30/07/2020

NO EMBARGO

Drug resistant parasites cost European livestock industry millions each year

An international research study has estimated that drug-resistant parasitic worms cost the European livestock industry more than €38 million per year in production losses and veterinary costs.

Parasites can cause major welfare and productivity problems in cattle, sheep and goats worldwide, affecting growth, fertility and milk production. Worryingly, drug resistance is increasing against the veterinary medicines widely used to treat and prevent infection. This means that current farming methods may not be sustainable in the longer term.

Now a major new study has estimated that parasitic worms cost the European livestock industry more than €1.8 billion per year, with drug-resistance costing at least €38 million per year in production losses and treatment costs. The study can support the identification of livestock sectors and regions where the largest losses occur and inform control programmes and research policies at national and European level.

Agricultural economic data was combined with the latest data on the levels of disease and drug-resistance in 18 European countries. Data were not available for all European countries and only one class of veterinary medicine was included in the analyses. There are five classes of veterinary medicine available to treat parasitic worms in livestock, and drug resistance is widespread against at least 3 of these classes. This means that the costs are likely to be higher than the conservative estimates reported in the study.

The study was led by Dr Johannes Charlier of the Belgian scientific consultancy Kreavet, as part of a European Cooperation in Science & Technology Action, COMBAR (Combatting Anthelmintic Resistance in Ruminants). It involved a total of 23 organisations who brought together regional expertise and the latest data on the economic impacts of parasitic disease in the European livestock industry.

Notes for the editor:

About COMBAR

Helminth parasitic pathogens cause severe disease and are amongst the most important production-limiting diseases of grazing ruminants. Frequent anthelmintic use to control these infections has resulted in the selection of drug resistant helminth populations. Anthelmintic resistance (AR) is today found in all major helminth species across Europe and globally.

COMBAR is advancing research on the prevention of anthelmintic (drug) resistance in helminth parasites of ruminants in Europe and disseminating current knowledge among all relevant stakeholders. By gathering parasitologists, social scientists and agricultural economists, COMBAR is bringing together a multi-disciplinary blend of scientists that normally rarely interact.

COMBAR is integrating novel developments in the field of (i) diagnostic tests; (ii) vaccines to protect animals from infection; (iii) anti-parasitic forages, (iv) selective treatment strategies and (iv) decision support tools. By evaluating those novel technologies, assessing their barriers to uptake and facilitating transfer of knowledge and technologies in a coordinated approach, COMBAR is tackling anthelmintic resistance in Europe.

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Reference:
Charlier et al. (2020) Initial assessment of the economic burden of major parasitic helminth infections to the ruminant livestock industry in Europe, Preventive Veterinary Medicine, *in press*
https://doi.org/10.1016/j.prevetmed.2020.105103

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