PROMISING BIRD CHERRY CULTIVARS DEVELOPED AT THE CENTRAL SIBERIAN BOTANICAL GARDEN

Description

Bird cherry has never been grown industrially elsewhere in the world, though its fruits are very rich in biologically active substances and are very good for making jams, pies, and cakes. For the first time in the history of the world horticulture seven high-productive bird cherry cultivars have been developed at the Central Siberian Botanical Garden SB RAS.

Cultivar “Pamyati Salamatova”

The cultivar is a cross between Padus virginiana and Padus avium. It has been released for commercial growing in West Siberia. The tree is large with medium-dense drooping crown. The cultivar is highly winterhardy and relatively resistant to pests and diseases. Fructification starts at the age of 3-4. The cultivar is high-productive, with average production rate of 160 centner/ha. The fruits are black, when totally ripe, 0.9-1 g. Content: 33% of dry matter, 16% of sugars, 1.25% of pectins, 0.17% of carotenes, and 10.4% of vitamin C. The fruit flesh is juicy with sour-sweet taste. Fruits ripen in early August. They are used raw and preserved (compotes, bird cherry flour, etc.).

Cultivar “Cherniy Blesk”

The cultivar is an apomictic seedling of the cultivar “Pamyati Salamatova” developed for commercial growing in West Siberia: large tree with medium-dense pyramidal crown; highly winterhardy, relatively resistant to pests and diseases. Fructification starts at the age of 3-4. The cultivar is high-productive: 140 centner/ha on the average. The 0.8-0.9 g fruits are black. Content: 37% of dry matter, 9.7% of sugars, 1% of pectins, 0.15% of carotenes, and 9.3% of vitamin C. Fruit flesh is juicy, sour-sweet tasting. Fruits ripen in early August. They are used both raw and preserved (compotes, bird cherry flour, etc.).

Cultivar “Plotnokistnaya”
The cultivar is an apomictic seedling of the cultivar “Pamyati Salamatova” developed for commercial growing in West Siberia: small tree with open crown; highly winterhardy, relatively resistant to pests and diseases. Fructification starts at the age of 3-4. Average production rate is 110 centner/ha. Fruits are black when totally ripe, 0.6-0.7 g; content: 24 % of dry matter, 13.3 % of sugars, 0.9 % of pectins, and 12.4 % of vitamin C. Fruit flesh is juicy, sour-sweet tasting. Fruits ripen in late July. They are used both raw and preserved (compotes, bird cherry flour, etc).

Technical appraisal and economic benefits
All the above cultivars are highly winterhardy, yielding, begin fruiting at early age, fruits are rich in vitamins. The cultivars are promising for commercial growing as well as for further breeding.

Application areas
Horticulture, food industry.

Development stage
Over the last 2 years described cultivars have been planted in the regions with extreme climate conditions: Tyumen, Tomsk, and Kemerovo Oblasts. Negotiations are being held on the testing conditions for the cultivars in Northern China. Testing of the cultivars in the mountainous area of Yunnan Province (China) is underway.

Patent situation
Authors’ certificates (1995 and 1999).

Commercial offers
Contract for production and supply of plant material (saplings); contract for further research and development of new cultivars; services in cultivar testing.

Estimated Cost
8 US$ per sappling.

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