

## FRUIT VARIETIES BREEDING IN ROMANIA: FROM THE BEGINNING TO PRESENT

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**Abstract.** The paper presents objectives and results of Romanian breeding program, developed at the main fruit species. Based on a valuable tradition with old practical results, on different biological material, collected and preserved over the years in genetic resources, breeding of fruit varieties continues to improve the production and fruit quality, having regard to demands of fruit market and processing.

**Key words:** breeding, quality, consumer demand.

In Romania, fruit species breeding program initiated in 1948 by professor Nicolae Constantinescu, has three distinct periods: 1950 to 1970, 1971 to 1999 and 2000 to present [6].

The period I (1950 – 1970) began with organization of Research Stations Voinesti, Bistrita and Cluj, where some collections and field trials of the main fruit species were established. In this period, the assortment included old foreign varieties and local selections. The objectives were: introducing the world valuable varieties to establish the most suitable ones for the ecological conditions throughout the country; breeding new autochthonous cvs. to be competitive with the best ones spread all over the world, both for productivity and fruit quality; clonal selection of autochthonous and foreign varieties recently or formerly spread in various growing areas, in order to maintain their productive and biological potential [3].

The Research Institute for Fruit Growing Pitesti, established in 1967 has represented an important step in the development of breeding programs for all fruit species, including berries [7].

A special importance was granted to enrich fruit collections with local varieties, wild species and foreign varieties, to be able to supply the gene sources for the breeding program [1].

The results of the breeding program occurred beginning with 1970, by introduction in the “Romanian official list for propagation” of the first varieties (Table 1):

- apple: ‘Aromat de vara’, ‘Rosu de Cluj’, ‘Frumos de Voinesti’, ‘Declicios de Voinesti’;

- pear: ‘Aromata de Bistrita’, ‘Timpurii de Dambovita’, ‘Napoca’, ‘Untoasa de Geoagiu’, ‘Aniversare’, ‘Republica’;

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