Pathological changes in the reproductive organs of cows and heifers culled because of infertility

The reproductive organs of 20 Estonian Holstein Breed (EHF) cows and three heifers, culled because of infertility, were studied by palpation per rectum and ultrasonography. In addition, pathoanatomical and pathohistological studies were carried out after slaughter. The pathohistological study revealed that small cysts often (12 animals) existed in culled cows, whose diameter was less than 2.5 cm. These cysts were frequently accompanied by changes in secondary and Graaf follicles, rete ovarii, ovarian stroma, and the endometrium. Three cows had follicular cysts in the ovaries, which were 25-35 mm in diameter. Two cows revealed luteal cysts in the ovaries; one of them had vaginal prolapse. Four animals (one heifer and three cows) manifested tumours or tumour-like malformations: ovarian endosalpingiosis, germ and stromal cell tumour, oviductal myolipoma, and haemangiosarcoma in the uterine blood vessels. One heifer had been culled because of two abscesses in the vaginal wall close to the cervix and another had chronic endometritis. The research findings indicate that the most common cause of infertility in the culled cows was cystic degeneration in ovaries (85%), accompanied by pathological changes elsewhere in the reproductive organs. We claim that these changes are responsible for the low pregnancy rate after the treatment of ovarian cysts. The second most common reason was genital tumours (15%). In heifers, infertility is rare and its causes are heterogeneous.


Observations on haemoglobin types in three breeds of Omani goats

Haemoglobin (Hb) types were studied in three breeds of Omani goats, Batinah (n = 22), Jebel Akhdar (n = 27) and Dhofari (n = 85). Type A was the only adult Hb observed in adult Batinah and Jebel Akhdar goats. In contrast, only 34% of the Dhofari goats were homozygous for Hb A, while 66% were heterozygous for Hb A and Hb B. Dhofari goats with type AB could further be differentiated into those with approximately 67% type A and 33% type B and those with approximately 33% type A and 67% type B. None of the goats was homozygous for type B. Seventeen kids observed from birth exhibited different levels of fetal Hb, dependent upon whether they developed the adult phenotype AA or AB. Kids that became homozygous for type A were born with approximately 90% Hb F and 10% Hb A. In contrast, goats that developed the heterozygous AB phenotype were born with only 30-60% Hb F, the remaining Hb being types A and B. These findings are not in accordance with previous reports that kids are born without any adult Hb. Hb F was no longer detectable in any of the three breeds of goats at 49 days of age. There was no evidence of Hb C, the pre-adult form of Hb.


Managing helminths of ruminants in organic farming

The use of anthelmintics is strongly limited in organic farming. This may induce a change in the intensity (no of worms) and diversity (proportions of species) of helminth infection. Helminths remain a major preoccupation in organic sheep farming; high levels of infection have been recorded on several farms and helminth diversity is always higher. The helminth infection in milk cattle of northern Europe is controlled and diversity is higher in organic farms, as recorded in sheep. The role of helminth diversity on intensity is still unclear. Grazing management is one of the means to controlling helminths. The use of safe pastures for calves and sheep after weaning is one of the major components of control. The use of alternate or mixed grazing is common for cattle in northern countries but is uncommon for sheep in France. Grazing management is not sufficient to controlling infection in sheep and conventional anthelmintic treatments are performed. Additionally, alternative treatments are used. The alternative therapies based on phytotherapy or homeopathy are largely recommended in organic farming but do not have any demonstrated efficacy. More research is needed to evaluate such therapies.


Risk factors associated with colic in horses

Many factors have been identified as risk factors for colic in horses in several epidemiological studies. The aim of our paper was to review the results of 12 epidemiological studies, in order to assess the impact of each risk factor for colic. According to the literature, the factors that increase the risk of colic are feeding practices (type and quality of food, type and changes of feeding), the intrinsic factors of horses (sex, age and breed), management (type and changes of housing and activity), medical history (a previous colic, administration of a medical treatment) and parasite control (the presence of worms and type of deworming program). Several individual factors were incurred as risk factors by all the studies. Nevertheless, the different studies did not always agree on the role of other risk factors. The conclusions were tightly related to several criteria in the selection of the study population, like the type of the epidemiological study, the number and the origin of horses included and the location of the study.