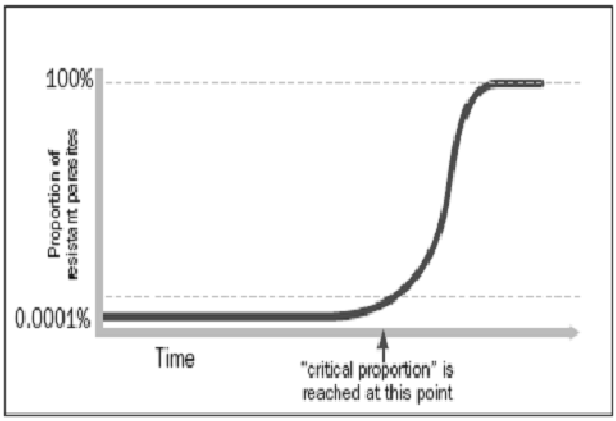
# WORM DRENCHING CALVES MADE EASY!

One of the most common causes of poor performing calves is parasitism. Farmers are therefore advised to drench calves regularly to ensure maximum growth rate. Ensuring that each animal receives the correct dose of an effective drench at the appropriate time is often difficult if stock is grazing off and facilities are less than ideal. Incorrect drenching leads to poor results and eventual build-up of resistant parasites.

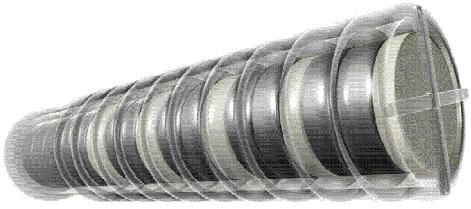
**How does resistance develop?**
Most worms on a property will be susceptible to all drenches, but a few individual worms may carry genes for resistance to one or more drench families. These genes are recessive, so only resistant worms mating with resistant worms will have resistant off-spring. Animals grazing pasture collect a variety of both resistant and susceptible worms. When the animal is drenched most of the worms will be killed. Worms that are resistant will most likely survive. Resistant worms then produce eggs that contaminate the pasture, leading to a greater proportion of resistant worms being ingested, and drenches being less effective over time.


**The concept of refugia.**
In order to minimise the development of a resistant worm population, there has to be a population of susceptible worms available to breed with the resistant worms to dilute the resistance gene. The normal practice is to drench all the young stock in a mob at the same time, however this creates ideal conditions for resistant worms to predominate. Traditionally this has been overcome on drystock farms via methods such as leaving some stock un-drenched, alternating drench intervals, using combination products, or by grazing with other species to reduce worm burdens on pasture.

## The i-Pulse

New Zealand animal health company Bomac Laboratories have developed **i-Pulse**, the world's first pulsatile, desynchronised combination intraruminal device (bolus) for calves. Each bolus contains five tablets. Each tablet in turn contains a combination of levamisole (clear) and abamectin (macrocyclic lactone) drench. Following oral administration



each bolus slowly erodes in the rumen and releases the 5 anthelmintic tablets at set intervals.

The first tablet is released immediately after administration. The remaining 4 treatments are released at slightly different intervals (approximately 4 – 6 weekly) in individual animals in a mob. The animals' increasing weight over this long treatment period has been taken into account with increased dose size over time. By staggering the drenching times for each individual animal there is always likely to be a mixture of susceptible and resistant worms in the population, meaning the likely hood of resistance developing is reduced and the drenches will be more effective.

The i-Pulse is only available from your vet.