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
of

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Determination of the Apomictic Fruit Set Ratio in Some Turkish Walnut (*Juglans regia* L.) Genotypes

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Abstract: This study was carried out to determine the amount of apomictic fruit set in 10 Turkish walnut (*Juglans regia* L.) genotypes in 2001, 2002 and 2003. Yalova-1, Şebın, Bilecik, KR-1, KR-2, Şen-2, 07-KOR-I, Tokat-1, Kaman-1 and Kaman-5 cultivars and selections were used in the experiment. Female flowers were bagged and/or pollinated with pollen of the apple cv. 'Golden Delicious' (*Malus x domestica* Borkh.), and the apomictic fruit set was determined 8 weeks after anthesis. The percentage of apomictic fruit set without pollination ranged from 0.5% to 1.6% in 5 walnut genotypes, namely Yalova-1, Bilecik, 07-KOR-I, Tokat-1 and Kaman-1, in the first 2 years. In the third year, the highest apomictic fruit set (6.4%) was obtained from Tokat-1 after pollination with apple pollen. Apple pollen did not induce apomixis in the other 4 genotypes. The results indicated that apomictic fruit set is insufficient for economical seed and crop production in these ten Turkish walnut genotypes.

Key Words: Walnut, *Juglans regia* L., apomixis

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