SUSTAINABLE UTILISATION OF PLANT GENETIC RESOURCES FOR AGRICULTURE AND FOOD

BOOK OF ABSTRACTS

International scientific conference 18 - 20 October 2016 **Piešťany** Slovak Republic



















NATIONAL AGRICULTURAL AND FOOD CENTRE RESEARCH INSTITUTE OF

National Agricultural and Foond Centre - Research Institute of Plant Production

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FRUIT QUALITY OF SOME LOCAL APPLE CULTIVARS, DERIVED FROM GENE BANK OF RESEARCH INSTITUTE OF HORTICULTURE, POLAND

Dorota E. Kruczyńska, Krzysztof P. Rutkowski, Aneta Matulska and Mariusz Chojnowski

Research Institute of Horticulture, Skierniewice, Poland

In 2015 at the Pomological Orchard (belongs to Research Institute of Horticulture in Skierniewice, Poland) apple fruits of 36 cultivars (13 summer and 23 autumn-winter), derived from gene bank of Research Institute of Horticulture were harvested. After harvest fruit weight, percentage of blush, internal ethylene concentration, starch index, total soluble solids content, titratable acidity and fruit firmness were measured. The quality parameters are cultivar depended and varied greatly.

Among summer cultivars the lowest titratable acidity (0.4%) was found for 'Korbasowki' and the highest (1.2%) for 'Oliwka Czerwona'. The total soluble solids content for those cultivars varied from 'Oliwka Zolta' (9.7%) to 'Profesor E. Jankowski' (13.9%). 'Kardynalskie Plomieniste' had the highest percentage of blush (ca 75%) and produced the biggest fruits (ca 250 g).

Among autumn-winter cultivars the lowest titratable acidity (0.4%) was found for 'Sztetyna' and the highest (1.4%) for 'Boiken'. Fruits of 'Matwilowka' cv characterized the lowest total soluble solids content (10.0%) in contrast to 'Kronselska' (15.0%). Fruit weight for those cultivars varied from ca 60 g ('Koksa Guzik') to more than 300 g for 'Sztetyna Zielona'.

Key words: Malus, fruit genetic resources, local cultivars, fruit quality

Acknowledgement. This work was performed in the frame of multiannual programme IHAR/IO (2015-2020), financed by the Polish Ministry of Agriculture and Rural Development.