

EFFECTS OF SYNTHETIC AMINO ACIDS ON MORPHOLOGICAL AND BIOCHEMICAL BLOOD PARAMETERS, AND ON HEALTH STATUS OF ARCTIC FOXES

Manfred O. Lorek¹, Areta Hartman¹, Andrzej Gugolek¹, Paulius Matusevičius²

¹ *Department of fur – bearing animal breeding, University of Warmia and Mazury in Olsztyn, 10–718 Olsztyn, Oczapowskiego 5, Poland*

² *Department of Animal Husbandry, Lithuania Veterinary Academy, Tilžės str. 18, LT–47181 Kaunas*

Summary. The effect of synthetic amino acids supplementation on morphological and biochemical blood parameters, and the general health status of Arctic foxes was investigated. The experiment comprised 120 Arctic foxes from weaning to slaughter, which were divided into 2 groups – control (I) and experimental (II). The control foxes were fed normal diet given to all animals in the farm. The foxes in experimental group were fed diet supplemented with synthetic amino acids: methionine, lysine and threonine, in the amount of 2 g of each amino acid per 100 g of total protein content in diet. Before slaughter blood samples from five randomly selected females in each group were collected for morphological and biochemical analysis. After slaughter five carcasses of males of each group were selected randomly for postmortem examinations.

The results of this experiment demonstrated no significant effect of synthetic amino acid supplementation on the morphological and biochemical parameters in blood and had no effect on the internal organs and alimentary tract segments examined.

Keywords: Arctic fox, synthetic amino acids, diet, blood, internal organs.