

micron bio-systems under the microscope



As the series on Micron Bio-Systems continues, **Ann Hardy** focuses on the company's silage inoculant Advance and talks to farmers who use it.

Gold star for Advance

Independent nutritionist, Mark Borthwick, a director of Lancaster-based New Breed UK, introduced Advance silage inoculant to his clients last year.

He says the first thing he and his colleagues noticed about Advance was the science which had gone into it.

"We've used other products before that are all front and no substance, but we could see what had gone into this one and we found the science held up."

"We used the product on a number of farms for the first time last season and it was a true test, as the conditions were so difficult."

"But we found it made our job as nutritionists very straightforward. Silage quality was more consistent, the amount the cows ate on a daily basis was also consistent, and there was less fluctuation in yield."

Silage face

"Most farmers can relate to a silage face that's the same colour and temperature throughout and it was a pleasure to see these clamps on our customers' farms."

"But what tops it for me is

seeing how the cows perform. The first thing we do on our monthly visits is walk through the cows; look at the dung, monitor and record cudding rates, condition score and so on, and so we build up a picture. We found good consistency throughout – and our customers said the same."

"It's been nice to find a product for which the supplier as well as the customer can see such benefits. I probably haven't seen anything before that's been quite so universal in its success."



“ We could see what had gone in to this one [product] and found the science held up ”
Mark Borthwick

Advance silage inoculants

Advance silage inoculants comprise:

- A range of lactic acid bacteria to quickly reduce forage pH
- Stimulants to ensure maximum microbial activity

on rehydration

- Acetic acid-producing bacteria to give stability on exposure to air
- A range of enzymes to break down fibre and get more milk from the forage



This year silage consistency has improved, says John Young.

Case study: John Young

JOHN Young admits he had not been unhappy with the silage inoculant he was using on Jenkin Cragg Farm, near Kendal, Cumbria. He would not have bothered to change, had a new product not been so strongly recommended by his nutritionist Mark Borthwick.

But since he took the advice to move to Advance silage inoculant, he says he has seen a distinct change in the way his grass silage has kept.

corroborated when Mr Borthwick took a sample to this year's Dairy Expo, held at Carlisle, and found it remained stone-cold after two days at the event.

But more important still, Mr Young says the cows are doing well on it, completely cleaning up their total mixed ration – based on fresh weights of 25kg/head of grass silage and 8kg/head of maize silage with meal and brewers grains – and currently averaging production of 34.5 litres/day.

Milked three times a day and producing 10,400 litres sold, he says he is very happy with their performance, which has been an improvement on the previous 12 months, and he will be using Advance again when he makes his silage this year.



“ This year, the face of the clamp has remained very, very, clean – and equally important, it has remained completely cold ”
John Young

Consistency

Milking 360 Holsteins on a fairly difficult Cumbrian farm, he had always struggled to get consistency in the clamp, which was not helped by up to 30 small fields contributing to each cut.

"We clamp up to 300 acres for each of three cuts and although we hadn't quite realised how inconsistent the resulting silage had been in the past, this year's consistency made me realise it was," he says.

"We've never had the same consistency as this before – and this was made in a bad silage-making year, which also goes in its favour."

In fact, Jenkin Cragg Farm is around 180m (600ft) above sea level and – located on the fringes of the Lake District – is in one of the wettest parts of the UK, where annual rainfall is around 1,520mm (60in).

Silage making and preservation is often difficult and in the past there has inevitably been spoilage at the cut face, which generally took around six days to cross.

"But this year, the face of the clamp has remained very, very clean," says Mr Young. "And equally important, it has remained completely cold."

Its failure to heat was

Case study: Nigel Dockeray

NIGEL Dockeray had grown tired of seeing silage wasted on his farm and clearing out troughs after cows. He had almost begun to think it was an inevitable consequence of conserving forage on the wet, 80-hectare (200-acre) Kelsick Farm he runs with his son, Mark, near Wigton, Cumbria.

So, when his nutritionist, Ian Wozencroft from New Breed UK, suggested trying Advance silage inoculant from Micron Bio-Systems, he was happy to give the product a go.

Using the inoculant for the first time last year was really putting it to the test, as the season was particularly wet, silage-making was difficult, and first cut was taken at the end of May – around 10 days

behind the usual cutting date. Describing the grass coming into the clamp as more fibrous and stemmy with less leaf than he would usually hope for, he knew its preservation was going to be a challenge.

Inoculants

Applying the inoculants, which contains a range of bacteria selected for their preservation qualities and stimulants to put them to work, at the time of cutting, made the process straightforward. First cut went into a clamp for the milking cows, while second and third were ensiled together, sandwiching a layer of wholecrop wheat which ran through the clamp as a central seam.

The results, according to



The clamp face has been clean and even, says Nigel Dockeray.

Mr Dockeray, were startling.

"The face has been so clean and even – there's been no waste at all," he says. "Any feed fellow who has been in the yard has commented on how good it is, and it's also stayed very cold."

"Even if a block gets dropped and left on the ground it won't heat up," he says.

"The year before when we'd used a different inoculant, we had one-and-a-half inches of black across the face, but this year we've had none of that."

The silage quality has been reflected in good dry matter intakes, which Mr Dockeray says

have been higher this winter.

"The cows have milked a lot better," he says. "The troughs are licked clean and appetites are up – there wasn't a pickle left this morning."

With yields running at 8,500 litres on this traditional farm of 120 cows he says he is happy with their health and performance.

And at an estimated cost of £4 to £5 per day for the whole herd, he adds: "This is nothing when your livelihood depends on it – it's money well spent."

"It's the best silage I have ever made," he concludes. "I've already ordered more for this year."



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For more information, visit www.micronbio-systems.co.uk