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CONTRIBUTIONS TO THE INTRODUCTION OF ITOH-PAEONIA IN THE REPUBLIC OF MOLDOVA

Sîrbu Tatiana

"Al. Ciubotaru" National Botanical Garden (Institute), SUM, Chisinau, Republic of Moldova E-mail: tatianaonica17@gmail.com

The achievements of the Japanese breeder Toichi Itoh, from the middle of the 20th century (1948), had a crucial impact on peony breeding. By successfully crossing the woody peony 'Alice Harding' with the herbaceous peony 'Kakoden', he obtained absolutely exceptional hybrids: the leaves are similar to the woody peony, and the habit is similar to the herbaceous peony. In the cold season of the year, the aerial part dies. According to recent classifications, they are attributed to intersectional hybrids (Moutan section x Paeonia section). Of the 36 seeds resulting from the hybridizations, 9 plants inherited the characters of the woody variety, and the rest of the seeds generated herbaceous plants. Toichi Itoh died in 1956, before being able to enjoy the results of his work. The researcher's work was continued by his assistant Shigao-Oshida, who in 1963 recorded the flowering of hybrids for the first time. The first generation of *Itoh-hybrids* was promoted by the American horticulturist Luis Smirnov, who bought Toichi Itoh's patent. Later, as a co-author, he patented the varieties 'Yellow Emperor', 'Yellow Dream' etc. After a break in peony breeding, in 1988, the American breeder R. Anderson obtained significant results, fascinating the world with the Itoh-hybrids created, declaring that these robust, exceptional varieties are the flowers of the future (Martin Page, 1997).

In order to enrich the *Paeonia* L. collection of the Laboratory of Ornamental Plants of the NBG(I) with new taxa, in the fall of 2018, four varieties of *Itoh-Peonies* (produced in the nurseries of Polish horticulturists) were procured: 'Bartzella', 'Cora Louise', 'Hillary', 'Prairie Charm'. In the private sector these peonies appeared 3-4 years earlier. Our main objective: to research the pace of development under the new conditions of growth. The 20-30 cm tall plants were received in containers, in a peat substrate. They were transplanted into soil in spring. After planting, they showed significant growth only in the third year. They are currently blooming abundantly, fruiting without producing seeds – a specific trait of *Itoh-Peonies*. Under the conditions of NBGI, the flowering period lasts 10-14 days and usually starts in the middle of May, in correlation with environmental factors (particularly – temperature). Budding and flowering occurs 8-10 days later than in woody peonies and goes in parallel to some herbaceous varieties. The propagation is vegetative, by division, just like herbaceous peonies. The studied peonies are resistant to pathogens and pests, to hydrological and temperature oscillations. We recommend using *Itoh-Peonies* in landscape design and for cut flowers and leaves.

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