

Effect of Different Potting Medium on Growth and Yield Performances of Brinjal under Organic and Inorganic Management

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Abstract: A pot experiment was conducted to evaluate the effect of different potting medium on growth and yield performances of brinjal (var. Thinnavelli purple) under organic and inorganic management. The experiment was carried out in completely randomized design with six replications. Four potting medium combinations were used as treatments [cattle manure: topsoil 2:1 (T₁, T₅), compost: topsoil 2:1 (T₂, T₆), leaf mould: topsoil 2:1(T₃, T₇), top soil (T₄, T₈)] under organic and inorganic managements respectively. For inorganic management, all other management practices were performed according to recommendations of Department of Agriculture and for organic management; farmers' adopted practices were followed. Growth parameters such as leaf number, number of branches and plant height were measured biweekly and yield parameters such as fruit weight, length, circumference and average yield per pot were recorded at harvesting. ANOVA and Duncan Multiple Range test was performed to find significant differences. There were significant differences observed in growth parameters among the treatments except for number of branches. The highest growth parameters were observed in compost: topsoil under inorganic. There were significant differences observed in all yield parameters among treatments. The fruit length, circumference and weight were the highest in compost: top soil under organic, however, the highest average yield was observed in compost: top soil under inorganic due to higher number of fruits. It can be concluded that rooting medium combination of compost: top soil at the ratio of 2:1 can be recommended for both organic and inorganic pot cultivation.