

Variability of old sweet cherries found in Slovak regions and their preservation

**Michaela Benková¹, Iveta Čičová¹,
Daniela Benediková¹, Lubomir Mendel¹,
Miroslav Glasa²**

¹National Agriculture and Food Centre,
Research Institute of Plant Production Piestany,
Bratislavská cesta 122, 921 68 Piestany, Slovak Republic,
email: benedikova@vurv.sk

²Institute of Virology, Biomedical Research Center,
Slovak Academy of Sciences,
Dúbravská cesta 9, 84505 Bratislava, Slovakia

The work is focused on the evaluation of variability of morphological and pomological characteristics of several old sweet cherries (*Prunus avium* (L.) L.) that were found in different Slovak regions. The experimental work has been performed during two years — 2014 and 2015. The following characteristics according to descriptor list of subgenus *Cerasus* was evaluated — period of flowering and ripening, morphological characteristics of the flowers, fruit size, fruit weight and quality parameters. The results have shown high variability of evaluated genotypes. From the 14 monitored localities, the most valuable genotypes were found in the locality Horna Streda — places Cachtice, Krakovany, Nitra and Brdarka. During the collecting expeditions 170 genotypes of sweet cherry, fruit of the different quality were found. The most interesting genotypes have been grafted onto rootstocks with different intensity of growth (*Prunus avium*, *Prunus mahaleb* L. and 'Giesela 5'). Some of selected cherry genotypes can be used for commercial growing after tests, while some of them can be used only for collection of genetic resources.

Acknowledgement. This work was accomplished with the support of project no. APVV-0174-12 the Agency for Research and Development (APVV) of Slovak Republic and by COST FA1104 project.

Keywords: genotypes, evaluation, *Prunus avium*, variability