OBLACHINSKA SOUR CHERRY AS POTENTIAL DWARFING ROOTSTOCK FOR SWEET CHERRY

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Production of sweet cherry in Macedonia

Total production from 2005 to 2011 is shown for different regions of Macedonia.
Vigorous sweet cherry trees are still common in Macedonian fruit orchards;

Seedlings of *Prunus mahaleb* L. and *P. avium* L. are the major rootstocks used for sweet cherry production;

In the last year’s farmers in Macedonia have shown increased interest for new high density cherry orchards established on dwarfing rootstock;

Mainly dwarfing rootstock that are used in new high density orchards are Gisela 5, Gisela 6 and semi dwarf MaxMa 14,

Some of these rootstock shown difficulties in adaptation of the specific agro ecological conditions in Macedonia.

Other critical point of usage of these rootstock is very high prices of planting material.
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Some of our previous observations shown possibilities of using oblachinska sour cherry variety as rootstock for some sweet cherries varieties. This sour cherry variety is well adapted in our agroecological conditions. It is low vigorous and very easy to propagation by suckers.
The aim of this study was to evaluate possibilities of usage the oblachinska sour cherry variety as a rootstock for sweet cherry production.
• 15 sweet cherry varieties including 4 autochthonous were grafted on vegetative rootstock oblachinska and early compatibility in nursery observed.

• Produced planting material of Bing, Van and Burlat was used to establish experimental orchard in Lakavica – Stip area (eastern part of Macedonia).

• Planting distance was 4x2.5 m.

• As a control was used the same varieties grafted on mahaleb and planted on density 4.5 x 4 m.

• Slender spindel on oblachinska rootstock and Spanish bush on mahaleb were used as a training systems.
Following parameters were evaluated

- Vegetative growth (total length of the branches and diameter of the trunk);
- Early precocity trough formation of may bouquets;
<table>
<thead>
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<th>Variety</th>
<th>Rootstock</th>
<th>Diameter, mm</th>
<th>Bearing potential</th>
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<td></td>
<td></td>
<td>rootstock</td>
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<tr>
<td>Bing</td>
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<td>40.6</td>
<td>41.3</td>
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<tr>
<td></td>
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<td>Van</td>
<td>oblachinska</td>
<td>42.0</td>
<td>44.2</td>
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<tr>
<td></td>
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<td>oblachinska</td>
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<tr>
<td></td>
<td>mahaleb</td>
<td>49.5</td>
<td>51.1</td>
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</tbody>
</table>
Rootstocks

![Graph showing rootstock characteristics for Oblachinska and Mahaleb varieties.](image)

- **Rootstock Diameter**
  - Oblachinska: 43.2
  - Mahaleb: 48.6

- **Scion Diameter**
  - Oblachinska: 45.4
  - Mahaleb: 46.8

- **May Bouquet Bearing Potential**
  - Oblachinska: 26.5
  - Mahaleb: 8.7

- **Mixed Branches**
  - Oblachinska: 3.2
  - Mahaleb: 0.7
Burlat

mahaleb

oblachinska