

STRUCTURE OF THE VEGETATIVE ASSEMBLY OF APPLE TREES ACCORDING TO AGE AND THE BIOLOGICAL CHARACTERISTICS OF THE VARIETY

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This work refers to the study of the structure of the vegetative ensemble of apple trees organized in the experimental orchards of SRL „Elit Fruct” and SRL „Prodcar”. The apple varieties Granny Smith, Gala Delicious, Gala Buckeye Simmons, Golden Delicious, Golden Delicious Reinders, Red Velox and Fuji Kiku, grafted on M9, intended for the establishment of high-density plantations, cultivated in the conditions of the central area of the Republic of Moldova. The vegetative growth of the trees in the apple varieties taken in the study is expressed, quantitatively, by the volume of vegetative growth accumulated annually by the size of the height and width of the crown of the trees, by the size of the surface and volume of the crown, as well as the level of soil coverage of the whole vegetative growth of trees. The vegetative growth of the trees in the apple varieties taken in the study is expressed, quantitatively, by the volume of vegetative growth accumulated annually by the size of the height and width of the crown of the trees, by the size of the surface and volume of the crown, as well as the level of soil coverage of the whole vegetative growth of trees. The height of the crown, in the studied varieties, was 256-282 cm in the 3rd year after planting. The variety Red Velox, of weak vigor, recorded the lowest value (256 cm) of crown height. The width of the crown at the base recorded maximum values (105-124 cm) admissible in relation to the distance of planting trees in a row (80 cm). The width of the crown at the top depends on the growth vigor of the variety and varied between 25 cm, in the variety Red Velox, and 65 cm, in the variety Granny Smith (control) of high vigor. From the data obtained regarding the height of the trees, it follows that the trees of the Red Velox variety have the lowest height both in 2017 (272 cm) and in 2019 (271 cm). The medium to high vigor varieties (Gala Buckeye Simmons, Granny Smith (witness) and Golden Delicious Reinders) exceed the height of the less vigorous trees (Red Velox) by 50-100 cm. The volume of the crown varies depending on the size of the trees, and these are influenced by the vigor of the variety. The studied varieties form a continuous crown in the direction of the row, which allows receiving no more than 43.8% of solar energy.

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