Determinismul genetic al producţiei la mei (Panicum miliaceum l.)

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As a result of the direct diallele hybridization among seven different millet (Panicum miliaceum L.) genotypes, at the Agricultural Research Station, Podu-Iloaiei, there have been studied the means of transmission of the productivity characters to the offspring, the expression of hybrid vigour in the first generation, F1, as well as the effects of general and specific combining ability. The hybrid vigour had values between 17% and 23% at grain weight per plant, between 13% and 55% at grains yield per ha, beetween 0% and 21% at fodder yield and between 7% and 45% at protein yield per ha.
The variance analysis of general and specific combining ability for those characters and the ration between general combining ability and specific combining ability pointed out that additive genetic variance had a great contribution to the determination of fodder yield and seeds weight per plant. Tall Dawn, Minerva and Turghai varieties had the best general combining ability for seeds weight per plant, Minerva and Tall Dawn varieties varieties had the best general combining ability for grains yield per ha, Tall Dawn, Turghai varieties and Socodor-1 population for fodder yield and Tall Dawn and Minerva for protein yield. They could de successfully used for breeding those characters in millet.