



## Phenotypic and genetic variability in the number of caryopses on a panicle sprout in millet (*Panicum miliaceum* L.) under conditions of different cropping

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During 1994-1995, at the Agricultural Research Station of Podu-Iloaiei, the complete variability in the number of caryopses on a panicle sprout in millet (*Panicum miliaceum* L.) was studied. The mean values of the variation coefficient for the individual variability in 10 cultivars (during 1991-1993) were between 12% and 27% in main crop and between 14% and 26% in sequential crop. Within the species this coefficient had values between 25% and 27% in both cropping practices. The study of the genetic variability carried out during 1994-1995 in 7 parental genotypes and 21 hybrids, obtained by direct diallel cross, the variance analysis of diallel tables, graphic analysis of covariance and variance in hybrid ranges with one common parent, as well as the study of genetic parameters, showed that this trait was controlled both by gene additivity and dominance effects, the first ones being prevalent. The type partial dominance was signaled by the presence of 1.176 genes, which influenced significantly this trait, being very variable from one locus to another. The heredity coefficients, in narrow and broad sense, demonstrated that this character had a high transmission to the offspring. The number of caryopses on a panicle sprout in millet had an ambidirectional heredity, at which both dominant and recessive genes took part.