Effect of additional mineral nutrition on the level of the selected parameters of metabolic profile in blood of dairy cows from the southern Podlasie region

Summary

The two year research was carried out on 4 dairy farms (A, B, C, D) situated in the area of the southern Podlasie. The aim of the research was to evaluate the influence of the mineral mixture Bovifosfomag® on the parameters of the mineral metabolism of cows. Blood was four times collected from jugular vein of animals: 60 days before parturition (date of sampling - I), 10-14 days before parturition (II), after the first month of lactation (III) and after the second month of lactation (IV). The number of erythrocytes (RBC) and the concentration of haemoglobin (HB) were determined in whole blood samples with MS 9 analyzer. The concentration of glucose and total protein in cow blood serum was determined with Cormay plus analyzer. Also, enzymatic activity of aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (AP) and Y-glutamyltranspeptidase (GGT) was examined in blood serum of cows, using Cormay plus analyzer. The favourable effect of mineral mixture on shaping of analysed haematological, biochemical and enzymatic indicators was found, what confirms the appropriate application of the mixture.