

Anna Sawa, Wojciech Neja,
Mariusz Bogucki, Daria Repuszewska

Course of lactation in first calvers and older cows as related to milk yield

S u m m a r y

The course of lactation (index of lactation persistency $P_{2:1}$, index of lactation persistency WL , interval between calving and maximum milk yield, maximum yield at peak of lactation) were estimated based on test-day yields from 57 883 lactations of cows kept in the Pomerania and Kujawy regions in 1999-2003. Age (lactation number) caused significant differences in the milk yield and course of lactation, with the greatest differences found between first calvers and second-lactation cows. First calvers achieved significantly lower lactation yield and maximum yield, were the last to reach the peak of lactation, showed the highest lactation persistency, and their lactations were the longest. Of all the lactation parameters, the production level of cows at the peak of lactation had the strongest effect on lactation yield ($r=0.773^{**}$), with the highest increment in milk yield parallel to the increase in maximum yield found in first calvers. The later attainment of the production peak after 90 days of lactation, especially by first calvers, allowed them to achieve in full lactation the highest milk yield. The proportion of first calvers that achieved the lactation peak after 90 days of age was over twice that of older cows. Cows with the highest lactation persistency ($P_{2:1} >100\%$, $WL <30\%$) achieved higher lactation yields. The proportion of first calvers with the highest lactation persistency was 2-4 times that of older cows.