

Influence of the Fruit's Position on the Plant over the Seeds Quality Indices of Peppers (*Capsicum annuum L.*)

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SUMMARY

Starting from the premise that between the seeds' quality traits and the position/order of the fruits' formation on the mother plant there are certain connections (Demir, 1991; Ozlem and Eser, 2007), the work aims at assessing the seeds' quality parameters depending on the order of the formation on the mother plant, at two genotypes of sweet peppers (Asteroid type and Cornel type). In order to emphasize some interdependences, as well as to establish some technological solutions of intervention aiming at increasing the seeds' quality, the biological material represented by the seed from the two types of sweet pepper, was studied in comparative plots for evaluation, located following the layered randomized blocks method, in four repetitions. To this end, there were several biometric determinations made aiming at establishing the following indicators: the number of seeds from the fruit, the germinative faculty, the germinative energy. The assessment of the connections between the variables under study was achieved through synthetic numerical expressions, namely by: correlation coefficients, while the significance of the differences between the variants under study was achieved by using the Duncan test. The results obtained show the existence of certain distinctly significant negative correlations between the fruit's position on the plant and the seeds' main quality indices. Therefore, the differences between the number of seeds from the first fruit formed on the mother plant and the fruits from the higher positions, starting with the fruit from the third position (36 seeds at Asteroid type, and 28 seeds at Cornel type), are significant (P 5%). Depending on the order of the formation of the fruits on the plant, there were significant differences between the values of the main physiological indicators of the seeds' quality, both for the germinative faculty (FG) of the seeds (93.2% - FG of the seeds from the first fruit; 86.1% - FG of the seeds from the fruit formed in the third position), and for their germinative energy (84.6% - EG of the seeds from the first fruit; 78% - EG of the seeds from the fruit formed in the fourth position).

Keywords: pepper, fruit position, seed quality

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