SOIURI NOI DE CIRES CREATE LA STATIUNEA DE CERCETARE - DEZVOLTARE PENTRU POMICULTURA BISTRITA
NEW SWEET CHERRY VARIETIES CREATED AT THE FRUIT RESEARCH AND DEVELOPMENT STATION BISTRITA
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Abstract

Obtaining new sweet cherry varieties with high quality fruits, different ripening periods, disease resistance, which turn to account the maximum of the pedoclimatic conditions of the Transylvania area it’s one of the main concerns of the breeders from Fruit Research and Development Station Bistrita. In Romania similar studies have been made especially at ICDP Pitesti - Maracineni and at SCDP Iasi. In order to obtain new sweet cherry varieties which satisfy the current demands of the consumers and growers, in the last five years were studied at SCDP Bistrita ten sweet cherry hybrids with early and middle ripening (BN 2/224, BN 12/12, BN 1/1, BN 3/112, BN 2/66, BN 13/6, BN 18/24, BN 14/83, BN 18/6, BN 2/158) and four hybrids with late ripening (BN 14/148, BN 3/5 M2, BN 14/92, BN 3/29). All these hybrids showed interest for selection especially in terms of productivity and fruit quality. The study of the biologic material was made according to the usual methodology for field trial. Among the 14 hybrids studied two were distinguished through high quality of fruits, very good yield and good resistance to stress factors and in 2009 they were homologated as Gloria (BN 2/158) and Ivona (BN 3/29). Gloria (Boambe de Cotnari x Van) has middle ripening, red bigaroon fruits with big size (8.0 g), an average of 18.2 % dry matter and very high yield (25.0 kg/tree). Ivona (Hedelfinger x Van) has late ripening, pink bigaroon fruits with middle size (6.0 g), high yield (22.0 kg/tree) and an average of 15.8 % dry matter. Both varieties have good tolerance for Monilinia laxa and for Coccomyces hiemalis.

Keywords: new varieties, harvest maturity, productivity, fruit quality
Cuvinte cheie: soiuri noi, maturitate de recoltare, productivitate, calitate a fructelor

1. Introduction

The Romanian sweet cherry assortment was improved during the last decades and the Fruit Research and Development Station Bistrita had a significant contribution. Obtaining new sweet cherry varieties, with high quality fruits, different ripening periods, disease resistance and which turn to account the maximum of the existing pedoclimatic conditions it’s one of the main objectives of the breeders from SCDP Bistrita.

Similarly researches have been made and are still made at RIFG Pitesti-Maracineni (Budan et al., 1997) and SCDP Iasi (Istrate et al., 2008).

In order to improve the sweet cherry it’s important to create a very large assortment with different ripening periods, considering that the sweet cherry consumption period it’s relatively reduced.

The sweet cherry varieties recently obtained at SCDP Bistrita have medium-late and late maturity contributing to the prolongation of the consumption period.

2. Material and methods

The studies of the hybrid biologic material have been made in the field trial with sweet cherry hybrids, planted in 1996. The plot was placed in the experimental area of the Genetics and Plant Improvement laboratory.

In the experience it was studied the behavior during 2004-2008 of two promising sweet cherry hybrids, homologated as new varieties in 2009: Gloria (Boambe de Cotnari x Van) and Ivona (Hedelfinger x Van).

The observation and determination were made according to the usual methodology for field trial (the beginning and the end of the blooming harvest maturity), vigor of trees the type of bearing formation, quantity and quality of production.

The technology used in field was the one recommended in the commercial production.
3. Results and discussions

**Gloria** is the result of the crossing between the varieties Boambe de Cotnari and Van. The tree has medium vigor and medium ramification. The one year branch is medium long and thick. It bears on long fruit branches and may bouquets. The blooming period is medium, the best pollinators are the varieties Boambe de Cotnari and Van. Bearing begins after 4-5 years from planting. The fruit is big (8 g), kidney shaped, dark red colored, shiny, with thick and crack resistant skin.

The pulp is pink colored, very firm, juicy, with sweet-sour taste, stone–adherent. The stone is medium size and it represents almost 4% from the fruit weight. The fruit contains 16.2 % dry mater, 6.68 mg vitamin C / 100 g fresh fruit, 10% total sugar and 0.38% acidity. The harvest maturity it’s in the third decade of June, sometimes with prolongation till the first decade of July. The fruits have very good quality, entering the bigaroon group and they are recommended for fresh consumption and industrial preparation. The yield it’s 25 kg / tree in the eight year after planting.

It has good tolerance for *Monilinia laxa* and *Coccomyces hiemalis*. It is recommended for intensive orchards.

**Ivona** it’s the result of the crossing between the varieties Hedelfinger and Van. The tree has medium vigour and medium ramification. The one year branch is medium long and thick. It bears on May bouquets. The blooming period is late; the best pollinators are the varieties Stella, Donissen, Germesdorf and Jubileu. The bearing begins relatively early. The fruit is medium size (6 g), heart shaped. with red-orange shiny colour. with medium-thick and crack resistant skin. The pulp is yellow. firm. crispy and juicy. with sweet-sour taste and stone–adherent. The stone it’s small representing 3.66% from the fruit weight. The fruit contains 15.8 % dry mater. 4.75 mg vitamin C / 100 g fresh fruit. 8.07 % total sugar and acidity 0.53%.

The harvest maturity it’s in the last decade of June. The fruits are recommended for fresh consumption and for industrial preparation. The yield it’s 22 kg/ tree in the eight year after planting.

It has good tolerance for *Monilinia laxa* and *Coccomyces hiemalis*. It is recommended for intensive orchards.

4. Conclusions

There were created and homologated two new sweet-cherry varieties: Gloria and Ivona. These new varieties have high yield, high quality fruits and are destined for fresh consumption and industrial processing.

The varieties have good tolerance for *Monilinia laxa* and *Coccomyces hiemalis*. It is recommended for intensive orchards.

5. References

Tables and figures

Gloria cv.

Ivona cv.

Ivona cv.