

References

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Abstracts

Citrinin as a possible cause of the pruritis, pyrexia, haemorrhagic syndrome in cattle

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An outbreak of the pruritis, pyrexia, haemorrhagic syndrome affected eight of a herd of 175 cows which was divided into two groups of 115 and 60 according to yield. There was no difference in management between them but citrus pulp pellets were fed only to the larger group in which the eight cows were affected. Silage, which had been made without the use of additives, was also fed to both groups. The citrus pulp was visibly mouldy and contained 30 to 40 parts per billion of citrinin. Signs of the syndrome occurred within three days of the cows starting to ingest the citrus pulp, which was fed for 21 days, and the last case occurred six days after the feeding of citrus pulp ceased. Five calves whose dams had been fed citrus pulp were subsequently born with superior prognathism. In contrast to the eight cows that developed the syndrome only one out of 68 heifers which were fed larger quantities of citrus pulp for 10 days developed mild signs of the syndrome and then recovered, suggesting that older animals may be more susceptible. The clinical signs, gross pathology and histopathology are described and compared with those of previous outbreaks. Mycotoxins, particularly citrinin, were strongly implicated as the cause of this outbreak.

Treatment and control of an outbreak of fat cow syndrome in a large dairy herd

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An outbreak of fat cow syndrome occurred in a herd of 300 Friesian and Friesian/Holstein dairy cows calving predominantly between January and May. The herd came in off grass in good condition despite a long and hot summer. The dry cows received a diet of grass silage, brewing waste and minerals until the end of December, but the grass silage was butyric and was partially replaced by maize silage. By January 23, 16 of 70 calving cows (23 per cent) had appeared to suffer milk fever. Subsequent blood tests revealed that the cows may have been ketotic, and clinical and post mortem examination showed that they were probably suffering from fat cow syndrome. The freshly calved sick cows were treated with glucose, and corticosteroids were injected every second day into those which remained ill. The cattle had received a high energy diet, but the cows still to calve were placed on a diet of low metabolisable energy (77 MJ/cow) but adequate levels of undegradable protein. The problem was associated with a possible clostridial infection in two cows and with reduced fertility.