Effects of different planting heights from grafting point for grafted vine ratios and nursery yields of some grape varieties on 41B rootstock

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Summary

This research was conducted in Bayramiç-Çanakkale, Turkey in 2007 and 2008 years. ‘Sultani Çekirdeksiz’, ‘Cabernet Sauvignon’, ‘Chardonnay’, ‘Alphonse Lavellée’, ‘Superior Seedless’ and ‘Merlot’ grape varieties grafted on 41B rootstock were used as research materials. In this study, effects of different planting heights from grafting point (< 8.0 cm, 8–10.5 cm, 10.5–13.0 cm and 13.0 cm >) on best grown nursery plant ratio (%) and first grade plant yield (%) were determined in the nursery. For this purpose, total 9600 grafted vine plants were grown (200 grafted vine plants x 4 repeats x 2 years x 6 different combinations of scion/rootstock) and examined at the end of vegetation periods. The obtained results showed that different planting heights from grafting point affected the vine ratios and nursery yields. Under 8 cm (52,93 %) and between 8 cm to 10,5 cm (52,94 %) of planting heights did not affect the grafted vine ratio statistically even though there were some differences among scion/rootstock combinations. However, between 10,5 cm to 13 cm (52,20 %) and over 13 cm (49,21 %) planting height affected the investigated parameters significantly. For the first grade plants amount, increasing planting heights increased the yield of the plants. The highest nursery plant yields were obtained from ‘Cabernet Sauvignon’/41B (56.48 %) and ‘Sultani Çekirdeksiz’/41B (55,53 %) scion/rootstock combinations.

Key words: Grafted vine saplings, planting height of grafting point, nursery ratio, first length grafted vine ratio.