

Utilization of the breeding value in the improvement of reproductive traits in the mink

S u m m a r y

Evaluation of possibility of utilizing the estimates of minks' breeding value, during the females' choice to the reproduction herd was the aim of the conducted analyses. Reproduction evaluation was carried on 12 455 litters, born by 7228 herd females. Variance as well as co-variance components of litter size were by evaluated REML method, basing on the individual model, with respect to random effects: additive effect of animal, additive effect of animal's mother, effect of specific environment of animal, as well as permanent effects: effect of year of whelping, effect of mother's age and effect of whelping season. Breeding values of animals were estimated by the BLUP method. Estimated rank correlations between the female-origin litter size (the selection criterion), and their litter sizes were small and amounted to 0.10. Convergence of rank between the females' breeding value and their mothers' value amounted to about 0.7. Similar values between the breeding values of females and their fathers (0.76), were obtained. The high rank correlation (0.93) between females' genetic value and total value their parents was affirmed. Animals' choice to basic herd could be based on total breeding value of their parents.