



Est. 1911
DAVIESWAY

IDEAS TO FARM. EVERYDAY.



Est. 1960
DASCO

HYGIENE • HEALTH • NUTRITION

home of world-class dairy equipment & innovation



Game changer



“Reduced our reliance on antibiotics by 70%”

Annie Newton – Tatura



NEW PLATINUM STANDARD CALF SUPPLEMENT



“Traditional rates of probiotics in milk are no longer relevant in modern calf-rearing practice. That’s why we’ve included more than double the probiotics in BioCalf over every other current product on the Australian market.”

Dr Robyn Plunkett BVSc

“I’ve never had as much success as what I’ve had with the BioCalf, and I’m sure it’s because of the heavier concentration of probiotics,” *Josh Gillie*

“It has cut down our use of antibiotics - I’d say by more than 70%, but in all honesty it may be even higher than that.” *Annie Newton*

**1000
DOSES
PER PACK**



BioCalf – Probiotic Powder includes:

- 5 micro-encapsulated probiotic bacteria – for safe delivery to the gut
- 15.5 billion Colony Forming Units (CFUs)
- 5 digestive enzymes
- Active live yeast
- Yucca Schidigera – plant extract that may aid in the control of Coccidiosis
- 100% active ingredients – no carriers or fillers
- Completely natural

What you can expect:

- Exceptional performance
- Formulated and endorsed by leading professionals and calf specialists
- Best value for money
- Unsurpassed potency within a small daily dose
- 1000 doses per 1Kg pack
- Mixes easily



FREE SHAKER

(with first BioCalf purchase only)

40x
Stronger than competing products



Also available

BioBoost – Probiotic Paste

Ideal for animals of any age that are stressed, sick or at weaning

WELCOME

We all know that prevention is better than cure.

And, as we head into 2020, the industry and its attitudes to antibiotics are changing. Historically, there has been a plethora of treatments available for sick calves in the antibiotic families.

Here at Daviesway, we would like to close the stable door *before* the horse has bolted ... and help shield calves naturally from the health challenges they face..

POTENT AND NATURAL

To that end, two of our newest product releases form an exciting core to this edition. They are the results of new work behind natural and potent probiotics.

The first is BioCalf, a double-strength probiotic powder fed in the milk every day. It contains Australia's only all-natural coccidiostat, *Yucca schidigera* (known as *Yucca*).

Yucca is native to the south-west of the United States of America and Mexico. Its extracts have been used for centuries, and in US cattle production for more than 30 years. *Yucca* has been peer-reviewed by researchers at high-level US universities, and we couldn't be more thrilled to make this powerful protection available for Australian calves every day of the week.

The other new addition is BioBoost - a potent probiotic paste.. It is 40 times stronger than any other product on the market.

Its strength is important and relevant, because, as calf rearing becomes more intense, so too, do the challenges calves and their rearers face.

We have visited with some of our customers, who are using BioCalf and BioBoost to find out how they are impacting their calf-rearing results.

Please make sure you check their stories on pages 2, 8, and 10.

WANT TO UPGRADE? NOT SURE HOW TO FINANCE IT?

Daviesway's partnership with global financial solutions company DLL (a fully owned subsidiary of Rabobank) now allows our customers to finance equipment from new installations and upgrades, to auto calf-feeders and milking robots – without impacting their farm's credit requirements.

Don't hesitate to have a chat to us about it.

COGS IN A WHEEL

BioCalf and BioBoost form part of a bigger conversation, because they have been included in what is now arguably the most comprehensive product range and support network offered by any company in Australia's calf-rearing space.

FULL CIRCLE

It stretches all the way from peach teats, through to the safest tube-feeder on the market, automatic calf feeders, milk taxis, individual and group hutches. We also offer sanitisers, which reduce ammonia without the drawbacks of lime.

So, before you make any decisions about your calf-rearing products or facilities, I'd urge you to chat to our team. We'd love to help.

FIRE AND THE FUTURE

We – like the rest of the country – have been devastated to watch the bushfires unfolding this season. We know that living in Australia means the threat of fire rides on everyone's shoulders all summer.

For dairy farmers, that danger is magnified when you have more animals than the ability to evacuate them in the wake of severe water restrictions.

We send our sincere sympathies to everyone impacted, and will be quietly working alongside our dairy-farming customers to help and support them as they rebuild.



NIKK TAYLOR

General Manager – Daviesway/DASCO
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Nikk Taylor has been with Daviesway/DASCO for 23 years, working across all aspects of the business.

WHO IS DAVIESWAY/DASCO?

Daviesway is a family-owned Australian business, which is today home to a team of 70 staff located throughout the country. It has alliances with dealers, resellers and retail rural outlet stores across Australia. Its in-house manufacturing arm in Victoria includes a full service & technical team. Daviesway also includes a calf-rearing specialist department (including Australia's only dried colostrum for calves, kids and foals). Its in-house chemical manufacturing plant, DASCO, introduced pre-mixed teat sprays in Australia. Daviesway's strong networks with many of the industry's leading global industry players remains integral to it keeping step with technology & innovation. Visit daviesway.com.au for more information, videos, stories and feedback.

AUSTRALIA'S ONLY DRIED BOVINE COLOSTRUM



Kwik Start is a colostrum supplement which boosts or replaces colostrum for newborn calves. It carries high levels of the immunoglobulins and antibacterials that are needed to give calves a flying start.



Annie Newton

Perry Farms



NATURAL PRODUCT DELIVERING QUANTIFIABLE RESULTS

A family operation that calved down 850 cows this spring has slashed antibiotic use in its calves by up to 70%.

Greg Perry, Annie Newton and Greg's son Scott, milk 1400 cows between two rotary dairies on 500 hectares (1250 acres) at Tatura in northern Victoria.

Annie oversees managing the calves, and the calf-rearing team.

Diligent, observant and committed to rearing the best calves possible, Annie has left no stone unturned in her pursuit of excellence, establishing exacting protocols in Perry Farms' calf pens because she understands the sheer scale of their operation means calves will be exposed to challenges.

Yet, as Annie sat down to discuss their approach after tagging almost 300 calves for the season, she talked about individual animals – not just the numbers.

"Our calves are really important to us because they are our replacements, and it's been proven time and again that the first couple of weeks of their life is so critical," Annie said.

"That time really depicts how they are going to calve down and their production potential. So, it's important to look after them from the word go."

Perry Farms' protocols include meticulous colostrum management, high-level hygiene practices, and the inclusion (for the first time this season) of the natural and potent probiotic additive BioCalf, which contains Australia's only all-natural coccidiostat. The family is also using BioBoost paste, a probiotic paste which is 40 times stronger than any other product.



BIOCALF

Double the strength of standard probiotic powders



BIOBOOST

40 times more concentrated probiotic paste

FINAL CALF-REARING PUZZLE PIECE

Annie said including BioCalf and BioBoost – after reading about its use at Hooper Farms, in Gippsland – gave her the vital final piece of her own calf-rearing jigsaw puzzle.

Their inclusion has been the only significant change made this season, and Annie said to have reduced their reliance on antibiotics by 70% has been a game changer.

BioCalf is added to the milk at one gram per calf per day. Its all-natural coccidiostat is *Yucca schidigera* (known as Yucca).

Yucca is native to Mexico and the south-west of the United States of America. American Indians recognised Yucca as a “tree of life”, with health-promoting activity. Its extracts have been used for centuries, including in US cattle production for more than 30 years. Yucca contains naturally occurring saponins, which help bind protozoal pathogens such as Coccidiosis and Cryptosporidium. Other positive effects from including Yucca include improved growth rates, feed efficiency and general health.

Annie said, *“We were using another product before BioCalf to help prevent Crypto, E.coli and Coccidiosis.”*

(Crypto, or Cryptosporidium, is one of the most common causes of calf scouring/dehydration in calves under six weeks old.)

“The first thing we noticed with Biocalf was that it mixed like a dream. It also stayed suspended in the milk, so we knew the calves were getting it. Sometimes mixing can be a challenge with some additives.”

BIOBOOST IS 40 TIMES STRONGER

Annie also included BioBoost for its potency – and she isn’t the first to fall in love with its impact on newborns and sick calves.

“Every calf we kept was given a dose of the BioBoost paste on their tongue at birth. I figured it was giving them ‘something extra’ to fight against any bugs we might have,” Annie said.

“If any calf didn’t seem ‘right’ at any point, we’d give them a double dose of the paste as a precaution. It was so simple, because you just slip it onto their tongue, and it worked really well as an early preventative treatment that was non-invasive, effective and easy to do.

“Now that the calves are bigger, and they are outside in the paddocks, if something doesn’t look quite right, they get the paste.

“It has cut down our use of antibiotics – I’d say by more than 70%, but in all honesty it may be even higher than that.”

“It’s not only the expense when you have to use antibiotics, it’s the stress for the calves, and the worry and extra work for our staff.”

Annie said BioCalf and BioBoost had also changed the look of their quarantine area for sick calves.

“Last year we had to make a shed into a designated hospital pen. This year we have had nothing like that.

“We set up a separate pen again to be safe, but the maximum number at any one time was six calves.”

TRAFFIC-LIGHT CONFIRMATION

Perry Farms operates a “three-dot traffic light” paint system with new calves. If they have been sprayed with a red, orange and green dot, they have received Perry Farms’ “gold standard” start, which includes:

- **RED DOT:** Colostrum (tubed with colostrum measured as Brix score of 22% or better within 12 hours)
- **GREEN DOT:** Umbilical cord dipped in methylated spirits and iodine solution
- **ORANGE DOT:** BioBoost paste given at birth

New calves are grouped in no more than eight per pen. After their colostrum, they are fed four litres-a-day of fortified milk (split into two feeds) until day five. They then go to once-a-day feeding with fortified milk. The timelines for how long they will feed fortified milk remains a fluid conversation.

CLEANLINESS AND OBSERVATION: NON-NEGOTIABLE

Annie said it is important to note that their system is only as strong as its weakest link.

In her thirst for knowledge, she has settled on two high-performing sanitising products: popular European product, Stalosan F (powder) and biodegradable Germidet (detergent and sanitiser).

Everyone who visits or works the calf sheds is asked to dip their boots and sanitise their gloves at the provided hygiene stations.

“It helps stop the potential spread of germs and, once the calf feeders have been washed each morning, the teats are sprayed with the Germidet solution to kill any bugs.”

Danish product Stalosan F has a pH below four. The non-toxic powder works because it includes high levels of copper and iron oxide, which are both well-known antimicrobials; the unique combination of minerals binds up to 100% moisture where ammonia is present. It is also far less toxic to work with than lime.

“We muck out calf pens every day,” Annie confirmed. “When we set them up at the start of calving, the pens are initially sprayed with the Germidet solution. Once it has dried we start by using Stalosan, we then add pine mulch and pine shavings for the bedding. When we top them up, we use Stalosan again because it dries the pens out, disinfects and reduces ammonia.”

“And, we use Stalosan in the sick-calf pens every day. If the calves outside are not sick, but perhaps they have manure that is a bit loose, we’ll just sprinkle some Stalosan over the manure. We do that in the calf sheds too. For five minutes work per shed, I think it’s worth it. It’s all about prevention.”

INFORMATION DELIVERED

Annie has been grateful for Daviesway’s Brendan Johnson, who keeps in regular touch with what’s happening in the global calf-rearing space.

“Brendan’s input has made all the difference. He just gives me the information, he’s not pushy, and he lets me decide what I want to do.”

Sacrifice on price, not quality

Germidet

Perfect for cleaning and disinfecting animal housing – calves, pigs, poultry... biodegradable and non-irritant.



GERMIDET vs VIRKON S
(Per 100lt solution)

\$15.30* vs \$39.00*

*prices may vary

Stalosan F

Broad spectrum, natural disinfectant powder for animal housings.

DAVIESWAY
Est. 1911
IDEAS TO FARM. EVERYDAY.

AUSTRALIA'S
ONLY
DRIED BOVINE
COLOSTRUM



DASCO
Est. 1969
HYGIENE • HEALTH • NUTRITION

Quality Calf Rearing Solutions



David Kuehnel says well-reared calves will give a seven-to-one return on investment during their first three lactations.

USA CALF-REARING EXPERT IMPRESSED BY BIOCALF AND BIOBOOST

Prevention is better than cure, and probiotics – fed at the right concentrations – are a natural way to achieve it, says USA calf-rearing specialist David Kuehnel.



BIOCALF

Double the strength of standard probiotic powders

For those unfamiliar, probiotics include live bacteria and yeast, which support and develop a calf's digestive system and immunity with helpful bacteria.

And, as the industry moves into 2020, probiotics are accepted today as a powerful and natural ally calf rearers can count on.

David was raised on a family farm in Wisconsin, USA, which reared 1200 special-fed veal calves annually. He went on to major in Meat and Animal Science at the University of Wisconsin. The former President of Milk Products for Land O'Lakes – the biggest producer of milk replacer in North America – today, he runs consultancy firm Rule of Three Solutions.

Daviesway brought David to Australia last year to share his thoughts and the latest research coming out of the USA in the calf-rearing conversation.

David stressed how important the calf shed was to dairy operations – with two telling points.

He confirmed that 50% of a cow's lifetime height growth, and 25% of her lifetime weight growth were achieved in the first six months of her life.

It's a statement that always gains attention.

David also explained that calves which were fed a higher solids diet in their first eight weeks, gained 11 kilograms (16.1%) more weight, were 3.3cm (3.8%) taller, 5.6cm (7.3%) longer and had 33 litres (17.2%) more body volume than their counterparts.



BIOBOOST

40 times more concentrated probiotic paste

7:1 RETURN ON INVESTMENT

And, for every additional 100 grams of average daily weight Gain (ADG) achieved from birth to breeding, producers could expect an additional 821 litres of production on the first three lactations – or a seven-to-one return on investment (ROI).

“We can argue whether or not it was an increase of 600 litres or 1000 litres,” David told a group in northern Victoria.

“But the takeaway message, is that the better the weight gain we achieve pre-puberty and pre-breeding age, the bigger the impact on the future milking ability of those individuals.”

And, he said, it's not recoverable later in a cow's life.

“There is no such thing as ‘compensatory frame growth’ – a short calf will be a short cow. I'm talking not just scale and size; I'm also talking body, lung, liver and digestive capacity. They are all set early in their life.”

David acknowledged that every operation was different, but stressed that the maths, including the ROI, didn't change. He said the subjective part of the story lay only in the way that producers chose to prioritise their next generation.

Half of a cow's lifetime height growth and 25% of her lifetime weight growth happens in her first six months.

CHANGING INDUSTRY THINKING

As the conversation turned to the value of using probiotics in the calf shed, David said they are important. It has been heightened by the growing global resistance to antibiotic use.

He said it was interesting that much of the industry remains comfortable feeding antibiotics in milk every day, but still finds it “*novel*” to include probiotics.

“I think we'll get that point where we can do a non-antibiotic support in our calf sheds – which is exactly what Daviesway is recommending – feeding the probiotic programme over a longer period of time without the antibiotics [which kill good bacteria].”

“We've learned so much about probiotics in the last few years, and we now know there is a really strong interactive relationship between the balance of the bacteria in the gut, and the general health of the animal,” David said.

“The calf's rumen and intestinal tract is not functioning when it is born, we have to develop it.”

“And probiotics – when they are fed at high enough concentrations – have so much to do with developing and supporting the immune system. We need probiotics to populate the mycobiome [the balance and populations of bacteria, protozoa and micro-organisms in a calf's gut]. They protect the calf during its early stages, and impact on its entire life.”

“Probiotics also influence feed efficiency, and are important to use when animals are stressed, or if their immune system is challenged.”

POTENCY IMPORTANT

Daviesway introduced two powerful probiotics to the market in 2019 – BioCalf (a double strength probiotic powder milk additive for calves, which contains Australia's only all-natural coccidiostat) and BioBoost (a probiotic paste that includes 40 times more active ingredients than other products on the market).

BioCalf is added to the milk at 1 gm per calf per day. Its all-natural coccidiostat is *Yucca schidigera*, also known just as “*Yucca*”.

Yucca is native to Mexico and the south-west of the United States of America. American Indians recognised *Yucca* as a “*tree of life*”, with health-promoting activity. Its extracts have been used for centuries, including in US cattle production for more than 30 years. *Yucca* contains naturally occurring saponins, which help bind protozoal pathogens such as Coccidiosis and Cryptosporidium. Other positive effects include improved growth rates, feed efficiency and general health..

“In my 37-plus years, I've seen a lot of additives and supplements that have come and gone, and there are a myriad of choices that people have available to them to choose from,” David said.

“I think the standard that we – as an industry – should put forward, and that the dairyman has every right to ask for, is ‘what is the simplest approach?’. And, ‘which are the products that work?’.”

He said the higher probiotic concentrations found in BioCalf and BioBoost made both compelling choices for him over others in the market.

David said, *“I see my role now as opening doors and opening minds. And, I'm trying to help both people and organisations and animals to visualise what could be.”*

“I think probiotics are an exciting area both to be part of, and to be looking forward to.”



PLATINUM CALF PROGRAMME



5 grams*
(Day 1)



200/grams



2 grams/calf/day



6
hours

2-7

NUMBER OF DAYS



COLOSTRUM

(min 20% on brix scale)



MILK

(Increase milk from 4 to 6.5 litres between 2-7 days)



5 grams*
 (once at day 50
 – start of weaning)



5 grams*
 (once a day – weaning)



5 grams*



1 grams/calf/day



1 grams/calf/day

**Dehorning/
 Vaccinating**

8-50

51-70

NUMBER OF DAYS

**BioBoost – perfect for calves who are sick, stressed and after dehorning/vaccinating/weaning*



**6.5
 LITRES
 DAILY**

MILK



**6.5-2
 LITRES
 DAILY**

MILK

(Decrease milk from 6.5 to 2 litres between day 51-70)



Josh Gillie

Gillie

PROBIOTICS HELPING CALVES REACH GOAL WEIGHTS SIX WEEKS EARLIER

Mainstream drugs have been largely kicked to the curb by the inclusion of two natural probiotic products in Josh and Nicole Gillie's busy calf-rearing operation at Tongala in northern Victoria.

The former dairy farmers have been rearing calves for 18 years, and contract rearing dairy-beef cross calves for the past two. This season, they will rear 800 head to 100 kilograms – with up to 350 calves on milk at any one time.

The pair sources a mix of heifer and bull calves from different dairy operations. Aged seven to 10 days when they arrive, they often include some Jersey genetics.

Anyone who has reared calves appreciates that the seven to 10-day age threshold is where "things get interesting" if calves haven't a word-perfect start. However, Josh and Nicole's goal remains the same regardless of the breed, breed-growth

potential, or their start: they need the calves to reach a target weight of 100 kilograms.

While that used to take anywhere from 13 to 16 weeks – and sometimes a little longer – this year, for the first time, some calves achieved it that within 10 weeks.

BIOCALF

Double the strength of standard probiotic powders



THE DIFFERENCE?

Part of their success has always been their refined attention to detail, quality nutrition, hygiene and some intelligent points of difference in their set-up.

However, this season Josh says they achieved even quicker weight-gain and improved calf health, while avoiding using expensive, heavy-duty antibiotics for the first time.

He said the difference has been including potent probiotic additive BioCalf (which contains Australia's only all-natural coccidiostat), and BioBoost paste (a probiotic paste that is 40 times stronger than any other product on the market).

BioCalf is mixed in the milk at one gram per calf per day. It's all-natural coccidiostat is *Yucca schidigera* (also known as *Yucca*).

Yucca is native to the south-west of the United States of America and Mexico. The Indians recognised *Yucca* as a "tree of life", with health-promoting activity. Its extracts have been used for centuries, including in US cattle production for more than 30 years. *Yucca* contains naturally occurring saponins, which help bind protozoal pathogens such as *Coccidiosis* and *Cryptosporidium*. Other positive effects of dietary supplementation with *Yucca* include growth rates, feed efficiency and general health.

BIOBOOST SAVES CALVES

BioBoost is a strong, multi-strain probiotic paste, which promotes immunity and recovery, and improves digestion. On arrival, every calf is given a dose of the paste, then grouped in pens of five calves for the first three or four weeks in mobile sheds Josh built.

"The big challenge is always when they first arrive, and that is one of the reasons I started using the BioCalf this year," Josh said. *"I saw the advertising and brochures on Facebook and there was a fair bit of talk about it on a few of the Facebook groups I follow.*

"Funnily enough, I had a couple of calves come in with bad cases of Crypto." (*Cryptosporidium* is one of the most common causes of calf scouring and/or dehydration in calves under six weeks old.)

"For three or four days, I doubled the BioCalf, giving them 1gm in their milk, morning and night, in addition to feeding electrolytes at lunchtime. I also gave them a dose of the BioBoost paste once a day. That's all I did – and usually I'd be using a lot of antibiotics in a situation like that.

"After a week, those calves were doing better than the ones that didn't get sick. They pushed through it like nothing had happened. I also had a couple of calves that had only been here for one or two feeds, and they went down and they were so sick they could barely even get up.

"I honestly didn't think they'd make it through the night, but it was amazing how after three or four days of giving them a double dose of the BioCalf combined with the BioBoost, that those calves were almost doing better than the ones which hadn't got sick."

NEW-AGE PROBIOTICS

Josh said it's not the first time he has tried probiotics, but it is the first time the impact has been so marked.

"I've never had as much success as what I've had with the BioCalf, and I'm sure it's because of the heavier concentration of probiotics.

"The aim of the game is to get the pellets and hay into them. And, if we get their digestive system going, that naturally gets their immune system going.

"And, that's the biggest thing I've found with it, I think: they just start eating earlier, they eat more, and they eat faster. That's why we're getting such great results.

"You can see the difference in them – even their coats are shinier."

OPERATION METICULOUS

The calves are quarantined for the first week when they arrive, and fed milk powder (28% protein) twice a day at 1.5 to two litres, depending on their size and breed.

When they begin eating the ad lib fed pellets (19% protein) and quality wheaten hay on offer, they are then fed 3.5 litres of milk once a day.

"Dairy-cross breeds are a little fussier to rear. A straight Angus calf is like a Labrador: they eat everything, and they grow like crazy. But once the dairy-cross calves get to the 60kg mark, they get less milk, they ruminate faster, and they usually start to fly from there.

"We normally wean them at six to seven weeks into groups of 35 head. And, once we get calves to 90kg, they will put on 1-1.5kg/day."

Every season the Gillies use a fresh paddock that was cropped on the previous calf intake for the calf sheds. Josh discs the old bedding into the ground to fertilise the next cereal crop rotation being planned.

He said operations such as theirs can be vulnerable to introduced diseases, which can wipe out up to 20% of a calf intake. They routinely sit on 1-2% fatality levels.

ON-TRACK

Josh acknowledges that rearing calves isn't as simple as it used to be, and he's convinced they are on the right track with BioCalf and BioBoost.

"The calf-rearing industry as a whole just seems a lot harder than it was 10 to 15 years ago; I think it's because of the level of bugs in the industry, and that calves seem to be more susceptible to them.

"It's been great to find a natural product that actually works."



BIOBOOST

40 times more concentrated probiotic paste

Calves are quarantined for the first week, and then housed in groups of three to five-head in mobile sheds for the first month.





Budge

BIOCALF FOR HEALTHY CALVES IN UNIQUE OPERATION



Gary and Anne Budge

Gary and Anne Budge have grown their business by growing their calves ... and selling them.

The couple milks 770 cows and rears 400 calves a year on 52 hectares (128 acres) at Nanneella – 20 kilometres from the pretty Victorian port town of Echuca.

In its entirety, the family runs up to 900 animals in its total-mixed-ration-driven milking platform, supported with fodder made on the 304ha (750-acre) operation.

Indicative of their independent thinking, almost without exception the calves born at their farm won't be used as herd replacements. That's because, the couple's business foundation is based on buying in 200 close-to-calving Holstein two-year-olds every spring and autumn.

After calving those heifers down, the Budges rear the resulting heifer calves to 120 kilograms within three to four months, before selling them on either to export or domestic buyers through their busy livestock agents.

They then re-invest the proceeds into the next crop of freshening two-year-olds for the dairy.

The Budges say their method negates the investment of carrying and growing young stock through to milking age when they can contribute to the family's annual production of more than five million litres.

Gary said, *"To me, it just makes sense. I'm in the business of making milk – not growing dry cattle."*

He said over time, they have bought some beautiful groups of freshening two-year-olds – sometimes from failed export orders, sometimes from dispersals or herd reductions. He said it's worked well for them for the past 15 years or so.

"We don't ever buy cows out of the milk cheque. Our trading account is always used to replace other stock."

"When we bought this property, people said we'd only ever milk 120 cows here. We've been here 20 years now. If someone says you can't do something, you just go and do it."

TIME IS MONEY

So, while Gary and Anne don't keep the calves from the heifers they buy in, getting them to saleable weights quickly does put a sharp focus on their rearing practice. Their margins depend on them achieving the necessary weight gain within set timeframes.

This season, for the first time they have included BioCalf into their programme. Added to the milk at one gram per calf per day, BioCalf is a double-strength probiotic powder, which contains Australia's only all-natural coccidiostat, *Yucca schidigera* (known as Yucca).

Yucca is native to the south-west of the United States of America and Mexico. The Indians recognised Yucca as a "tree of life", with health-promoting activity. Its extracts have been used for centuries, including in US cattle production for more than 30 years. Yucca contains naturally occurring saponins, which help bind protozoal pathogens such as Coccidiosis and Cryptosporidium.

"We certainly didn't have many sick calves or scours this season, and we found if they did get sick, they picked up very quickly. It's made our job easier, that's for sure."

Anne Budge.

Other positive effects of dietary supplementation with Yucca include growth rates, feed efficiency and general health.

The couple said BioCalf mixes easily, stays suspended in the milk for exceptional absorption, and has been easy to build into their busy daily routine.

THE NUTS AND BOLTS

Anne and Gary's calves are fed four litres of milk a day (twice-a-day for the first month, and once a day thereafter). They are also offered ad lib pellets, straw and water. The goal is for them to reach 120kg at four months.

Gary observed: *"The calves looked well in themselves this season. I would also say that they started eating pellets and straw a little sooner on the BioCalf, which is a good sign in terms of their gut development."*

"This calving has actually been pretty cruisy, to be honest."

CALVES RECOVERED QUICKER

The vet behind BioCalf, Dr Robyn Plunkett (BVSc) says BioCalf represents the next generation of probiotics.

"Farming is so intense nowadays that calves are exposed to more harmful bacteria than ever before. The traditional rates of probiotics in milk are no longer relevant in modern calf-rearing practice."

"That's why we've included more than double the level of probiotics in BioCalf over every other current product on the Australian market."



BIOCALF
Double the strength of standard probiotic powders



TRUSTI TUBER

Safest tube feeder on the market

The smoothest and most practical feeding process for your calves. Designed by a vet and farmer, the Trusti Tuber significantly reduces calf stress and discomfort, giving the operator complete confidence.

It has a soft and flexible tube, which is easily swallowed by the calf.

The flexible tube is advanced through the mouthpiece, so the tube can be easily and safely positioned in the oesophagus



Comes with a Peach teat cap for easy transition between teat and tuber



Probiotics serious contributor to calf health and growth



HAMISH HUNT

Special Projects – Daviesway/DASCO
Mobile: 0400 118 749
Email: hamish.hunt@daviesway.com.au

Hamish has worked with DASCO/Daviesway on special projects for 21 years. The Industrial Chemist graduated with a degree in Bachelor of Applied Science in Applied Chemistry from RMIT University in Melbourne in 1986 – before adding further study in Bio Science and Genetics.



Yucca plant extract has been used in US cattle production for more than three decades.

Probiotics serious contributor to calf health and growth

There are some big points in the probiotic conversation that haven't been widely shared. Nor are they well understood.

They are, however, massively important – and they explain a lot.

Daviesway released two new probiotic products late last year: BioCalf and BioBoost. The impact of the ingredients we've included, and the probiotic potency of these products, holds some of the secrets as to why they are getting such rave reviews from our customers.

WHY PROBIOTICS?

Probiotics are not new to our industry; so, you may ask, why have Australian researchers been largely quiet on this subject?

Research is not cheap; the silence is basically because Australia's dairy industry has not had the funding to underwrite clinical studies into probiotic use. There is, however, well-documented and credible research out of the USA and Europe confirming the efficacy of probiotic use from the early 1990s.

WHAT PROBIOTICS DO

Research confirms that supplementing the rumen with probiotics accelerates calf growth: it directly stimulates rumen development, and reduces the need for antibiotic intervention.

And, here's one of the kickers...

Probiotic supplementation maintains an immature rumen pH in the neutral range of 6-7. On transfer to the abomasum, the same bugs die in the pH<2 environment, releasing essential amino acids for the calf's growth. This is why calves on BioBoost and BioCalf appear healthier – because they are.

The ammonia to amino acid pathway is a net contribution of energy to the calf.

WHEN IT GOES WRONG

When the ammonia is not consumed by microflora, it is absorbed to blood, converted to ureic acid by the liver, and excreted. This is a net energy drain on the calf. On top of that, the rumen acidifies, thus killing more organisms – and potentially the calf.

CHECK THE POTENCY

It is also important to take note of the potency in probiotic formulations. The dose must be high enough to have a meaningful impact because of the rapid transit time through the immature rumen.

BioCalf is twice as potent as other products on the market, and BioBoost is 40 times stronger. This was a deliberate move in creating our formulation, to give calves the level of protection that modern calf-rearing facilities demand. We are literally talking billions of colony forming units (CFUs) for the Daviesway formulation, rather than the millions that most other products use.

YUCCA IS A TRUMP CARD

The other inspired addition is that BioCalf includes an extract derived from *Yucca schidigera*, which is native to the deserts in south-eastern California, Baja California, New Mexico, southern Nevada and Arizona. Yucca has been used for centuries, and in US cattle production for more than 30 years. It is in no other product on the Australian market.

Yucca contains naturally occurring saponins, which help bind protozoal pathogens such as *Coccidia* and *Cryptosporidium*. It also includes naturally occurring anti-microbials and anti-oxidants with complex properties that are still being researched.

Yucca leads to higher microbial yields through rumen nitrogen uptake. It carries a US GRAS (Generally Regarded As Safe) status, and is FDA-approved for use in humans.

It also cost-effective, safer and more consumer-friendly than synthetic compounds.

NO-BRAINER

For me, BioCalf and BioBoost deserve their place at the table, within the big picture of a complete calf-rearing regime that includes close attention to hygiene, quality colostrum, draft-free pens in the winter, ventilation in the summer, access to fresh water, fibre, grain and, of course, milk.

So if you'd like to see what the farmers using BioCalf and BioBoost are saying about these products, please check out their stories in this edition.

These results are great all round.



BIOCALF

Double the strength of standard probiotic powders

BIOBOOST

40 times more concentrated probiotic paste



MTF SERIES



link to video

MIXER TANKER FEEDERS

- Mix and feed out milk to calves
- Carry up to 1000 litres
- Available in 50, 60, 70 or 80 teat units
- Self-cleaning. Simply quarter fill the tank with clean water and start the pump. Feeder will self-wash within 3 minutes
- Made by New Zealand's leading calf feeding company, and it comes with a two-year warranty.
- Guaranteed to save you time

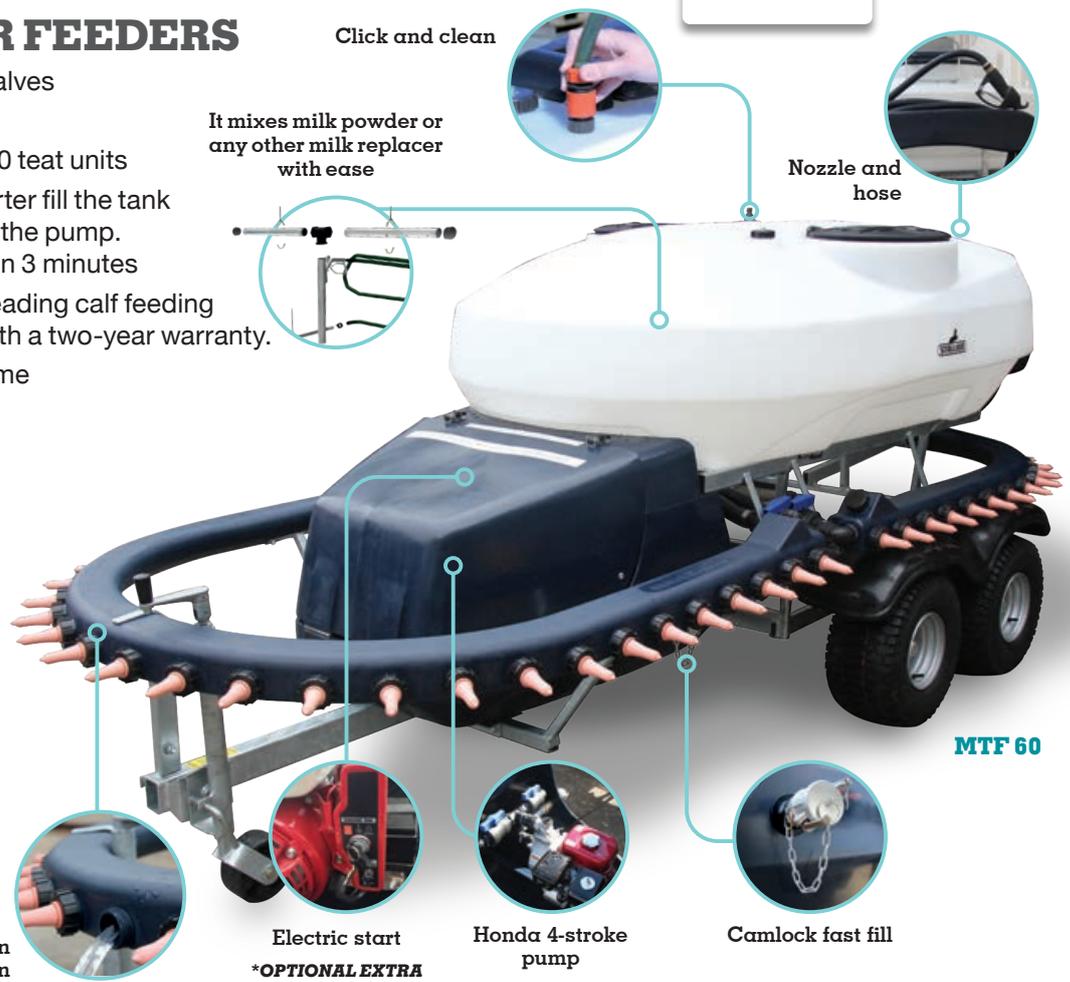
Models

MTF 50 / 50 teat / 1000L tank
(tandem axle)
1450H x 1520W x 3520L

MTF 60 / 60 teat / 1000L
tank (tandem axle)
1450H x 1520W x 3520L

MTF 70 / 70 teat / 1000L tank
(tandem axle)
1450H x 1520W x 4200L

MTF 80 / 80 teat / 1000L tank
(tandem axle)
1450H x 1520W x 4800L



MTF 60

OT SERIES

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- Larger tank lids with three-way locking system, built to withstand high wind
- Lower inspection point with re-positioned side access. Stronger frame with heavier gauge galvanised steel
- Enhanced stability with lower point of gravity
- Easy click-and-clean system
- Easy turn Hansen milk taps

Models

OT50S / 50 teat / 500L tank (single axle)
1280H x 1850W x 2800L

OT50LT / 50 teat / 1000L tank (tandem axle)
1440H x 1850W x 2800L

OT60LT / 60 teat / 1000L tank (tandem axle)
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OT 50S

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60 teat
500L tank

LIMITED EDITION

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- UV protected plastic
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*Fitted with
60 Peach teats -
the world's No.1
calf teat*

Strictly limited stocks

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