Effect of Rootstock on the Production of *Rosa hybrida* cv. Nirpventyel 'Versillia'®

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Abstract

Recently, roses from Kao-Ping area have won excellent reputation at island-wide flower auctions. However, a variety namely *Rosa hybrida* cv. Nirpventyel 'Versillia'® has exhibited problem of low productivity after one year cultivation. This research is to investigate the factors that affect the yield and quality of cut flower of this particular variety.

Comparisons on productivity were made between grafts on *Rosa multiflora* and *Rosa odorata*, with check plantlets propagated from single-node cutting. The results showed that in the first year, total yields of cut flower grafted on *R. multiflora* and *R. odorata* were increased by 47.7% and 46.8% while compared to the control respectively. The yields of high quality flower (with shoot length＞65cm, namely A+ grade and A1 grade) were increased by 35.4% and 56.5%, respectively. In the second year, total cut flower yields were improved by 65.7% and 83.4%, while high quality flowers yielded 83.6% and 117.3% more, respectively.

Key words：*Rosa*, bending shoot culture, pipe house , rootstock

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