OSTERTAGIA ostertagi

DIAGNOSE BEFORE TREATING

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The *Ostertagia ostertagi* burden

Pastured dairy cattle contribute to a healthy milk supply. Animal welfare and productivity, however, are placed at risk by gastrointestinal nematode infections.

In adult cattle, the single most significant nematode species is *Ostertagia ostertagi (O. ostertagi)*. All pastured herds are vulnerable to *O. ostertagi* infection, with 10%–50% of European herds likely suffering production losses, depending upon the region.[1]

- Negative impacts to feed intake, feed conversion, growth rate, reproduction efficiency and milk yield[2]
    - *O. ostertagi* can cause reduced growth performance (30–50 kg) after the first grazing season and decreased subsequent milk productivity with excessive exposure[3]
- Cost increases from non-targeted anthelmintic treatment
- Potential anthelmintic resistance with overuse of anthelmintics

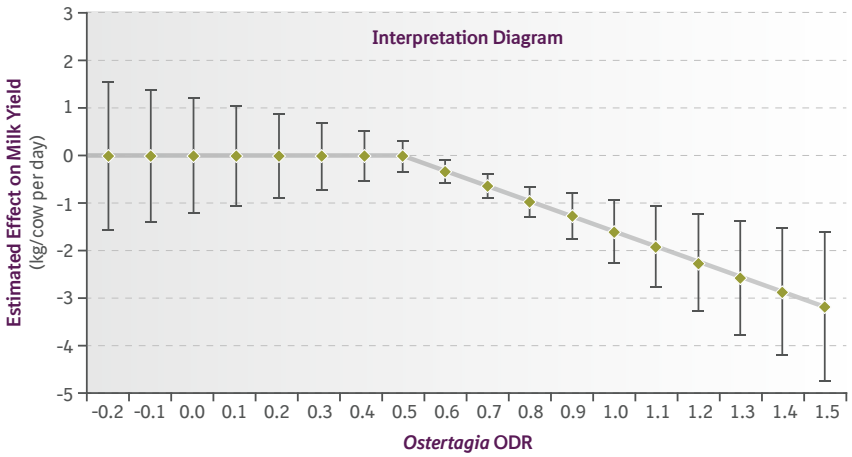
Traditionally, control of *O. ostertagi* infection has consisted of calendar-based anthelmintic treatment. This strategy presents challenges, as indiscriminate and intensive anthelmintic treatment brings about the rapid development of resistant nematodes.

Current best practices recommend the approach of “diagnosis before treatment,” a more sustainable, targeted control method compared to repeated scheduled treatments.[4]

Help develop a sustainable *Ostertagia ostertagi* decision making process

Assess the economic benefit of anthelmintic treatment for *O. ostertagi* infection with the first assay to detect antibodies to *O. ostertagi* exposure in grazing cattle. The field-tested semi-quantitative SVANOVIR® *O. ostertagi*-Ab assay correlates antibody levels (figure 1) to the economic impact on the milk yield, offering a threshold at which anthelmintic use is justifiable. This provides an objective, specific and cost-effective method for evaluating the severity of infection and ensures that anthelmintics are used when needed, minimizing the development of anthelmintic resistance for long-term effectiveness.

figure 1



Test results are expressed as optical density ratios (ODR), with a high ODR indicating a high exposure to *O. ostertagi*. The relation between ODR value and change in milk yield, based on tests on bulk milk samples from >800 European herds. The deviation bars are in correlation to the number of sampled herds.

SVANOVIR® *O. ostertagi*-Ab advantages

- Diagnose *O. ostertagi* during and after infection through antibody detection, unlike conventional methods that require parasite detection in the sample
- Support better decision making for prudent use of anthelmintics
- Diagnose herds where *O. ostertagi* may be impacting milk production and improve milk output through appropriate anthelmintic control
- Use one single bulk tank milk sample to determine infection severity, optimize commencement of the lactation curve and assess subsequent seasons
- Produce test results in an easy-to-use-and-interpret format

SVANOVIR® *O. ostertagi*-Ab ordering information

Species	Bovine
Samples	Bulk Tank Milk
Type	Indirect ELISA

Article Number	Tests*	Plates	Format
104897	184	2	Strips

*Tests: maximum number of tests for analysis, wells for kit controls excluded

Unwavering in our commitment

At Svanova, **we care about the health of people and animals. We are committed to our laboratory partners around the world and work to meet their needs by** delivering high performing products that can help to improve the health and well-being of all animals both now and in the future.

Uncompromising in our quality

We are dedicated to the quality of our products, processes and services. Since 2003 our ELISA products have been **developed, manufactured and supplied to the market according to the ISO 9001 quality management system,** and are certified at ISO 9001:2015 standard.

Learn how Svanova veterinary diagnostic solutions can help you monitor, prevent, control and eradicate significant animal diseases. Find out more at **www.svanova.com**, or contact your local Svanova representative.

1. Bennema, S. C. et al. Epidemiology and risk factors for exposure to gastrointestinal nematodes in dairy herds in northwestern Europe. Vet Parasitol 173, 247–254, doi:10.1016/j.vetpar.2010.07.002 (2010).
2. Charlier, J., van der Voort, M., Kenyon, F., Skuce, P. & Vercruysse, J. Chasing helminths and their economic impact on farmed ruminants. Trends Parasitol 30, 361–367, doi:10.1016/j.pt.2014.04.009 (2014).
3. Ploeger, H. W. et al. Production of dairy replacement stock in relation to level of exposure to gastrointestinal nematode infection in the first grazing season: second-year calves and heifers. Vet Parasitol 65, 99–115 (1996).
4. Kenyon, F., Hutchings, F., Morgan-Davies, C., van Dijk, J. & Bartley, D. J. Worm Control in Livestock: Bringing Science to the Field. Trends Parasitol 33, 669–677, doi:10.1016/j.pt.2017.05.008 (2017).

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