

The Study of Some Green Pepper Lines (*Capsicum annuum* l. Var. *Grossum* Sendt) Tested in the Comparative Plots for Evaluation

Gicuta SBIRCIOG

Research and Development Institute for Vegetable and Flower Growing Vidra, 077185, Ilfov,
Romania; ralldom@yahoo.com

SUMMARY

The research works carried out at RDIVFG Vidra during the 2007-2008 period in the frame of program green pepper breeding. Five green pepper varieties (lines) which were developed in the frame of the Institute were studied in the comparative plots for their behaviour using as a control variety the cultivar Export. The variants were set up in randomized blocks placed in four replication and during the growing season several observations and determination were performed according to U.P.O.V. file (Nicolaie I.,1994).The germoplasm resources used in the frame of green pepper breeding process in order to obtain of this material consisted in native and /or local populations as well as varieties and hybrids brought from other countries. As breeding methods bulk positive selection yearly resumed in the valuable populations, intraspecific pollination among valuable varieties and lines followed by the pedigree selection and bulk positive selection yearly resumed in the advanced populations were used. (Sbirciog, 2003). By this study one could conclude that all the lines recorded absolute values which were higher for the early and total yield than the control variety Export , and on the other hand, the yield differences had a statistical significance. Regarding early crop, one could emphasize the line L12 which gave a yield of 75% from its whole yield (31.0 t/ha up to the 1-st of August , so it surpassing the check variety with 2 tone (29.5 t). Also, one could emphasize the variety Barsan having an early yield of 26.5 which means 90% from the total yield of the control variety Export. Regarding the total yield, one could emphasize the line L12 and the variety Barsan which gave a yield gain of 22.0 and 19.5 t respectively by the comparison with the control variety Export. Considering the shape and fruit colour one could render evident the line L250 and the variety Barsan having fruit of medium size (average weight 110g) characterized by light colours, well appreciated by consumers, of yellowish –white and yellowish green respectively. The line L12 having large fruit of 230 g in light green colour without pistil concavity is also remarkable. The differences of the yield among green pepper lines by the comparison with the variety Export, were computed statistically sure, they being characterized as very significant.

Keywords: pepper, lines, early yield, total yield.

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