

# Surveys of practices, perceptions and attitudes

in relation to integrated management of gastrointestinal parasites in sheep flocks

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CONTEXT Anthelmintic resistance (AR) is widespread gastrointestinal parasites of sheep and its impact on sheep production is important. A multi-component project (2015-2018) was conducted in Quebec with the aim of documenting the magnitude of this problem. The project was divided in four (4) activities in order to:

- 1 Determine the prevalence of AR in Quebec sheep flocks;
- 2 Survey the perceptions, attitudes and practices of the main players regarding parasite management;
- 3 Develop tools to promote integrated parasite management (IPM);
- 4 Transfer knowledge to promote the adoption of new practices.

This poster describes the second activity of the project.

**OBJECTIVES** To assess the practices, perceptions and attitudes of producers, veterinary practitioners and advisers relatively to IPM, with the goal of targeting the right content and strategies for knowledge transfer.

#### **ACKNOWLEDGEMENTS**

We wish to acknowledge the participating producers, veterinarians and advisers, as well as our social science adviser from McGill University, Paula L. Bush.

for the producers

34%

Calculate the dosage according to the average weight

93,5%

systematically deworm their whole grazing flock

dewormers

sheep

producers

3% Use fecal analysis for testing resistance

**METHOD** A semi-structured questionnaire was developed with the help of a social scientist (P. Bush) and a focus group whose members included sheep producers, veterinarians and advisers. Developed in three versions, the questionnaire:

- → Included 4 sections (farm description, parasite management, resistance and best practices, information and knowledge).
- → Was sent via personal email to sheep producers whose flock was managed on pasture (n=32), veterinary practitioners (n=15) and sheep advisers (n=7).

Descriptive statistics were computed.

**43**%

Are culling non

resilient animals

Use coprological

analyses at one point in the last 5 years

#### **FINANCING**

WHAT DID WE

This project was possible thanks to funding from Agriculture and Agri-Food Canada as part of their Agri-Innovation program.

### **RESULTS & DISCUSSION**

#### **Producers**

Main results are presented in the "Study Highlights" section. Most producers who were not applying specific best practices answered they would be willing to do so in a near future but under certain conditions:

- $\rightarrow$  lower costs
- → **less time-consuming** strategies
- → more knowledge and technical transfer.

**84**%

Say their veterinarian was their main source of information

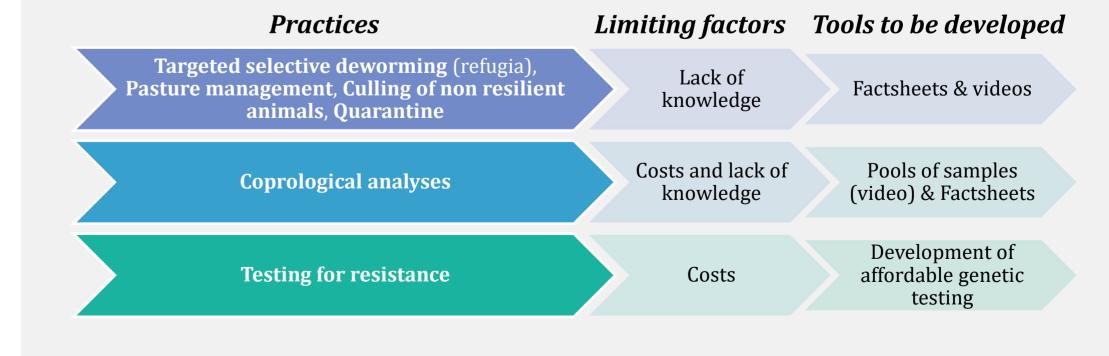
## **LEARN FROM THIS** STUDY?

→ Implementing IPM is a big challenge, as shown by Jack et al. (2017) and Woodgate and Love (2011): veterinarians and advisers must work as a supportive team with the producer.

→ **Most producers** were willing to implement some or all best practices under certain conditions.

→ Very few producers tested for resistance, and it

is known that being affected is a known incentive to change practices. → In order to change this paradigm, various tools need to be developed as there is a need for **knowledge transfer**.



#### **Veterinarians and Advisers:**

More than 70% answered they knew about best practices, but would appreciate getting more information. As expected, advisers knew more about pasture management than veterinarians (Fig. 1), but only 57% of the advisers knew about specific plants that could help controlling parasites. However, few veterinarians and advisers recommend those best practices to their clients, and more than 60% perceived that most producers would not adopt them, except coprology.

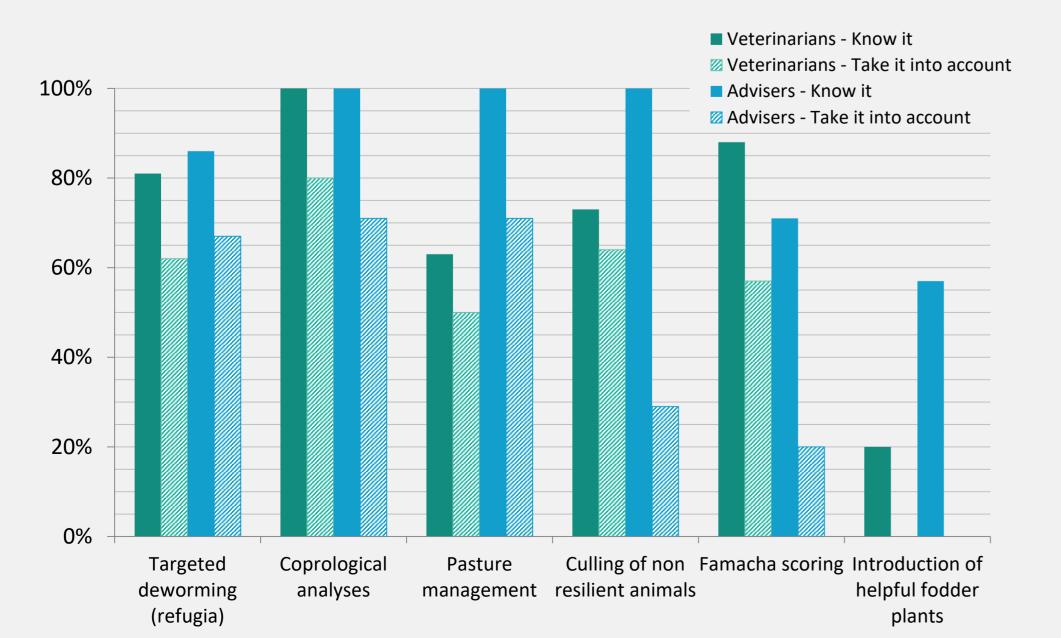


Fig. 1 Expertise and attitudes of veterinarians and advisers towards several best practices in IPM

#### WHAT WAS NEXT?

**Production** of videos and factsheets to help knowledge transfer (see next poster) • Organization of workshops and conference to promote IPM and good practices • Implementation of IPM through a new campaign of awareness and technical transfer supported by the government of Quebec that will start in 2019 (PISAQ) – This campaign will bring together veterinary practitioners and producers to deal with this issue.

#### REFERENCES

Woodgate, R.G. & Love, Stephen. (2011). DOI: 10.1016/j.vetpar.2011.11.045. Jack, Corin & al. (2017). DOI: 10.1016/j.prevetmed.2017.01.018.