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Variability of the colour of the white polar foxes during the postnatal period

S u m m a r y

The purpose of conducted study was to determine to which genetic group the white polar foxes kept on a Polish farms were belonging. The basis herd was surveyed every year as well as the young stock. The evaluation of the colour of cubs' furs (1122 individuals) was carried out twice a year - after birth and in a stage of full maturity of fur. Probability of having white cub in a litter was estimated by the variance analysis by least square method. In dependence of parental pair selection the considerable phenotypic variability of born offspring was affirmed. The change of mating direction contributed to appearance of different colour types of cubs in litters. In the national white foxes' population there are both homo- and heterozygotic individuals, with regard on shadow colour gene and recessive gene of white colour. The increasing possibility of occurrence of white-coloured foxes during the growth of winter fur, however, indicates that the considerable part of white foxes belongs to the brightest type of shadow kind.