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## **METHODS OF CREATING AND WAYS OF USING LINEAR MATERIALS OF MONOSEED FODDER BEET IN BREEDING FOR HETEROSIS**

It is given the urgency of selection improving of genotypes of fodder beet plants, currently necessary to create monosprouting varieties and hybrids with high yields of root crops, high solids content, carbohydrates and minerals. They should be plastic to growing conditions, rules of organic and mineral fertilizers, resistant to negative biotic and abiotic environmental factors.

The aim of our work was to evaluate the effectiveness of different methods (multiple individual family selection, moderate and severe forms of inbreeding) obtaining linear material of monosprouting fodder beet, development of principles of selection and parental components to forming highly monosprouting varieties and hybrids of this culture.

Researches are indicating that the selection of materials of monosprouting fodder beet, created by multiple individual and family selections, there was a slight decrease in weight of roots unchanged solids content. In linear materials is obtained by severe inbreeding, a decrease in mass of roots 6,6 – 14,3% of the original population. Much less depression on this basis was observed in material that obtained through the weakened forms of inbreeding (0,1 – 5,1%). Solids content, in general, was at the initial populations.

It is calculated the effects of general combining ability of each line at the appropriate features, rejected worst line, and based on the best – created test hybrids and synthetic population with a high level of productivity. At the level of productivity is resulting the hybrids of monosprouting fodder beet that far exceeded of mansprouting Umansky feed grade white 7. High levels of productivity is described as hybrids, created on the basis of materials that related multiple individual selections (FY-374/9 F1, FR-1117/2 F1), so and hybrids derived based on lines of varying depth inbreeding (FY-442/7 F1, FY-507/11 F1, FR-1110/7 F1, FY-471/14 F1, FR-1207/9 F1).

Thus, multiple individual and family selections and moderate forms of inbreeding are the effective methods to create the linear material of monosprouting fodder beet with different genetic structure. A requirement for the further working with these materials is to assess their combining ability and level of basic productivity. By appropriate selection of best components crossing the best monosprouting fodder beet hybrids are exceeding mansprouting grade-standard by the collection of solids in 5,7 – 15,0%.

**Key words:** monosprouting fodder beet, individual and family selection, inbreeding, yield, dry matter, heterosis.