

Effect of Cutting Wood Harvest Time on Planting Success Rate of Five Blueberry Cultivars[©]

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INTRODUCTION

Cutting propagation is used to produce the three main rabbiteye blueberry cultivars, 'Woodard', 'Tifblue', and 'Home Bell'. It usually takes 7 months for cutting propagation (from September to April) and the costs are very high. To reduce production costs container-grown plants were examined for the production of cuttings. In addition to the above three cultivars container planting was applied to two other taxa, 'Mayards' and 'Blue Shower'.

MATERIALS AND METHODS

All the shoot material was collected from mother plants at Sanyou Nouen Nursery. 'Woodard' and 'Homebell' were collected from 10-year-old plants and 'Tifblue' was from 15-year-old plants. 'Mayards' and 'Blue Shower' were collected from container stock in 18-cm pots (2-year-old plants). A hormonal treatment of IBA powder was applied on the cut end.

RESULTS AND DISCUSSION

In this test, 'Homebell' showed the best rooting results among the five tested cultivars. Many cuttings of 'Woodard' and 'Tifblue' only showed callus proliferation on the cutting ends and no rooting. It should be noted that 'Homebell' cutting were harvested about 10 days earlier than those of 'Woodard' and 'Tifblue' (Table 1); also the cuttings of 'Homebell' were more vigorous than those of 'Woodard' and 'Tifblue'. Both of these factors may have caused the difference in rooting activities. The planting rate (%) of 'Homebell' was lower than that of 'Mayards' and 'Blue Shower' which were taken in February. It should be noted that plant growth habit is weaker in 'Woodard' and I think it caused the lowest potting rate among the five cultivars. 'Mayards' and 'Blue Shower' rooted faster when compared to the three other cultivars.

In this test, soil conditions, cutting time, and number of cuttings were different and the rooting results varied with cultivar. Therefore, further research is needed to develop a short-term multiplication method for these rabbiteye blueberries.

Table 1. Blueberry cultivars and treatment conditions.

Cultivar	Cuttings stuck (month/day)	Number of plants	Soil condition (peat moss: kanuma soil)	Day planted in pot (month/day)	Plants transplanted to pot	Rate for planting in pot(%)
Woodard	9/26	95	7:3	4/27	66	69.4
Tifblue	9/26	314	7:3	4/27	229	72.9
Homebell	9/16	64	7:3	4/27	51	79.7
Mayards	2/22	18	8:2	4/27	15	83.3
Blueshower	2/22	12	8:2	4/27	12	100.0

Seedling box were used for this experiment.