Agricultural and Food Science - abstract

Vol. 16 (2007), No. 2, p. 136-146

PEURA, JUSSI, STRANDÉN, ISMO, MÄNTYSAARI, ESA A,

Genetic parameters for Finnish blue fox population: litter size, age at first insemination and pelt size

Keywords fertility, fur animals, genetic correlations, heritability, pelt size, variance components,

Abstract

Pelt size has increased rapidly in the Finnish blue fox population during the last decade. However, average number of pups per mated female has slightly decreased after the mid-1990's. In this study we estimated genetic parameters of litter size in the first two parturitions, age of female at first insemination, and pelt size with a linear multitrait animal model. Heritability of litter size in first and second parturition was 0.06 and 0.10, respectively. Heritability estimate for age at first insemination was 0.15 and for pelt size 0.29. Genetic correlation between pelt size and first litter size was –0.30, between first and second litter size 0.76, and between second litter size and age at first insemination 0.70. Thus, genetic correlation between fertility and pelt size was unfavorable.

Contact jussi.peura@faba.fi

[Full text] (PDF 553 kt)

Updated 2.10.2007.

Source: MTT's Publications database Afsf