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Factors affecting the quality and composition of raw milk delivered to a selected dairy cooperative in the southern Podlasie region

S u m m a r y

The aim of the investigations was to evaluate the quality of milk originating from the dairy cooperative in the southern Podlasie region. Data concerning freezing point, protein, fat, lactose content, somatic cells and total bacteria count in 36 806 samples were used in the study. The effect of delivery amount per year, month, season and year of production and milk recording in herd on milk composition and quality was examined. The average of somatic cell count (SCC), total bacteria count (TBC) in 1 ml of milk amounted to 34.2 and 173.4 thousand, respectively. Analysed material contained on average 3.29% of protein, 4.13% of fat and 4.66% of lactose. The means of milk quality and composition parameters were significantly ($P \leq 0.01$) differentiated by all the experimental factors. It was found that the highest hygienic quality was milk in autumn season

from deliverers in milk recording, producing over 50 000 l per year. On the other hand, the best cytological quality characterized the milk in spring season, originating from the smallest suppliers ($\leq 50\ 000$ l per year), being out of milk recording. As regards milk composition, the highest levels of protein, fat and lactose were achieved in winter season from leading milk producers in milk recording.