Relationship between the genotype and the successive lactation and the somatic cell count in cow milk

**Summary**

The aim of the study was to evaluate the effect of the genotype and the successive lactation of the cows on the somatic cell count (SCC). The investigations were carried out on 236 crossbreds of Black-and-White x HF and 131 crossbreds of Red- and-White x HF. The genotype was identified from the breeding documentation i.e. heifer-cow cards. The somatic cell counts in the successive lactations was determined using milk control data. The SCC value was higher in milk of Red-and-White x HF than in Black-and-White x HF crossbreds. However the differences in SCC between compared genotypes (with different share of HF genes) were not statistically significant. Generally, SCC increased along with the successive lactation and this effect was statistically significant (P<0.05). No interaction was found between the genotype and the consecutive lactation. Concluding, the obtained results suggest that SCC can increase with the age of a cow while the HF blood share does not influence this trait.