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
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**Studies on Flower Types and Pollination Properties of Some Vitis Species and  
Cultivars Used as Rootstocks**

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**Abstract:** 15 American rootstocks (Rupestris du Lot, 99 R, 110 R, 1103 P, 420 A, SO 4, 5 C, 44-53 M, 1616 C, Ramsey, 1613 C, 41 B, 5 BB, Fercal, Harmony) were used as plant materials. Because of the importance of rootstock breeding programs, the flower biology of rootstocks were studied. For this reason, the morphology and anatomy of the flowers and the productivity, viability, germination rate, size and shape classification of the pollens were examined. According to the results of the study, three flower types (male, functionally male and functionally female flowers) were determined. Rootstocks having functionally female flowers showed abnormal pollen shape and did not germinate. Rootstocks with male and functionally male flowers had a prolate shape and germination rates varied between 8.60 and 32.70%. At the same time, pollen productivity was found to vary from 1242 to 1968 in male and functionally male flowers whereas it was 1050-1124 in functionally female flowers. According to the results, rootstocks with male and functionally male flowers showed enough or high pollinator characteristics.

**Key Words:** Grapevine rootstocks, flower type, pollen, germination, productivity

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