One-year Production Model of Rose Cut Flowers by Bending Shoot Culture in Pingtung

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Abstract

The purpose of this study was to evaluate the effect of bending shoot culture on one-year crop production model of rose cut flowers in Kaoshiung-Pingtung area. In this experiment four-month-old plantlets, propagated from single-node cutting, of *Rosa hybrida* cv. Nirpventyel 'Versillia'®, *R. hybrida* cv. Ines 'Tineke'®, *R. hybrida* cv. Meiqualis 'Grand Gala'® and *R. hybrida* cv. Ruisteenka 'Ravel'® were planted on September 1 in portable pipe-house or outdoors, with bending shoot training. The control was planted outdoors and trained in traditional upright way.

The results showed that bending shoot training forced the plants to produce cut flowers earlier and therefore more yield in December as compared with traditional training way. During cool season (from November to March, the high price duration in Taiwan), 'Versilla', 'Grand Gala' and 'Ravel' gained higher yield and better quality of cut flowers in both pipe-house and outdoors with bending shoot training. However, the yield of 'Tineke' was decrease in pipe-house with bending shoot training.

Considering the total productivity (from November to June), 'Versilla' and 'Grand Gala' produced more cut flowers when cultured outdoors with bending shoot training. 'Ravel' produced 30% more cut flowers under both pipe-house and outdoors with bending shoot training. Whereas all four tested cultivars gained the best flower quality in pipe-house with bending shoot training.

Key words: *Rosa*, quality, quantities, training, tropical area

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