

COST Action ENVIRANT
(CA23154)



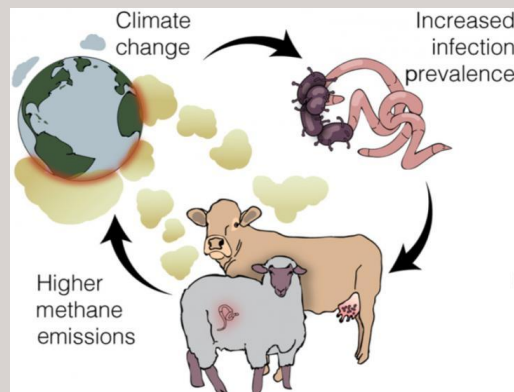
envirant

**Environmental impact of
anthelmintics in livestock and
alternatives to minimize their use**

 **cost**
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY



CHALLENGES

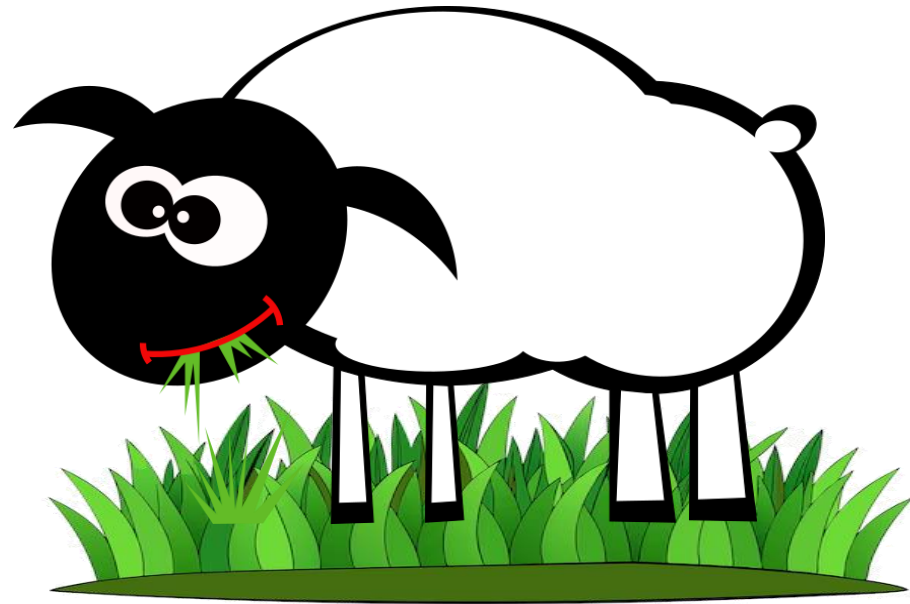


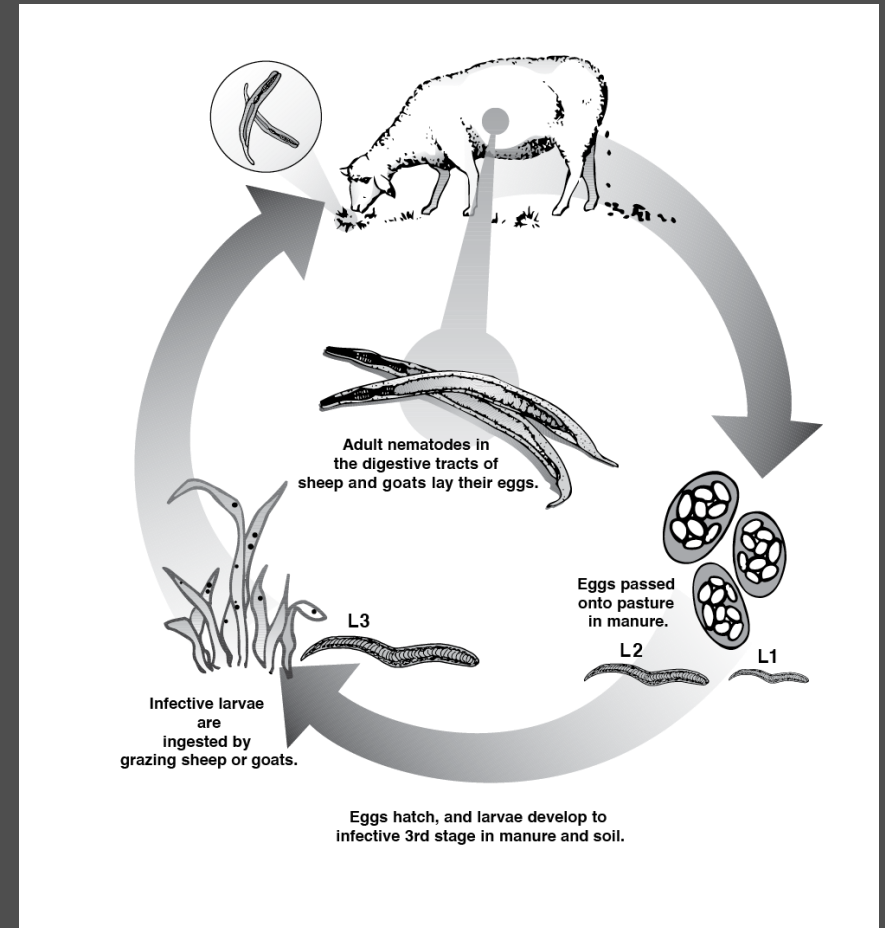
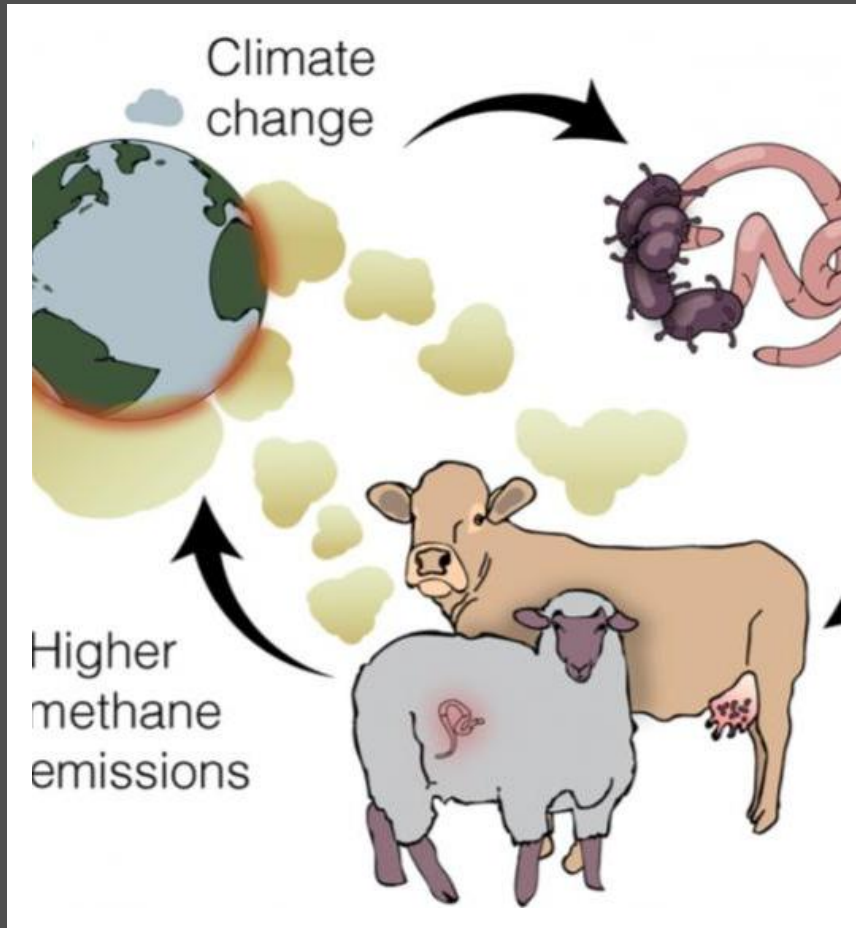
- Climatic change
- Food security
- Environmental protection
- Sustainability of animal farming systems
- Public Health protection



Grazing ruminants = gastrointestinal nematodes

- **Common & Widespread**
- **Affect health & welfare**
(anorexia, impaired digestion & nutrient absorption)
- **Reduction of farmer's income**
- **Reduction in quantity & quality of products**







Livestock

- Improved health
- Improved Welfare

People

- Ensure food security
- Safe, high-quality food
- Support human health and wellbeing

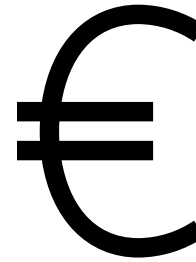
Profitability

- Improve productivity
- Support farming sector

Environment

- Reduce impact of livestock on GHG emission
- Ensure sustainable food production

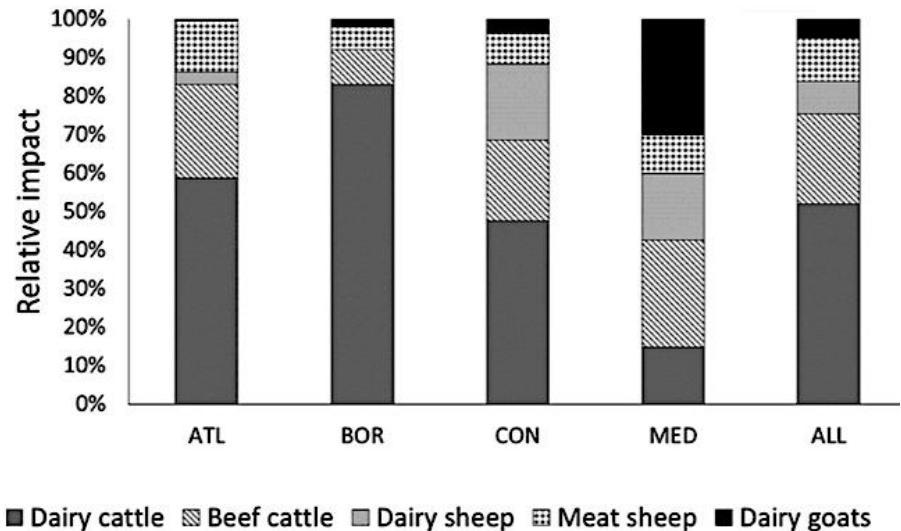
parasite control matters



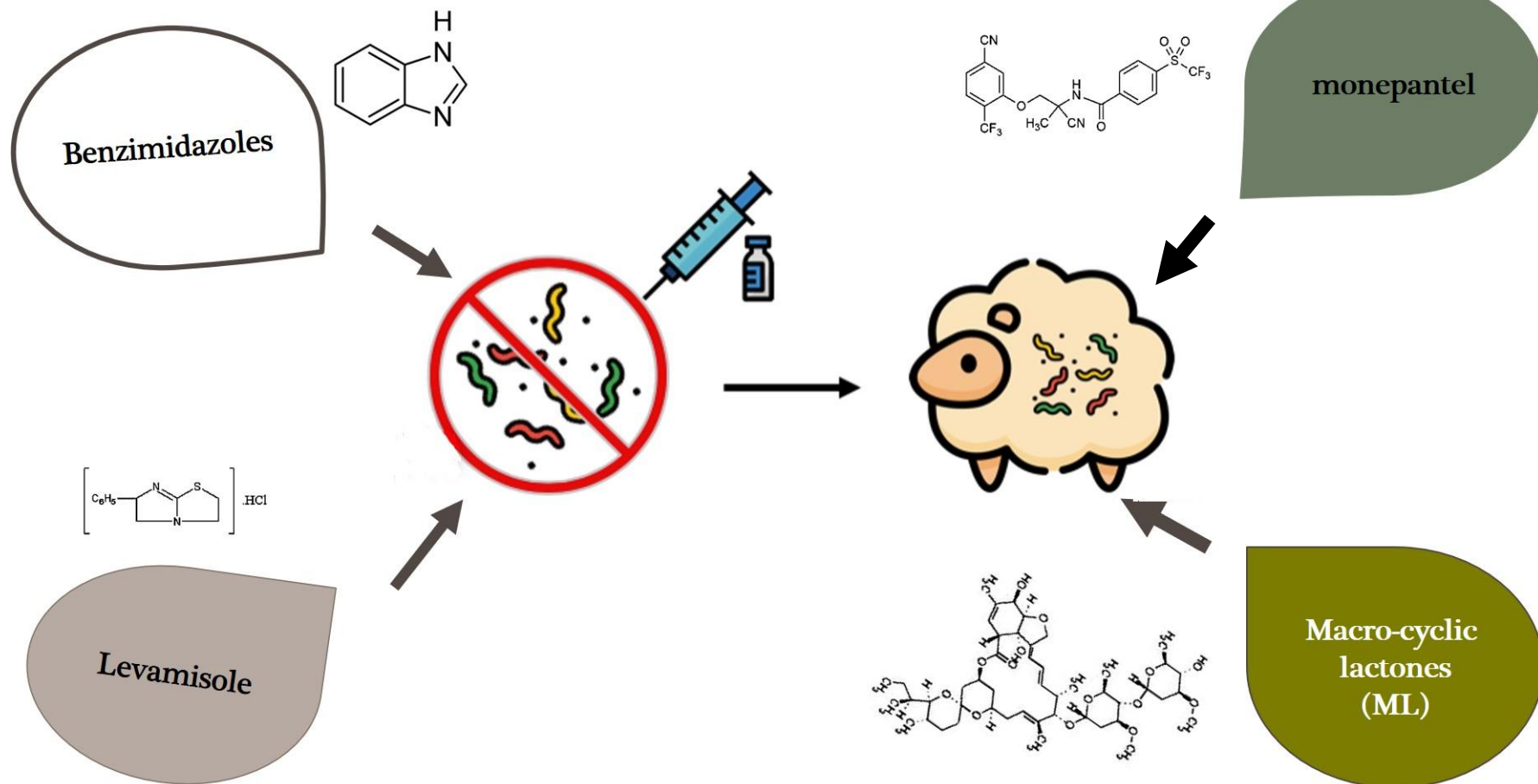
to Fig. 1): ATL = Atlantic (BE, FR, UK, IE, NL),
BOR = Boreal (NO, SE), CON = Continental
(AT, DE, LT, MK, PL, RO), MED = Mediterra-
nean (ES, IL, IT, PT, TU), ALL = all combined.

Evidence infection

- Budgets of all known national and European research projects on the topic in Europe over 10 year period
 - € 2.7 M / year
- Annual investment / Annual cost:
 - 0.15%



How to control Parasites?



Increases LIMITS on the USE of AHs

NEED for ALTERNATIVE SOLUTIONS of CONTROL

- × *AH drug resistance***
- × *Demand to reduce chemicals
in agriculture***
- × *Constraints in the regulation
to use commercial AHs***



What about the environment?



AH drugs have been considered recently emerging contaminants because their presence in both terrestrial and aquatic ecosystems

Soil ?

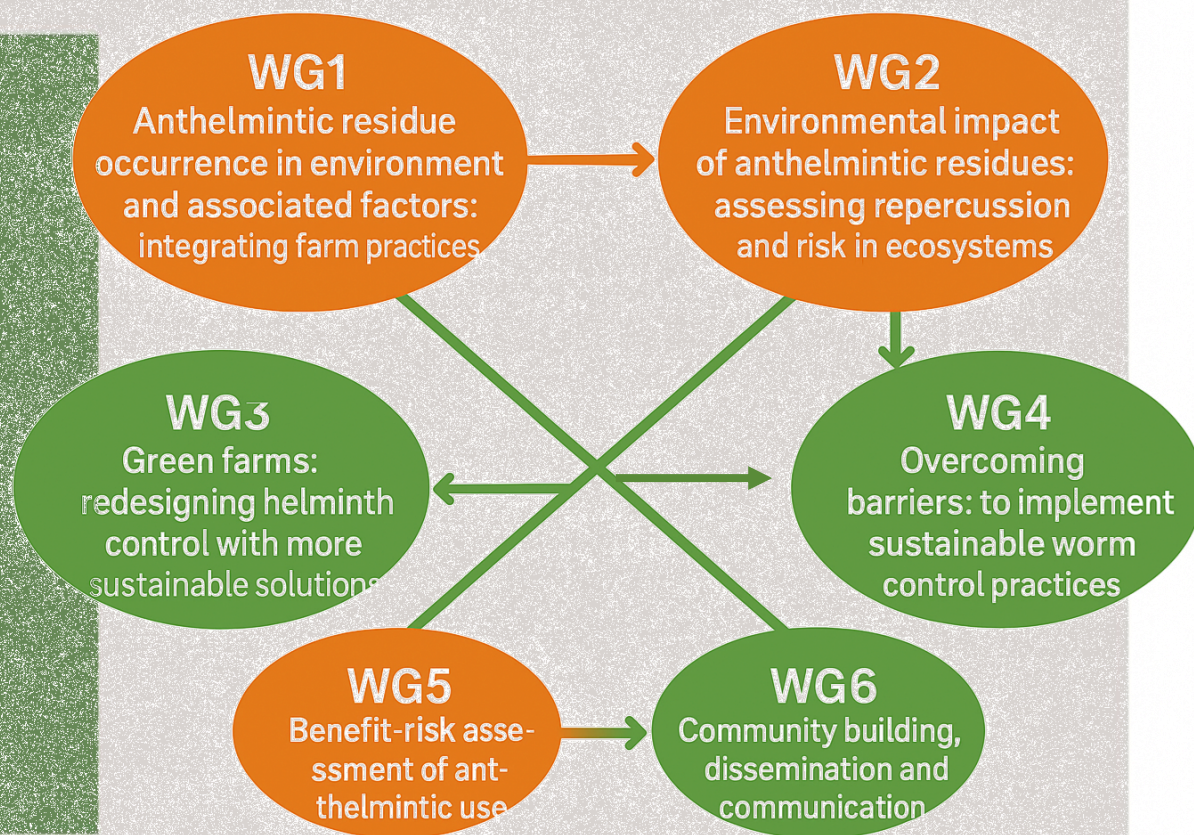
Water ?

Other organisms?

ENVIRANT aims to tackle this by:

- monitoring the **use & efficacy** of AHs in livestock farming;
- investigating factors related to farming practices/ environment/climatic conditions that favour the **persistence of AHs in the environment**;
- assessing the impact of AHs residues on **ecosystems**;
- developing **sustainable methods to reduce** the use of AHs in a variety of European settings;
- conducting sociological research **on barriers to implement sustainable methods**;
- modelling the **impact of AHs use**, considering animal health benefits and ecosystem risks

How we are organized



<https://envirant.eu>



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