

Foot dipping vs spraying – why not both?

Two-pronged approach

Digital dermatitis is stubborn. Once a herd is infected, even if a level of control is achieved, it's still there, in the environment and under the skin of the cow's foot. So what's best when it comes to tackling this costly and insidious disease? We spoke to two hoof care specialists to find out.

text **Rachael Porter**

Mild weather saw digital dermatitis rear its ugly head on many units in December – highlighting for many producers that it's not a disease that 'goes away'.

Warm, wet and dirty conditions are all it needs to re-emerge in cows' feet and wreak havoc with mobility – and all the production and fertility consequences that come with that. So, what's the best way to tackle an outbreak and, once a level of control has been achieved, keep it in check?

Well-managed programme

It's not a case of dipping or spraying, according to Dorset-based vet Nick Bell, from the Royal Veterinary College. Both, used together as part of a regular and well-managed programme, can really yield good results as far as digital dermatitis (DD) is concerned.

"As with mastitis, the aim is to treat existing DD cases and to prevent new ones from occurring. And spraying has a key role when it comes to the former and dipping in the case of the latter.

Dirt pockets

"Also like mastitis, early detection of DD and prompt and effective treatment is one of the cornerstones of control. This is why spraying, usually with an antibiotic spray, comes into its own.

"Foot bathing or 'foot disinfection' has a role to play in preventing new cases. Many producers are foot bathing regularly – but they're not necessarily doing it well. And that's often why new cases develop."

Dr Bell says that spraying is perfect for targeted treatment of infected feet. But dipping has a vital role to play in cleaning hooves on a 'whole herd' basis

– particularly the hard to reach places, like between the claws. "There's one particular area, a pocket between the claws at the end of the heel, which I often show to students and producers in workshops. It's the size of a finger and, more often than not, is filled with dirt.

"Bacteria, particularly those that cause DD, can sit in here and wait for an opportunity to infect the hoof."

He believes that foot bathing – immersing the hoof in a footbath solution – is the only way to clean cows' feet and remove dirt pockets like this.

"When I lift feet infected with digital dermatitis, the lesion often extends into this heel pocket, which points to it as the source of infection."

Foot bathing in a 4% formalin solution is most common on UK units and Dr Bell says that, as a rule of thumb, one litre of solution is enough for one cow passage through the footbath.

"So a 200-litre bath will footbath 200 cows once, or a 100-cow herd twice, before the solution needs to be changed.

"The majority of producers that I work with are following this, but it depends on the farm set up and the herd. It's essential to know how large your footbath is and how much solution it can hold.

"Producers who do guess are, more often than not, quite a bit out with their estimate." Many producers footbath at least once a day, some put their herd through a solution after every milking, and others footbath three times a week.

"The ideal frequency – and effort required – depends on the individual herd and its DD history. And how virulent the strain of DD on a particular unit."

Spraying benefits

Dr Bell says that he likes foot spraying, particularly with Quill Productions' product, for two reasons.

"It's a non-antibiotic alternative – it contains chelated copper and chelated zinc that penetrate the foot and helps to get to the root of the problem. But it's also something that producers can use, on the spot in the parlour, when they see a cow with a case of DD. And they can repeat the treatment a week later too."

It is from the same family as the Hoof-Fit Gel, recognised and approved by the VMD

Dipping routine: regular and 'correct' foot disinfection can keep DD under control





Spray solution: weekly application in the parlour can significantly reduce DD levels



Fast acting: solution is absorbed by skin

as an antibiotic-free cure for DD, with no withdrawal time for milk.

Quill Production's director Graham Crocker, a former dairy producer, knows only too well the devastating impact that DD can have on a herd's health, welfare and productivity.

He says that the spray is an alternative to what he sees as 'painful' and somewhat ineffective foot bathing routines with formalin solution.

"In an environment where the foot is constantly in contact with faeces and slurry, antibiotic sprays and foot bathing solutions can be quickly rendered ineffective. And, since the DD bacteria hides under the skin, what better than a product that can also get under the skin and tackle the source of the problem."

Money-back guarantee

Mr Crocker advocates that cows' feet are not washed before application and that all cows' feet are sprayed once a week, in the parlour, with a 50% solution. "That's frequent enough to ensure that DD is no longer an issue in the whole herd. And I'm so confident of that I offer a money-back guarantee."

His company, in conjunction with Ambic, has developed an in-parlour system to make application easy to slot into the milking routine. "It takes just seconds to spray a cows' feet and offers protection for up to one week."

A 'distracted' producer recently telephoned Mr Crocker in desperation because their milk buyer was going to stop collecting their herd's milk because DD was creating a serious welfare issue. "I called the milk buyer, on their behalf, and asked for four or five days grace for the producer, who had just bought a system, to sort the problem out.

"The buyer came back to the unit a fortnight later and he couldn't believe that he was looking at the same herd. And that producer is still using the spray to keep DD at bay." |