Growth of Papaya grown in pot culture of different soil compositions

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Papaya is known as anti-proliferative agent and consists of high nutritional value. It is reported that the application of microbial inoculants individually and/or along with different fertilizers effect the growth and development of papaya in field conditions (Mamtha et al. 2002, Wei et al. 2006). Hybrid papaya (Scarlet princess) (Carica papaya L.) is a high yielding variety. In present study, an attempt was made towards effect of different fertilizer treatment and phosphate solubilizer on growth of hybrid papaya grown in pot cultures.

An experiment was carried out in 9 inch poly bags filled with fumigated sandy loam soil. The pot soil was added with different fertilizers individually and/or in combination. The treatments used were [1] control, [2] super phosphate (5 mg.pot⁻¹), [3] Potash (5 mg.pot⁻¹), [4] Shymala-a combination of N P K (5 mg.pot⁻¹), [5] Multiplex Annapurna (5 g.pot⁻¹), [6] Garden Samrat (5 g.pot⁻¹), [7] Nirmal Bio-power (5 g.pot⁻¹), [8] broth culture of fungi phosphate solubilising Aspergillus sp. (5 ml.pot⁻¹), [9] Fungi + Super phosphate (5 ml + 5 mg pot⁻¹), [10] Fungi + Super phosphate + Multiplex Annapurna (5 ml + 5 mg + 5 g pot⁻¹), [11] Fungi + Multiplex Annapurna (5 ml + 5 g pot⁻¹). The plants were watered daily and final observation on various growth parameters were recorded after 60 days.

Results obtained on growth parameters exhibited good performance of hybrid papaya grown in different treatment as compared to control (Fig. 1). The plants grown under treatment of Annapurna showed good leaf
Where, 1= Untreated control, 2= Super phosphate (5 mg pot⁻¹), 3= Potash (5 mg pot⁻¹), 4= Shymala-a combination of N P K (5 mg pot⁻¹), 5= Multiplex Annapurna (5 g pot⁻¹), 6= Garden Samrat (5 g pot⁻¹), 7= Nirmal Bio-power (5 g pot⁻¹), 8= Broth culture of fungi phosphate solubilising Aspergillus sp. (5 ml pot⁻¹), 9= Aspergillus sp. + super phosphate (5 ml + 5 mg pot⁻¹), 10= Fungi + Super phosphate + Multiplex Annapurna (5 ml + 5 mg + 5 g pot⁻¹) and 11= Fungi + Multiplex Annapurna (5 ml + 5 g pot⁻¹).

**Figure 2.** Dry biomass and root shoot ratio of papaya plants grown in different treatments.

Figure 3. A & B, Effect of different treatments on growth of papaya.

**REFERENCES**
