

11,057 animals in total were collected. Data collection concerning housing and milking practices was performed using a questionnaire. Somatic cell count (SCC) was measured directly from the milk tank (coulter counter, DeLaval) of each farm. Farms were categorized according to the intensiveness of husbandry as: intensive, (indoor, milking parlour) extending (outdoor grazing, hand –milked or mobile milking machine) and semi-intensive (combination of the previous criteria). Mean SCC was not different ($P>0.05$) between farms regardless the method of housing. Interaction between farm SCC and method of milking was significant ($P<0.05$). On 26 machine-milked farms the mean SCC was $905 \times 10^3/\text{ml}$ and the incidence of clinical mastitis was 8.4%. On farms ($n=7$) using portable machine milking, the mean SCC was $580 \times 10^3/\text{ml}$ and the incidence of clinical mastitis was 14.6%. SCC and clinical mastitis incidence for hand-milked farms ($n=6$) was 532×10^3 and 5.7%. There was no differences between groups concerning SCC ($P<0.05$). Differences between groups concerning incidence of mastitis was significant ($P<0.05$). The method of milking is one of the most important factors influencing SCC and incidence of clinical mastitis in dairy sheep farms.

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Changes in echostructure values of the endometrium during pregnancy in Holstein Friesian cows

Veränderungen der Echotextur des Endometriums während der Gravidität bei Holstein Friesian Kühen

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The purpose of the present study was to investigate possible changes of echostructure values of the endometrium in cows during pregnancy and to compare these values with progesterone (P4) and estrogen ($E_{1,2}$) profiles. Twelve cows were examined once a month from the second week after insemination throughout gestation. Further daily examination starting from day 4 ante partum until partum was performed in seven of them. All images were captured from the pregnant uterus horn (*major curvatura*). The mean measurement out of 3 images taken was used. At the time of examination blood samples were collected and P4 and $E_{1,2}$ concentrations were determined (RIA). Special software for image analysis (ECHOVET 2.0) was used for image elaboration. Statistical analysis was performed using repeated measures ANOVA and Pearson's correlation of the means across time. P4 and $E_{1,2}$ concentrations were found similar to those described in literature. Significant changes were noticed throughout the study in the defined echostructure variables: Mean Grey Value (MGV), Contrast (CON) and Homogeneity (HOMO) (all $P<0.001$). P4 concentrations were positively correlated with MGV and CON ($R=0.78$ and $R=0.79$, respectively) and negatively correlated with HOMO ($R=-0.73$). $E_{1,2}$ concentrations were negatively correlated with MGV and CON ($R=-0.72$ and $R=-0.68$, respectively) and positively with HOMO ($R=0.73$). Results from the present study suggest that echostructure values can be used for the detection of changes in the endometrium during pregnancy and that these changes have an association with P4 and $E_{1,2}$ concentrations.

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Comparison of forces occurring during the passage of calves through the cows' pelvis by using simultaneous tractions on equilateral and displaced forelimbs or an alternate traction on both forelimbs

Vergleich der Kräfte, die bei gleichzeitigem Zug an gleichseitigen und versetzten Vordergliedmaßen sowie bei wechselseitigem Zug während der Passage von Kälbern durch das Kuhbecken auftreten

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A recent in vitro study showed that for the entry of the elbows and the shoulder into the pelvis less forces are necessary by pulling alternately on both forelimbs and vice versa less forces are required for the passage of the thorax through the pelvis by pulling simultaneously on equilateral forelimbs. But until now there is no information about the effect of a simultaneous traction on displaced forelimbs.

By using an in vitro model equipped with electric motors stillborn calves ($n=8$; 40.5 ± 3.7 kg) were pulled on front legs through a dissected pelvis showing dimensions typical for Holstein Friesian cows. Three different traction modes were performed: simultaneous tractions with front legs positioned equilaterally (ET) or displaced by 10 cm (DT) and an alternate traction (AT) with differences of 10 cm between both forelimbs. The forces were measured using load cells and evaluated with data acquisition software. The maximum forces on single limbs occurring during the entry of the elbows and shoulder joints into the pelvic cavity were lower ($p < 0.05$) for DT (235 ± 90 N) than for AT (373 ± 189 N), while total forces on both limbs (405 ± 148 N vs. 454 ± 256 N) did not differ ($p > 0.05$) between the above mentioned traction methods. For the passage of the thorax through the pelvis maximum forces on single limbs were lower ($p < 0.01$) for ET (456 ± 164 N) compared to DT (660 ± 276 N), while total forces on both limbs (775 ± 293 N vs. 896 ± 408 N) did not differ ($p > 0.05$). The results show that the lowest forces are necessary if the calf's shoulder girdle is pulled into the pelvis by using a simultaneous traction with displaced forelimbs and if the thorax of the calf is drawn through the pelvis by using a simultaneous traction on equilateral forelimbs.

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Comparison of two different extenders for chilling of canine semen

Vergleich zwei verschiedener Verdüner zur Flüssigkonservierung von caninem Sperma

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The importance of artificial insemination in dog breeding has significantly increased during the last decades and using chilled semen is an interesting alternative to frozen semen due to higher pregnancy rates and litter size. The aim of the present study was to compare a Tris-egg yolk extender (TE) with a commercially available extender (CaniPro Chill 10; CP) for preservation of canine semen. 30 ejaculates were collected from 30 dogs and the sperm rich fraction was examined for motility incl. CASA (SpermVision), viability (SYBR/PI), live/dead ratio (eosin smear) and pathomorphology. Either TE or CP was used for chilling of equal aliquots of the sperm-rich fraction. After storage at 4°C , semen samples were evaluated accordingly on days 1, 2, 3, 5, 7 and 10. Before chilling, estimated motility (mot) was $80.8 \pm 9.5\%$ and CASA motility (mot_{casa}) was $70.9 \pm 18.1\%$ with $65.0 \pm 19.9\%$ of spermatozoa