

THE EFFECT OF AGROTECHNICAL PROCEDURES ON THE GROWTH AND PRODUCTIVITY OF DIFFERENT PLUM'S VARIETY-ROOTSTOCK COMBINATIONS

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The establishment of plum plantations, their productivity largely depends on the variety-rootstock combination. In the Republic of Moldova, the main rootstock used and approved for plum cultivation is the Cherry Plum. Plum trees grafted on the Cherry Plum have an average and above-average growth vigor. The root system of the trees is distinguished by a high adaptability to the climatic conditions of Moldova, good resistance to diseases and pests, good adaptability to most types of soil from the Republic of Moldova.

The intensive plum orchard located on an area of 3 ha, the private property of SRL „AMV-Grape” from the Vadul lui Isac village, Cahul district, was planted respecting the planting distance of 5.0 x 3.0 m – 667 trees/ha. The Super Prezident variety under study is a new variety, recently approved, grafted on two rootstocks – Cherry Plum and Cubani-86. The crown has the form of a spindle. The first variant - the Super Prezident variety grafted on the Cherry Plum seed rootstock approved in the Republic of Moldova – control sample. The second variant – the Super Prezident variety grafted on the Cubani-86 vegetative rootstock. The number of repetitions for each variant is 4. The number of trees in a repetition is about 6-8. Placement of replicates - randomized. The research was carried out under field and laboratory conditions.

The trunk thickness of the Super Prezident plum trees studied, regardless of the rootstock, increased constantly, recording an increase of 3.2–4.4 cm in the 4th and 6th years of vegetation. The height of the Super Prezident variety plum trees at the end of the 6th year of vegetation varies from 3.1 m for the trees grafted on Cherry Plum to 3.2 m for the trees grafted on the Cubani-86 rootstock. It was established that the fruit yield per tree at the end of the 4th year of vegetation at the Super Prezident plum tree on Cubani-86 rootstock was 7.43 kg, and in the one on Cherry Plum- 2.42 kg, in the 5th year after planting - 11.1 and 8.8 kg, and in the 6th year after planting - 24.00 and 11.40 kg, respectively.

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