

## INFLUENCE OF HERITABILITY ON BLACK-AND-WHITE COWS MILK QUALITY ACCORDING TO SOMATIC CELLS COUNT

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**Summary.** Since 2000 the year *INTERBULL* (International Bull Evaluation Service) has began to pursue international value comparison of sire breeding according to somatic cells count. Influence of genetic factors and possibilities of cow milk selection according to somatic cells count in black-and-white cattle herd have been determined in Lithuania for the first time. Somatic cells count in milk of 63.9 % investigated cows was determined not to exceed 200 th./ml, the cows proved to be healthy, their udders are rarely damaged by mastitis. According to milk procurement standing rule (SCC) 79 % of cows under examination belong to the extra and first-classes. Most sires according to daughters SCC belong to the ranks, where SCC lower than 400 th./ml. In black-and-white cattle herd determined a low heritability coefficient is determined ( $h^2 = 0.07$ ) however, it is enough for selection work. A low negative genetic correlation coefficient between cows yielding capacity and SCC ( $r_g = -0.07$ ) shows selection necessity according to the both traits.

**Keywords.** Somatic cells count (SCC), black-and-white cows, sire, breeding value, heritability coefficient ( $h^2$ ), genetic correlation coefficient ( $r_g$ ).