Changes in active acidity and specific weight of colostrum depending on the selected factors

Summary

Colostrum samples were collected over 10 successive milkings from 50 Polish Holstein-Friesian cows of Black-and-White variety in an experiment carried out on an individual farm in the Kujawsko-Pomorskie province. Cows were milked twice a day and a total of 500 samples were analysed. The effects of cow’s age (primipara and multipara), previous lactation yield (6000, 6001-7000, >7000 kg milk), calving season (I-III, IX-II) and dry period length (56, >56 days) on the active acidity and specific weight of colostrum were estimated. Acidity increased regularly with successive milkings and density decreased for successive samples. Lower-acidity colostrum was obtained from spring- and summer-calving cows and from cows that had lower yield in the previous lactation. Higher acidity was characteristic of the colostrum of primiparous and cows dried to 56 days before calving. Colostrum with higher specific weight was obtained from cows calving in the autumn and winter period, from multiparous compared to primiparous and from cows with a higher previous lactation yield.