

P-67 (215)**THE NATIONAL ASIAN PEAR (PYRUS SEROTINA REHD.) PROJECT IN IRAN: COMPATIBILITY AND COMMERCIAL STUDIES OF INTRODUCED CULTIVARS**

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The wide range of temperature and specific climatic conditions in Iran creates potential features for Iranian fruit industry in terms of culture and producing high quality of different fruit crops. In addition, there is a good potential for establishment of orchards with new introduced fruit species in suitable areas. The main objective of the National Asian pear project at Tarbiat Modares University (TMU) was to examine and evaluate the possibility of culture and production of new pear species (*Pyrus serotina* Rehd.) in suitable areas of Iran. The improvement of Iranian pear gene pool and breeding programs was the other objectives. Phase I of the project have been started at TMU with a successful introduction of nine cultivars from Belgium in 1998. After quarantine inspection, evaluation and initial propagation, introduced cultivars were propagated for compatibility studies in various climatic conditions of Iran. Phase II of the project have been carried out from 2006 to 2014 growing seasons for compatibility studies of the introduced germplasm, mainly at TMU Asian pear collection and research orchards at Tehran and followed in 25 different sites including horticulture research centers, universities and private commercial orchards as well as some small home gardens that located in various climatic conditions of the country. Results based on the data obtained from different experimental sites revealed the promising compatibility. Although, the performance of trees and quality of fruit produced were influenced by different climatic conditions. Asian pear trees showed high productivity in most of the studied cultivars. Fruit produced from the introduced cultivars showed different in color, shape and season of maturity, so grouped into the early, mid and late maturing harvest. The obtained data will analyze and use in order to continuing the project in Phase III in 2018 growing season for the culture and orchard management, economic, commercial and breeding purpose.

Keywords: Asian pear, Plant Introduction, Compatibility study, Germplasm evaluation, Pear Breeding program.