Facial Eczema Risk and Incidence Monitor Report

Weekly Summary

Week 16 - 26 April 2019

FE Risk - National trends in spore count levels (% elevated above 30,000 spg)

Data provided by: Eltham Vet Services, Carlyle Vet Services Napier, Dargaville Vets, Whitianga Vets, Wanganui Vets, Te Puke Vet Centre, Cambridge Vets, Franklin Vet Service Taupiri, Atkinson & Assoc Piopio/Te Kuiti

AsureQuality contributors: Morrinsville, Whangarei, Taupo (Hastings and Gisborne no counts possible)
About facial eczema

Facial eczema (FE) affects most ruminants but especially cattle and sheep throughout most North Island regions plus the northern end of the South Island. FE is responsible for serious production losses estimated to be around $200m annually with affected stock suffering liver and skin damage, which together contribute to ill-thrift, reduced fertility, reduced milk and meat production and, if left unprotected, in worst cases death.

During summer and autumn months warm, humid conditions together with dead litter in pasture support the growth of a fungus (*Pithomyces chartarum*) in pasture. Animals graze toxic pasture and once in the rumen the spores release a mycotoxin sporidesmin, which then enters the blood stream eventually finding its way into the liver. The toxin specifically attacks the cells of the bile duct resulting in the liver being unable to process and excrete waste products and phylloerythrin, a chlorophyll breakdown product. Infected animals display signs of photosensitisation and look distressed. The first signs are often reddening and swelling of skin exposed to the sun (i.e. around the eyes, ears, lips and nose) as well as restlessness, shaking and rubbing of the head and ears, and seeking shade.

Prevention of facial eczema

With careful planning and implementing a sound FE management plan, farmers can take control of the risk of facial eczema. Prevention is the only recognised method of avoiding FE. Ensure all staff are aware of the associated risks and dangers of FE but ensure the plan is implemented when spore counts are rising but before clinical signs are identified.

Predict risk/ monitor management programme

There are a variety of testing options that can assist determining if animals are at risk or to check that your management programme is working. It is recommended that 10 cows are selected to test for serum zinc and GGT 3-6 weeks after your management programme has started (Facial Eczema – Management for New Zealand dairy herds, Dairy NZ).

Essential to start FE control early.

Ideally start prevention with zinc treatment and Fungicidal sprays, two or three weeks before the spore growth danger period for maximum protection.
Northland

When local pasture spore counts are trending upwards of 20,000 spores/g and weather conditions look favourable for sporulation, monitor your own farm’s pasture spore counts week to week and implement Facial Eczema control and prevention strategies. Data recorded below is the highest count received in each region per week.

For the local weather forecast in your region please go to: http://www.stuff.co.nz/national/weather

Data provided: Kaitaia 0, Kaikohe/BOIs 0, Whangarei 3, Dargaville/Ruawai 3, Maungaturoto 0, Rodney 0

Note: Due to a count >100k spg the scale for the Y-axis on this graph has been changed to a log2 scale.
Bay of Plenty

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Data provided by: Tauranga 0, Te Puke 10, Whakatane 0, Opotiki 0, Rotorua 0

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Data provided by: Franklin 0, Whitianga 3, Waihi 0, Hauraki 0, Piako 0

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Central Waikato

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Data provided by: Hamilton 1, Morrinsville 3, Matamata 0, Raglan 0, Waipa 2

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Data provided by: Otorohanga 0, Waitomo 1, Taupo 4, South Waikato 0

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Data provided by: New Plymouth 0, Stratford 5, South Taranaki 0, Wanganui 2

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Data provided by: Gisborne 0, Hawkes Bay13, Wairoa 0

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Lower North Island

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Data provided by: Rangitikei 0; Manawatu 0, Horowhenua 0, Tararua 0, Wairarapa 0

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South Island

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Data provided by: Tasman 0, Grey 0, Marlborough 0