Cobiotex®
by EnviroSystems

A biologically active bedding additive, ensuring a more hygienic cubicle environment.

" We've used Cobiotex® since January 2021 with chopped straw on mattresses in cubicles. It stays put well on the cubicles, is easy to apply and isn't labour intensive like other bedding additives we've used in the past - making life a lot easier! We are happy with the savings we've made since switching to Cobiotex® and plan to continue using it. We just wish we'd found it sooner! "

Richard Infield at Ouse Farm, Bedfordshire

Cobiotex®
by EnviroSystems

A bacterial bedding additive which outcompetes pathogenic bacteria, producing a more hygienic and controlled bedding environment

Benefits

- Reduces the risk of environmental mastitis & digital dermatitis
- Reduces somatic cell counts
- Suitable for all bedding types
- Increased absorbency
- Easy and quick to apply

Application rates

Areas	Application notes	Annual Amount per 100 cows (6 month winter)
Cubicles	200g/cow/week	560kg
Calf pens	100g/calf/week	280kg

What is Cobiotex®?

Cobiotex® is a multi-strain bacterial bedding additive which forms protective biofilms over the bedding and cubicle surfaces.

These biofilms outcompete the growth of pathogenic bacteria, including those linked to environmental mastitis (*E. coli, Staphylococcus and Streptococcus*) and digital dermatitis (*Treponema and Dicholeobacter*) reducing the risk of these diseases spreading.

The non-pathogenic bacteria in Cobiotex® are commonly found on farm environments, meaning their introduction to animal housing causes no adverse health risks to humans, animals, or downstream processes.

How does Cobiotex® work?

Cobiotex® is different from traditional bedding additives (such as lime) by preventatively limiting pathogenic growth through a process called Competitive Inhibition, rather than applying a direct antimicrobial agent after the pathogenic bacteria have been established.

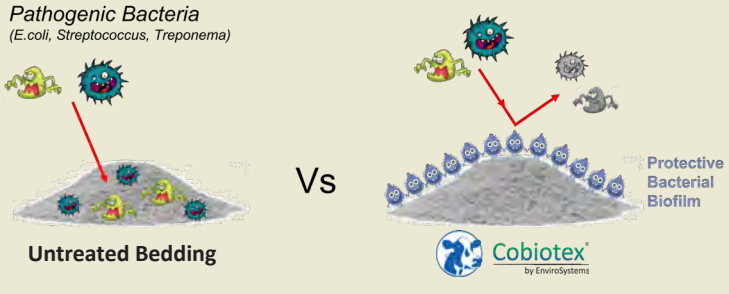
Competitive Inhibition

Non-pathogenic biofilms formed by the bacteria in Cobiotex® colonise the bedding surface and outcompete pathogenic bacteria for resources, limiting their colonisation and growth, and reducing the risk of diseases spreading.

Traditional Antimicrobial Additives

Harsh chemicals are added to the bedding to kill off the pathogenic bacteria which have already colonised the surface. However, these chemicals regularly come into contact with the cows skin and cause irritation which can lead to skin damage.

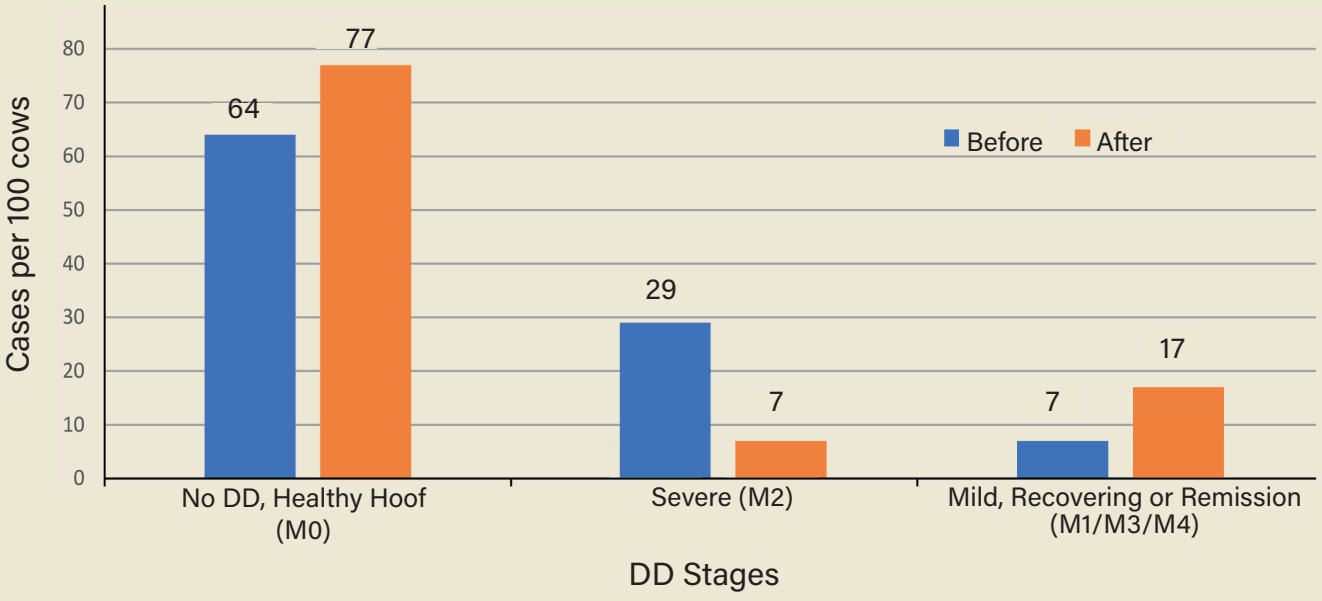
How Competitive Inhibition Works:



Competitive inhibition is a simple yet effective and safe way of reducing the amount of pathogenic bacteria on bedding cubicles. With it being a biologically active product, Cobiotex® works best with neutral pH bedding, including EnviroBed, without any extra additives.

Cobiotex® Trial on Digital Dermatitis

Dietaxion, the manufacturer behind Cobiotex® ran a trial of the bedding additive on a French dairy farm severely affected by digital dermatitis in 2021. The trial included 120 Prim'Holstein cows housed all year round in cubicles, treated with 200-250g of Cobiotex® on each cubicle for 12 months. The farm started the trial with 36 cases of digital dermatitis (M1-M4) per 100, significantly higher than the typical average of around 21 cases/100 cows (AHDB 2021). The graph below shows the number of cows per 100 in the herd presenting with M0-M4 stage digital dermatitis before and after the trial.



Following treatment, the number of active cases of digital dermatitis dropped from 36 to 24 cases per 100 cows, a significant improvement. Additionally, the remaining cases of digital dermatitis were more confined to the M1/M3 and M4 stages, showing a reduction in proportion of cows in the painful M2 stages associated with severe lameness.

Digital Dermatitis M Score

The following schematic describes the M scoring system for digital dermatitis adopted by the International Committee for Animal Recording (ICAR).

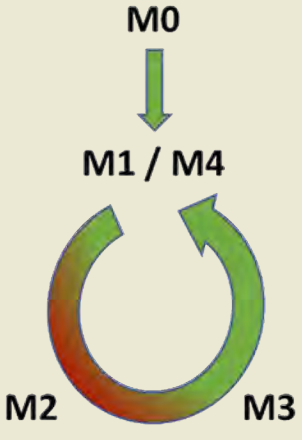
M0 **Healthy Hoof** - *Normal skin*

M1 **Small < 2cm Lesions** - *No lameness or pain*

M2 **Larger >2cm Ulcer** - *Lameness and pain*

M3 **Healing Stage** - *No lameness or pain*

M4 **Chronic Stage** - *Small M1 like lesions*



Cobiotex® is available to purchase in 25kg bags or pallets from our online shop.

Scan here to visit the website.

Alternatively you can also contact one of our area sales managers

01772 860085

What farmers say

We've been using Cobiotex® since January 2021, before this we used lime and we're finding Cobiotex® much easier to apply. Since changing from lime to Cobiotex® we've seen good results in control of E. coli and a reduction in digital dermatitis. The cows are a lot cleaner and dryer, we've also had reduced environmental mastitis cases we are now running at 12/100 and 120scc compared to 22/100 and 180scc previously.

James Weaver at Rooms Farm in Shropshire

Technical questions answered

When do I need to first apply Cobiotex® before the cows come back in?

Cobiotex® bacteria rapidly populate new environments, especially if they are clean, so a day before would be sufficient. Applying for several days beforehand will boost the bacteria numbers ahead of the cows bringing in pathogenic bacteria, and would help build up the robust surface much quicker.

What are the benefits of using Cobiotex® with calves and dry cows?

Using Cobiotex® with calves and dry cows will help to create a healthier skin condition containing fewer pathogenic bacteria, which would prevent them from introducing pathogens into the milking herd.

How does Cobiotex® stay on the beds when I brush the beds off every day?

The bacteria in Cobiotex® form complex biofilms that adhere strongly to the surface at a microscopic level. Similar to how brushing debris off a dirty table surface does not make it sterile, brushing the beds will not disrupt the bacteria populations underneath.

How long does it take to see a difference after using Cobiotex®?

The beds start to become populated with the Cobiotex biofilm straight after application. After 4-6 weeks we would expect to see a fully formed biofilm surface in the area where it is directly applied, and after 3 months this should have built up enough resistance over a large enough surface area to start seeing a reduction in mastitis cases.

What area of the cubicle bed do I apply the Cobiotex® to?

Apply to the foot of the cubicles where the teats rest. This prevents bacterial pathogens associated with mastitis from populating that area and passing onto the teat ends.

Do I have to put the Cobiotex® underneath my bedding or can I put it on top?

Cobiotex® works best when applied under a fresh bedding material where it can form a protective biofilm layer that builds up over time. This prevents the transfer from the mattress, matting or floor through the bedding and onto the teat surface. Applying above the bedding would stop the transfer from contaminated bedding to the cow, but the majority of the biofilm would be lost when the bedding was changed and need replacing.

Products by EnviroSystems

EnviroBed® by EnviroSystems | SlurryBugs® by EnviroSystems | EnviroCare Teat by EnviroSystems | OptiSile® by EnviroSystems

EnviroSystems® Innovating for Agriculture

EnviroSystems (UK) Ltd
Pasture View, Barton Cross Park,
Barton Lane, Preston
Lancashire, PR3 5AX

www.envirosystems.co.uk
01772 860085