



Cattle vet Debby Brown, from Lancaster-based Advance Nutrition, takes a timely look at health and welfare issues that are affecting dairy herds across the UK. This time she's focusing on forage and problems caused by moulds and fungi.

Watch out – wet forages can pack a toxic punch

# Mycotoxins misery

**W**here there's damp, there are moulds and fungi. So it's no surprise with the wet summer and 2012's poor silage making conditions, as well as the continuing winter deluge, that cows are feeling the effects of their presence in some feed and forage. Wet grass and grain silages are not keeping as well as would be expected on some units and this can impact on cow health, fertility and milk production.

There are a number of possible problems with wet and mouldy feed, including listeriosis, acidosis and mycotoxicosis. Each cause distinct symptoms in the cow, but there is some overlap and a definitive diagnosis may be difficult to achieve. Listeriosis can often present as abortions or as nervous signs, such as depression, a 'droopy' face and possibly walking in circles. Listeriosis is, unsurprisingly, also known as 'circling disease'. Acidosis and mycotoxicosis can both be associated with cattle having inconsistency in their faeces with mucous tags, a drop in milk production, poor body condition and reduced bulling activity. Acidosis can be caused and remedied by changes in the diet, but if mycotoxins are present then problems will persist.

Adding a mycotoxin binder to the herd's ration, without making other changes, is likely to be the most practical way to achieve a diagnosis. If improvements are seen, mycotoxicosis is likely to be at least part of the issue. It is possible to test feed for mycotoxins, but this is expensive and delays treatment. And it can fail to identify what is causing the cows' symptoms.



## The encyclopaedia **Mycotoxicosis**

### Cause

Mycotoxins are the poisons – or toxins – that are produced from secondary metabolic processes. These occur naturally in a variety of moulds as they grow. The amount and type depends on fungal type and environmental conditions.

*Aspergillus*, for example, grows in warm and dry conditions and produces aflatoxins. *Fusarium* grows in cool and wet conditions and produces, among other, 'T' toxins.

### Symptoms

The symptoms are wide and varying, but can include rough coats, poor body

condition, low milk yield with poor milk quality, poor conception rates, foot lesions that fail to heal, heifer conception rates below 60%, swollen udders in heifers, poor bulling activity and soft/loose dung with mucous tags.

### Diagnosis

Usually the diagnosis is the result of definitive clinical signs, evidence of mould on feed and a response to treatment, typically the addition of a mycotoxin binder to the herd's ration.

### Treatment

Feed a mycotoxin binder, but monitor response.

### Prevention

Try to avoid feed spoilage through good silage clamp management, and avoid feeding spoiled feed and forages.

