

PRELIMINARY ANALYSIS OF FERTILITY TRAITS IN POLISH LOWLAND CATTLE

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A total of 5,496 calvings of *Black and White* and *Red and White* breeds was recorded in 7 Pedigree Herds. The preliminary description of data covers some of the fertility traits, calf mortality and dystocia. Birth weight and gestation length were also analysed. Overall twinning rate was 2.3 p. 100. The number of inseminations per calving was 1.91 for *Black and White* cows and 2.07 for *Red and White* cows. Difficult calvings were more frequent in heifers: 13 p. 100 in *Black and White* heifers, 21 p. 100 in *Red and White* heifers, and about 3 p. 100 in cow sof both breeds. Still-birth rate was higher in heifers of both breeds, 15 and 13.6 p. 100, and much lower in cows, 7.6 and 6.2 p. 100, respectively. *Red and White* calves, and male calves of both breeds, were heavier. A longer gestation period was associated with higher birth weight.

REPRODUCTIVE PERFORMANCE OF DAIRY COWS FROM PARTURITION TO CONCEPTION

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The present study reports some preliminary findings on post-partum reproductive performance of clinically normal cows.

Data have been collected from cows representing *Swedish Red and White* (SRB), *Swedish Friesian* (SLB), *Swedish Jersey* (SJB) and crossbred SLB × SRB.

A total of 64 cows were included in the material, all in either first, second or third lactation.

In the present study it was found that the interval from 1st to 2nd ovulation was significantly longer for the primiparous cows. Approximately 30 p. 100 of all cows in both parity groups showed weak to moderate external signs of oestrus at 1st ovulation.

These cows ovulated significantly later after calving than those ovulating without external signs of heat.

Prostaglandin release after parturition varied widely among cows, but declined continuously with time. There was a tendency towards higher levels in the primiparous cows.

Unsuccessful inseminations relative to the estimated day of ovulation indicated that a large number of the unsuccessful inseminations must be attributed to factors other than timing of insemination in relation to ovulation.

UMWELTEINFLÜSSE AN ZWISCHENKALBEZEIT UND SELEKTIONSMÖGLICHKEIT

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Die Analyse von 8547 Standardlaktationen der *Schwarzbuntrasse* in Slowenine zeigt, dass die Kalbesaison, Laktationszahl und Herde die Zwischenkalbezeit (ZKZ), signifikant beeinflussen. Die Heritabilität für ZKZ und Serviceperiode (SP) ist um 10 p. 100 geschätzt. Eine selection der Besamungsbullen aufgrund durchschnittlichen korrigierter ZKZ oder SP ist bei einer umfangreichen Töchterzahl möglich.