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EVALUATION OF SEVENTEEN PROMISING APRICOT VARIETIES FOR THEIR AUTO-FERTILITY IN IRAN

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In apricot cultivation self-incompatible varieties make limitations from fruit production point of view in solid blocks for growers and also for breeders when planning for hybridization programs that all need adequate pollination. The apricot improvement programs are running continuously in many countries. In Iran, three governmental experimental sites have been working on this fruit species exclusively since fifty years ago. For each site which presents specific climate some promising varieties are under complementary evaluations. Fertility is a common trait during evaluations and so the self-incompatibility of these promising varieties has been studied. Here the results are presented. In West Azerbaijan province (Tabriz) AD405, AD626, HS731, AD732, AD412, DM101, AC113 and CANINO (as control tree), in Khorasan -e-Razavi province (DOSHIRV-2, SHOG-4, GHIS-2, SH-48, SH-46) and CAFONA as check plant and in Alborz province(Karaj), KB52(107502), KB39(107563), KB24(107558), KB21(107548), KB7(107572) and CANINO as control tree were examined for 3 years. All varieties in Alborz, Khorasan-e-Raavi showed self-incompatibility. In Tabriz, all varieties except AD732 which showed the possibility of self-compatibility were self-incompatible, too. In all experiments the self-compatibility of control trees was confirmed. The cross compatibility of varieties in each group of apricots was tested, too, considering the pollen germination ratio and flowering season overlap to determine pollinizers. We discarded to test cross-compatibility for some of the varieties with low pollen germination and very soon or late flowering time.

Keywords: apricot, self-incompatibility, pollen, pollizer, fertility