

TYPES OF FOREST FRUIT CAPITABLE IN THE FOOD INDUSTRY

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ABSTRACT: This paper shows the main berries and how these can be used in the food industry. The main berries used in the food industry are: strawberries, apples, curases, raspberries end blackberries.

KEY WORDS: berries, raspberries, blackberries.

1. INTRODUCTION

The harvesting of fruit and seeds of trees and shrubs shall be carried out at the time of their baking. Baking is the phenomenon of passage of seeds to physiological maturity. Apart from physiological maturity, the maturity of consumption is distinguished, when fruits acquire pleasant taste qualities.

The correct determination of the moment of the maturability of harvesting influences the quality of fruit and their preservation. Fruits collected before they reach consumption maturity are sour, strong, slightly aromatic and preserved, and those that remain on the trees later become luscious, blacken and spoil.

The harvest time is marked by the degree of colouring of each species, the strength of the pulp, the size of the fruit, the release of the characteristic aroma, the ease with which it is detached and the beginning of the fall of some fruit.

The action to redeem forest fruits begins in spring with:

- recognition of the land, with the inventory of the fruit bases for determining the production potential;
- flowering check, with determination of the degree and intensity of flowering;

- checking the fruit binding, with the determination of the percentage of binding;
- approximate estimation of fruit production;
- establishing fruit collection points from gatherers;
- preparation of packaging by species, quantities and destination;
- arranging collection points;
- hiring seasonal staff for collection points;
- setting the starting moment of the collection.

Harvesting should be carried out in a dry time, in the morning after the dew disappears, that the fruit is not moist, because it is heating up, it breaks down and it is more attached in the packaging and thus it is terened. The optimum harvest time is in weather with sun, between which 8-12 and 15-20. The collected fruit must arrive on the same day at collection points.

The method of harvesting depends on the kind of fruit and their destination. Some are picking by hand from trees or on the ground, others by shaking.

2. TYPES OF BERRIES

Bitter cherries, *Cerasus avium* tree fruit – bird cherry, Hawthorn cherry, are globulous with a diameter of up to 10 mm, dark red to vindation and taste sweet-bitterness. It is processed in natural and alcoholized juices, sweetness, syrup, fermentation products (brandy, called chirș), etc.

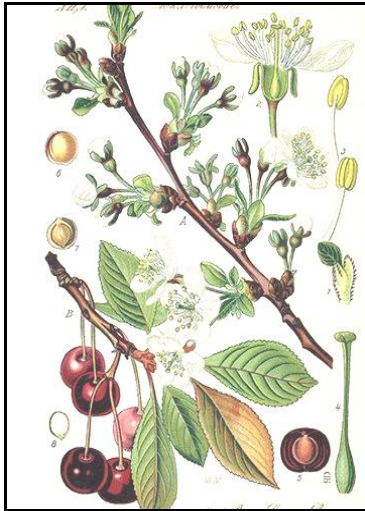


Figure 1. Bitter cherries

Blackberries, the fruit of the *Rubus hirtus* shrubs are Rugi, respectively *Rubus caesius* – Blackberries de plain, are globulous polydrupe, fleshy with sweet-sour taste, with sizes like raspberries, glossy black to the forest and black-brown, covered with A waxed layer to the plain mural. The berries can be processed like raspberries.



Figure 2. Blackberries

Strawberries, the fruit of the arbulous *Fragaria Vesca* – The forest *Fragul*, are gem – semisferous, Polyachene fleshy bacials with a diameter of 5 – 10 mm and the length up to 15 mm, red – open to red – closed on the outside and the white or white-pink core. Have pleasant sweet taste and a special flavor. It is consumed fresh or processed in: sweetness, syrup, sherbet, compot, natural or concentrated juice, fermentation products, medicinal teas, etc.



Figure 3. Strawberries

Raspberry, the fruit of *Rubus idaeus*-raspberry, are red polydrupe, rarely yellow, with diameters of 8-15 mm, very succulent, with sweet-sour taste and very pleasant aroma. The areas of use know the most varied forms, such as: Fresh fruit, in the preparation of natural juices, concentrated, alcoholized, compotes, sweetness, syrup, jam, sherbet, wines and liqueurs, medicinal teas, etc.



Figure 4. Raspberry

Black currants, the fruit of the *Ribes nigrum* arbust – Black currant are black spherical bneedles with a diameter of 5 – 9 mm, arranged in cogs, with sweet-sour taste, with characteristic flavor. Due to the rich content of biocatalitic trophins, especially vitamin C and mineral salts, it is processed in many products, such as: sweetness, natural juices, paste, wine, brandy, liqueur, syrups, medicinal extracts.

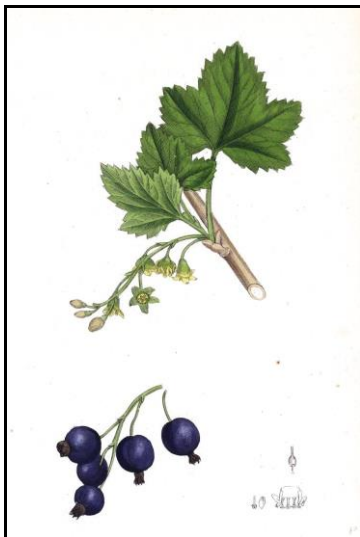


Figure 5. Black currants

3. HARNESSING FOREST FRUIT IN THE FORM OF LEGS

The pulpation of berries (sulfitation) consists in the introduction into appropriate

packaging of clean and sorted fruits, over which the preservant is poured.

Pulpation of Raspberries. Of the berries, raspberries are best for pulpation. It is recommended that the actual pulpation take place within 8 hours of picking.

In a beech barrel of 120 liters pour 1 kg sulphurous acid with a concentration of 4%. Then insert a layer of raspberries in thickness of about 1/3 – 1/4 from the height of the barrel, over which sprinkle 1 kg sulphurous acid, and so on, the barrel thus fills completely in 3 or 4 rounds, then permanently clogged and weighed to establish the sing and the necessary preservant. The remainder of the conservatory is poured through the vran, bearing in mind that for 100 kg of fruit, 5 kg of preservative with a concentration of 4% is required.

After filling and clogging, seal the barrel vrana with a new wooden stopper, waxed and well beaten. Then roll the barrel, so that the conservative solution envelop all the fruits. The defective sulfitation of raspberries can cause the formation of unparable cocoloes of the preservative, which constitutes a permanent fermentation factor. This is why it is recommended to fill the barrel in the innings and not suddenly.

Do not allow the barrels to be kept under the open skies in the sun and placed directly on the ground. The maximum permissible temperature in the storage places is 20⁰C.

Well-pulsed raspberry, retains its aroma and characteristic taste for 2 years.

The preparation of BlackBerry and Fragi pulses is done under identical conditions as for raspberries.

The preparation of blueberry and cranberry powders is performed taking into account that:

- Pulpation should be made not later than 12 hours after harvesting;
- Selection and sorting shall be chosen only healthy, well-baked fruits, without being stirreed and of a single quality;
- The capacity of barrels is 120 or 200 litres;

- The concentration of sulphuric acid 2% and the proportion of 10 kg preservative solution to 100 kg of fruit;
- Pulpation operation and then storing barrels with legs is done under the same conditions as in raspberries;

The preparation of the Horn fruits is performed taking into account that:

- Pulpation to be made no later than 24 hours after harvesting;
- The fruit is washed, then selected and sorted, choosing only healthy fruits with a normal baking stage, not accepting green horns or riots;
- Barrels of 200 litres are used, because the fruit is strong;
- The preservative must have a concentration of 2% and shall be used for 10 kg at 100 kg fruit;

4. HARNESSING BERRIES IN THE FORM OF JUICES

The preservation of fresh juices shall be made exclusively in oak barrels with a capacity of 500 litres, not waxed.

The preservative used is sulphurous acid in a concentration of 6% (about 60g SO₂ per litre of water). The preservative will be added gradually, doing the following:

An oak barrel with a capacity of 200 liters is used, which is located near the storage barrel. The small barrel will be graduated from 50 to 50 kg by marked well visible. The ready-to-canned juice is poured into this buffer barrel, up to the 50 kg graduation, add the necessary amount of sulphur dioxide solution to 6% concentration and mix well with a wooden shovel.

This process is repeated until the buffer barrel is full. From the buffer barrel the juice is poured into the large barrel, repeating the operation until its filling. After filling, attach the vrana with a well-beaten wooden stopper, then store it in covered and well-ventilated places at a temperature of 15-20°C.

In most cases, the preservative juices with sulphur dioxide, are clarified in the course of 10-14 days by the yeast. It is

necessary that the barrels are checked daily, and if it is found that the juice is clear, it is fired from the yeast.

5. CONCLUSIONS

1. The harvesting of fruit and seeds of trees and shrubs shall be carried out at the time of their baking.
2. The method of harvesting depends on the kind of fruit and their destination.
3. In juicy and fragile fruits, the placing in non-enamelled metal buckets is forbidden, since organic acids attack metal and the fruit is blacked.
4. Of berries, raspberries are best for pulpation.

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