INTERVIEW

Le GAEC de la Guicharde

At the end of April, milk containing colostrum or antibiotics was separated, but traces of inhibitors were detected in the milk tank. Moreover, several cows had red discoloration of the hooves. A laboratory analysis quickly revealed the presence of hazardous levels of mycotoxins in the feed ration, in particular Trichothecenes and Zearalenone. Ergot was also visible to the naked eye in the barley.

A mycotoxin binder from the Adisseo range (Toxy-Nil®) was quickly administered, and its beneficial effects were visible in less than a week. Traces of antibiotics in the milk disappeared. Milk production increased by 1.2 kg/day; fat content remained stable at 39.7 while protein rose by one point, reaching 35.2. Cell counts in the milk decreased by 37% (from 365,000 to 230,000) and the red discoloration in hooves gradually disappeared. The binder was therefore effective and reliable to combat a multi-mycotoxin contamination.

Daniel Guillaumée is a poly-crop/livestock farmer with his son, Romain, in the French department of Haute Marne. His 280 ha farm includes 65 ha of prairie land, with the other plots managed in rotations of wheat, barley, triticale and maize. His herd of 85 Prim'Holstein dairy cows produces between 30 and 32 kg of milk per cow daily

Farm characteristics/ status quo

- Haute Marne, France
- 85 dairy cows
- 280 ha, of which 65 ha prairie land
- Milk production: 30-32 kg/day
- PC: 34 and FC: 39

Ration

- 35 kg beet pulp
- 2,5 kg grain (barley)
- 3,5 kg soy/rapeseed mix (70/30 ratio)
- 3,7 kg hay
- 250 g minerals
- 60 g urea

Detected mycotoxins

- 230 ppb Trichothecenes A (T-2 and HT-2 toxin)
- 85 ppb Trichothecenes B (DON and nivalenol)
- 125 ppb Zearalenone
- 10 ppb de Fumonisins
- Visible ergot in the barley

Small info panel:
Certain fungi, such as *Penicillium*, can produce mycotoxins that are classified as antibiotics, patulin being one of them.

B MM045-01

ADISSEO
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INTERVIEW

Le GAEC de la ferme du Chenecieux

Gaylord Cuny operates a family-run dairy farm with his father in the French department of Vosges. Their 65 dairy cows produce around 600,000 L per year. The farm also includes a fattening operation for male beef cattle and weanlings are marketed.

During the winter season, at a time when milk production was at 30.5 kg/cow/day, the health condition of the animals deteriorated, and production rates dropped to 8.5 kg/cow/day. The cows' eyes were swollen and bulging. They had red discoloration of the hooves and a rough hair coat. Dry matter intake also drastically dropped by 40%.

It was difficult to identify the problem, however the veterinarian and nutritionist suspected a feed-related issue. During the diagnosis, Gaylord made several attempts to change the forage and the basic ration, for example by using a different source, switching from maize silage to hay, etc. DON-type mycotoxins were detected in the maize silage and basic ration.

A mycotoxin binder from the Adisseo range (Toxy-Nil®) was administered two months after the first symptoms appeared. As soon as the binder was incorporated into the ration, there was a remarkable improvement in intake and then milk production gradually increased. Three weeks after Gaylord began including the binder in the diet, production increased to 20-22 kg milk/cow/day. The cows are currently producing more normal volumes of 28 kg milk/cow/day, remaining slightly below their original levels as a result of contamination.

The binder is incorporated directly into the basic ration at a dose of 40 g/cow. "*To date, this is the only effective solution we have found to ensure improvements in our herd*", states Gaylord.

Farm characteristics/ status quo

- Vosges
- 65 dairy cows
- Milk production: 30.5 L/cow/day
- 120 ha, of which 20 ha dedicated to silage maize, 20 ha to field crops and the rest to pasture
- Small fattening operation
- FC - 41.2 and PC - 33.4
- Cell count: 120,000 - Cell count 780,000

Ration

- 6 kg baled rye-grass
- 6 kg baled alfalfa
- 1 kg hay
- 20 kg maize silage
- 6 kg distillers grain
- 3 kg rapeseed meal
- 2 kg maize
- 2 kg barley
- 300 g minerals
- 60 g urea

Detected mycotoxins

- 2800 ppb of Trichothecenes B (DON)

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INTERVIEW

Jeremy Jacquot runs a joint poly-crop/livestock farm with his mother and father in the French department of Haute Marne. The farm has a fattening operation and produces milk from 140 dairy cows, of which twenty or so dry cows throughout the year. The milk is used to make Brie de Meaux cheese. The yearly milk production stands at 1,350,000 L, which is collected via two milking robots.

Le GAEC du Menhir

In July 2020, Jeremy encountered problems with his dry cows, heifers and dairy cows. The veterinarian intervened when the farm began to experience drops in milk production and increases in the number of cows with red discoloration of the hooves and lameness. Simultaneously, intake and the number of visits to the robot decreased. Certain blood test indicators revealed the beginning of acidosis, though the cause of the situation remained unclear. The nutritionist also analyzed the ration, including tests to detect the presence of mycotoxins. The winter barley was contaminated with ergot alkaloids, which were determined to be the source of the symptoms.

A mycotoxin binder from the Adisseo range (Toxy-Nil®) was incorporated directly into the mixer. Milk production quickly increased to 2 kg/cow/day and the red discoloration of the hooves and lameness gradually disappeared. At the peak of the contamination, the intake of the 120-cow herd dropped to that of only 90. But the binder restored the herd's intake to its normal level. Now the milk production is stabilized, and the binder has become a permanent ingredient in the ration.

Farm characteristics/ status quo

- Haute Marne, France
- 120 dairy cows
- 20 dry cows
- AOC Brie de Meaux
- Milk production: 30 to 31 L/cow/day

Ration

- 12 kg maize silage
- 13 kg alfalfa silage
- 1 kg alfalfa hay
- 300 g straw
- 1 kg barley
- 5,7 kg wet corn grain
- 7 kg pulp
- 2,4 kg soybean meal
- 400 g rapeseed meal
- 2,6 kg individual production-adjusted concentrate
- 300 g minerals

Detected mycotoxins

- 260 ppb Ergot alkaloids
- 140 ppb Fusaric acid
- 7 ppb Emerging mycotoxins
- 378 ppb of Trichothecenes B (DON)

B MM045-01