ANALYSIS OF PERMISSIBLE ERRORS FOR PRODUCTION INDICATORS OF MILK RECORDED COWS

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Summary. The accuracy of the productivity (milk, fat and protein contents) results for milk recorded cows depends not only on the chosen method of productivity recording but also on various factors peculiar to production conditions. The purpose of the present study was to determine statistically well-founded permissible standards for cow productivity recording errors with respect to control milking and their check-ups on Lithuanian dairy farms.

The study indicated that there were no statistical differences between cow productivity indicators during the control milking and 24 hours after it. This indicates that the accuracy of productivity evaluations was not affected by any zootecchnical or other subjective factors during the sample collection time. The resulting errors might have been only due to measuring equipment and the methods of milk composition analysis. When cow production is evaluated by At method, the additional error’s factors are coefficients of recounting and correcting functional multipliers.

Statistical data analysis indicated that error standards for milk production were 2,1 and 3,9 kg, fat content - 0,14 and 0,26 kg and protein content - 0,07 and 0,11 kg for, respectively, productivity control milking and the check-ups (A4 and At methods) on the next day after official cow productivity recordings.

Key words: cow productivity recordings, errors of productivity indicators, methods of productivity recordings.