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**Research Note**

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# Studies on growth of improved varieties of bitter guard (*Momordica charantia* L.)

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**ABSTRACT :** A field experiment was conducted to study on growth of improved varieties of bitter gourd (*Momordica charantia* L.) under agro climatic conditions of Kokan region of Maharashtra. The experiment was laid out in Randomized Block Design (RBD) with three replications. The results revealed that improved variety of bitter gourd 'Kokan Tara ' recorded the maximum number of leaves, leaf area and number of internodes, while MC-84 variety found to be beneficial with respect to number of branches and internodal length. However, Hirkani variety produced maximum stem diameter.

**KEY WORDS :** Bitter gourd, Growth, Varieties

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Bitter gourd is well known for its high nutritive value as a source of proteins, minerals and vitamins. Since globalization, the demand for fresh vegetables for export is increasing in recent years. To meet this increasing demand of export as well as super markets of metropolitan cities, different high yielding varieties have been evolved for general cultivation in India.

The information regarding the varietal evolution on growth of bitter gourd is very meagre. Hence, the present study was conducted to evaluate the different improved varieties of bitter gourd for their growth under agro climatic conditions of Konkan region of Maharashtra.

Field trial was conducted at the Vegetable Improvement Scheme, Central Experimental Station, Wakawali, Dist. Ratnagiri (M.S.) during *Kharif* 2000 with ten treatments and three replications in Randomized Block Design (RBD). The treatment consisted of ten improved varieties *viz.*, MC-84, Kokan Tara, Hirkani, RHRBC-4-1, PBIG-2, RHRBC-5, PBIG-3, PBIG-1, DVBTG-1 and Preethi.

The data presented in Table 1 revealed that improved variety of bitter gourd Hirkani variety produced maximum length of vine (5.75m) as compared to rest of the varieties. The differences observed in relation to vine length in different varieties could be attributed to their varietal characteristics. The result is in conformity with the observations recorded by Rajput *et al.* (1996), Anonymous (1994) and Anonymous (1993).

Significant variation was observed in number of leaves, leaf area and number of internodes as affected by different bitter gourd varieties. The maximum number of leaves (347.12), leaf area (441.46 $dm^2$ ) and number of internodes (418.00) was recorded in variety Kokan Tara. The results are analogous with those obtained by Rajput *et al.* (1996) in bitter gourd; Sevele (1998) in musk melon and Khade (1999) in bottle gourd.

Among the different varietal evolution, MC-84 variety found to be more beneficial with respect to number of branches (7.00) and internodal length (10.40 cm). The result is in conformity with the observations recorded by Anonymous (1994), Puri and Singh (1992) and Sharma and Dhankar (1989).

It is evident from the Table 1 that the stem diameter significantly influence by different variety which was found to be maximum (1.85 cm) in Preethi.