DAGI newsletter article for Vets

DAGI (Drench And Grazing Integration) is an app developed to help farmers visualize worm larvae on their paddocks. When these larvae are ingested by your stock, they become worms that limit production and force you into drenching – but what if you could avoid them in the first place?

For decades, New Zealand sheep farmers had a simple answer for worms: drench the flock every three or four weeks, keep the paddocks clean, and push the lambs through. It worked brilliantly. It intensified grazing, it boosted growth rates, and it built an industry.

The trouble is, every time we drenched, only the worms with resistance genetics survived to breed. We bred the smart ones. Today more than a third of NZ farms have triple drench resistance — and when we drench, it's often only the smart ones that survive. The system that worked for so long has fallen over.

DAGI started with NZ vet Ryan Luckman working with a farmer battling resistance; trying to work out what stock/drench had been where, and when. Knowing that 90% of worms are on the paddock, not in the animals, they drew maps to follow the resistant worms and the drench exposure across the farm.

But no one has time to redraw a map every time they move a mob or drench. And no one has the ability to constantly integrate the weather, humidity, temperature and all the other factors that we know affect worm egg hatching.

But we DO have that information available to us if we have an interface that allows us to access it – e.g. an app.

That's the problem DAGI solves. You put in your stock movements, your drenches, and your faecal egg counts. Age, weight, energy intake, weather — all automated. The app runs the parasite lifecycle in the background and paints every paddock on your farm with two traffic lights: one for larval contamination, one for resistance risk. Red, amber, green. You open DAGI in the morning and you can see, at a glance, which paddock your lambs should go on and which to save for cattle or maybe crops or silage. This means you can avoid the larvae in the first place, rather than just treating once the animals are already infected. Less exposure to worms = less need for drench. And less reliance on drench means better productivity.

Even better; the traffic light system shows the current situation, but also the history of the mob or paddock, making it easy to review management decisions to inform future grazing choices.

With the help of industry experts and the support of B+LNZ, Ryan has been building DAGI since 2024. We launched to our first group of Beta test farmers in November 2025, and tested it for 8 months to get rid of any bugs before full release.

Currently launching on the app store in NZ, we will be looking to the UK and Australia next. Drench resistance is not confined to one place, and so we want to use what we've learned here in Aotearoa to help farmers deal with the same problem elsewhere.

If you wish to know more, have a look at our website www.dagi.nz

We also have recorded webinars and app run throughs on our YouTube channel, to demonstrate how it works: https://www.youtube.com/@DAGIDrenchGrazingIntegration

Follow us on social media; Instagram @dagi.nz and Facebook @DAGI to keep up to date.

For any questions get in touch at info.dagi.nz@gmail.com