

Organic Dairy and Pastoral Group

Pastoral Workshop @ Larsons Road, Eketahuna

Organic Weed Management and Cropping in Organic Systems

Property of Mike and Kathleen Long, sharemilked by Nick and Gerrie Cole

Tuesday 19 May 2009

Thank you to:

Jack Wanklyn, Shorty Buckingham, Kerry Harrington for extensive contribution to the workshop, Steve Haswell for information on soil samples, and Tony Robinson for overview on Brix (complex sugars) levels

Statistics

Size: 70 ha
Stocking: 150 Cows this season, 180 coming season
Rainfall : 2500mm annual
(327mm February 2009)
Calving: Spread 10 weeks
75% calf in first round
9% empty
No AI this year
Fertiliser/ 700kg/Ha Probitas
Conditioners: Seaweed
BD prep 500 (has been used not noted how often)
PH: 5.8
Certification: Bio-gro C3. Full certification 1 September 2009
Brix: Milk Brix reading running at 12

Overview

Nick presented and overview of the farm history being:

- Previously owned by Mike's mother and share-milked conventionally.
- Mike and Kathleen purchased 3 years ago
- Engaged Nick and Gerrie as 25% sharemilkers
- Running the property with some stock sharing between this property and M&K's property out of Dannevirke

Weeds

Main weeds are ragwort, Scotch thistle and Californian thistle. Buttercup was establishing itself on the property when they first took over but organic soil management has resulted in very little buttercup on the property. It was noted that buttercup is a major issue for the neighbouring properties.

Nick has made use of the local volunteer fire service fundraising to pull ragwort, grub scotch thistle and weed-eat fence-lines for calves. Calves are being treated with repeated topping just after the buds form and cows have grazed the paddock.

Nick has made a large quantity of Ragwort Tea for dosing the paddocks. It was commented by Shorty and Jack that the fermentation appeared to be anaerobic which is not good. Advised to mix smaller batches ideally using 200l drums and to obtain some BD preps to mix in which should result in aerobic fermentation. It was also noted that the Tea needed to be diluted before use.

Further Reading:

(1) "Weed cover unaffected after converting a dairy farm to organic production" by K.C. Harrington, M.A. Osborne and P.D. Kemp (2008). Summary and access to full paper available on internet at: http://www.nzpps.org/journal/61/nzpp61_116.php

(2) "Mineral composition and nutritive value of some common pasture weeds" by K.C. Harrington, A. Thatcher and P.D. Kemp (2006). Summary and access to full paper available at: http://www.nzpps.org/journal/59/nzpp59_261.php

(3) Information on weed identification and biology (and also contact with Kerry Harrington) at: <http://weeds.massey.ac.nz>

(4) Information about the Massey University organic dairy farm trial, including access to all annual reports of the trial: <http://www.agservices.net.nz/page.php?12>

Stock Health

Nick noted the following in general health of stock:

- Since commencing conversion to Organics stock have been generally healthier
- Very few health issues
- Very few Vets calls
- No Clinical Cases of Mastitis. A few cows have shown early signs and this has been treated with Homoeopathic Preps SSC, Phytolacca. Shorty advised Bryonia/Belladonna mix could also be useful.
- Have had a few cases of abscesses to feet/hooves. This has been successfully treated with Cleaning the abscess and applying a white sugar and Iodine poultice.

Brian from Tararua Vets has farmed organically in the States and is very good for consulting on organic requirements.

Shorty advised the following on animal health:

- full animal health benefits would not be obtained until every animal was born from an organically certified animal. Immunity becomes stronger
- Track genetics and cull for health issues. Worm intolerance/ scouring mastitis are inherited traits
- Be hard with culling
- Track all stock issues in a notebook and follow trends / breeding

- Make decision at breeding time. If a cow has had calves with health issues mate to a terminal sire so you are not tempted to keep a heifer calf as a replacement.
- Homoeopathic remedies are very good. If they do not appear to be working consult your vet and you may have to revert to conventional.

Further reading on Homoeopathics:

Homoeopathic Handbook for Dairy Farming by Tineke Verkade.
ISBN No. 0-473-08376-0. Tineke is a Homoeopathic vet in the Waikato and will consult over the phone or visit www.hfs.co.nz

Homoeopathy for Dairy Cattle by Chris Day

Treatment of Cattle by Homoeopathy by George Mcleod
<http://touchwoodbooks.co.nz/tcattle.html>

<http://www.homeopathy-consults.co.nz/links.html>

Cropping

3ha was cultivated November 2007 and the following mix planted.

- Rocket (salad leaf plant) 12kg
- Pitau (white clover) 12kg
- Rival (Turnip) 16kg
- Plaintain 12kg
- Chicory 12kg
- Peas 12kg

A total of 76 kg seed. Cultivation process was to a depth of 50mm with a crumbler only starting from grass pasture with several passes over a 1 month period late Oct/early Nov, seed was sown with a spreader and harrowed. Resulting crop produced very good feed. Grazed in Jan and Feb (Turnips) and then again late autumn early winter. 3ha then produced 60 bales of Hay and Balage in November. Peas were not as successful as expected as they need to be sown deeper. A further 3Ha planted November 2008. Considering replacing peas with sunflowers this year for stock to get the benefit of oils.

Turf/soil samples noted:

- Good depth of roots
- Good worm activity
- Oxygen provided to soil by roots

Brix

Tony gave an explanation of Brix levels. Brix is the unit of measure for complex sugars. Essentially a Brix reading like a soil test is one item to be considered among many and should not be used alone.

For detailed information on Brix go to www.highbrix.com