

P-57 (175)**BREEDING OF SOUR CHERRY AND MAHALEB IN IRAN**

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Iran is one of the important origins of cherries. From 2006 to 2010, a total of 140 sour cherry and mahaleb genotypes were collected as part of a national research project in 14 provinces in Iran. Promising genotype isolated before flower opening. Shoots with flower buds were put in growth chamber in 20-22°C temperature in order to pollen collection. The growth ability of pollen tubes was tested in selected of media culture. Results show that 5112 sour cherry genotype with 63/9 percent and 5131 mahaleb genotype with 60/03 percent had highest growth of pollen tube. Percentage of fruit set in self-pollinating sour cherry genotype varies from 18 percent in 5192 genotype to 12.7 in 5109 genotype. All studied mahaleb with less 1.5 percent fruit set were recognized self- incompatible. Maximum fruit set in some of genotype obtained in open pollination. Also selection of best pollinator for promising genotype 5192 showed that 5190 with 8 percent had the highest fruit set. Fruit set in open pollination in this genotype was 10.2 percent. For quality and quantity characteristics, sour cherry sorted in different groups. The main qualitative characteristics were in 5175, 5170, 5153, 5407, 5121, 5192, 5109, 5120, 5192, G19, G9, G21, G23, G31, S1, G20 and the main quantitative ones were in genotype 5115, 5152, 5112, 5212, 5131, 5115, 5136, 5410, 5213, 5177, 5186, 5170, 5132.

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