

Study of the dependencies between more important pomological indicators in Cornel-Tree genotypes

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1 ABSTRACT

The object of this study is nine genotypes of *Cornus mas* L.: Kazanlashki pear-shaped, Pancharevski cylindrical, Shumenski oblong, Yaltenski, Vratsa-Castel Sandryan, Atkov cornel-tree, Tsarigradski yellow and Yellow Hadjiiski, distributed in the territory of Bulgaria. The objective of the study is the analysis of the impacts between more important pomological indicators and their presentation through linear models. The impacts between weight, length and width of the fruit, length of the stem, weight, length and width of the stone more important pomological indicators were researched by applying correlation analysis. The proven dependencies were evaluated and modelled by linear regression models presenting the complex effect of the tested signs on the weight of the fruit. The length of the fruit (0.907), its width (0.746), and the length of the stem (0.605), the stone weight (0.755), its length (0.787) and its width (0.605) had positive effect on fruit weight. After a regression equation was worked out, it was found that 90% of the dispersion of the dependent variable could be explained by the alteration of the irrigation, soil cultivation, pruning, which are not the subject of this study.
