

GROWTH OF FOUR-YEAR-OLD 'SYLVIA' AND 'KARINA' SWEET CHERRY TREES GRAFTED ON FIVE CLONAL ROOTSTOCKS

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SUMMARY

In a field experiment, 'Sylvia' and 'Karina' sweet cherry trees grafted on rootstocks of German selection: 'GiSela 5', 'GiSela 3', 'Piku 4' and 'Weiroot 72' were investigated. Trees on 'F 12/1' were regarded as the control combination. The trees were planted in a grey-brown podzolic soil in the spring of 2004, at a spacing of 5 x 2.75 m, at the Experimental Orchard in Dabrowice near Skierniewice (central part of Poland). The experimental plots were drip irrigated. The data collected in the fourth year after planting included tree vigour (expressed as trunk cross-sectional area), and the number and length of one-year-old shoots.

The measurements of trunk thickness revealed that the most dwarfing among the five rootstocks tested was 'GiSela 3'. 'F 12/1' proved to be the most vigorous rootstock in this trial. In terms of growth, 'GiSela 5' and 'Weiroot 72' reached an intermediate level between 'GiSela 3' and 'F 12/1'. Trees grafted on 'Piku 4' had very similar vigour to those on 'F 12/1'.

The mean length of one-year-old shoots on the sweet cherry trees were also affected by the rootstock used. The trees of both cultivars on 'F 12/1' had the longest shoots while those on 'GiSela 3' – the shortest.

Generally, independently of rootstock type, trees of 'Karina' cultivar were more vigorous than 'Silvia' ones.