

Impact of Technological Improvements on the Quality and Yield of Grafted Grape Seedlings

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Abstract: *The area of grape plants in the Russian Federation is now steadily increasing. One of the issues contributing to the industry's resurgence is the scarcity of high-quality planting material for grapes. Because imported clone types cannot adapt to the soil and climate of grape-growing areas in the Russian Federation, buying imported seedlings is not always a satisfactory solution for vineyards in terms of seedling satisfaction. The output of grape seedlings of regional table and technical varieties must thus be increased. The findings of a research on the growth time of grape seedlings and the substrate they are grown on are presented in this publication. The best substrate composition for grafted vegetative seedlings was determined to be a 1:1:1 mixture of sawdust, glauconite sand, and bentonite clay, with a 60-day growth period. The yield of first-class grafted seedlings produced using this growing technique was 51.2%. Grafted vegetative seedling culture, which is often recognized to take 40–45 days to produce, yields seedlings at a level of 35.4–39.6%, which is 11.6–15.8% less than the best form of the experiment.*

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