended fertilizer application at basal and topdressing (T1,Control), half dose of recommended fertilizer application at basal and topdressing times with 9g of pomegranate peel powder (T2), 9g of orange peel powder (T3), 9g of banana peel powder (T4), 4.5g each of pomegranate and banana peel powder (T5), 4.5g each of orange and banana peel powder (T6), 4.5g each of orange and pomegranate peel powder (T7) and 3g of each of orange, pomegranate and banana peel powder (T8) at both times. All parameters, except the plant biomass were measured in 2 weeks interval. Analysis of Variance was performed to determine significant difference among treatments ($p<00.5$). The results reveal that application of fruit peel powder had significant differences on plant height, number of leaves per plant, number of branches per plant, average length of lateral shoots, leaf area and plant biomass and the highest value was obtained in half dose of recommended fertilizer application at basal and topdressing times with 3g of each of orange, pomegranate and banana peel powder (T8) and while the lowest performance was observed in plant application with half dose of recommended fertilizer application at basal and topdressing times with 9g of pomegranate peel powder (T2). Among the all tested treatments, half recommended fertilizer application at basal and topdressing times with 3g each of orange, pomegranate and banana peel powders at both times would be the most suitable fruit peel powders to get higher growth and flowering of Rose.

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