

## Performance of sweet cherry 'Regina' on nine clonal rootstocks

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In field experiment, sweet cherry 'Regina' grafted on rootstocks of German selection: 'Gisela 5', 'Gisela 3', 'Gisela 6', 'Piku 1', 'Piku 3', 'Piku 4', as well as those on the Italian rootstock 'Victor', and the Russian rootstocks 'LC-52' and 'VSL 1' were investigated during ten consecutive years. The trees were planted in a grey-brown podzolic soil at a spacing of 4.5 × 2.5 m, in the spring of 2005. Vogel Central Leader system was applied in the orchard and trees were drip irrigated during dry weather in vegetation seasons.

The data collected included tree vigour (expressed as trunk cross-sectional area), yield, fruit weight, content of soluble solids in fruit and tree tendency to root suckers.

The results revealed that the most dwarfing among the rootstocks tested was 'Gisela 3' followed by 'Piku 1', 'Gisela 5', 'LC-52', 'Victor', 'VSL 1', 'Gisela 6', and 'Piku 4'. 'Piku 3' proved to be the most vigorous rootstock in this trial. In terms of cumulative yield 'Gisela 5' performed as the most productive rootstock while 'Piku 3' was the lowest. No significant differences were found in fruit weight between rootstock types. Fruit picked from trees grafted on 'Gisela 5' had the highest content of soluble solids, and fruit of trees on 'Piku 1', 'Piku 3' and 'Victor' — the lowest. Among rootstocks tested 'VSL 1' manifested excessive root suckering tendency.

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