Performing a coproscopic analysis after an antiparasite treatment

Need/issue: Internal parasitism.

Aim: To detect gastrointestinal strongyles resistant to pest control treatments on farms.

How to implement:

Equipment: single use gloves, plastic bags/jars, a drug containing the active substance whose efficiency is to test

Description:

- Day 0: two groups of 10 animals are identified within the same lot (ewe lambs, gimmers, ewes). The first group will act as a control group. These animals won't be given any treatment. The second group will be given a treatment
- 14 days post-treatment (day 14): both groups' faeces are collected and sent to a lab
- A pooled sampled coproscopic analysis is conducted for both groups at the lab
- Results

Expected benefits:

- Quick idea of how efficient a pest control molecule will be in a farm
- This knowledge enables the farmer to adapt his pest control strategy by reasonably using a molecule proved to be efficient, or by changing the chemical family if the first one proved to be inefficient.

Prerequisites and/or limits:

- Requires the use of a laboratory or veterinarian
- As the results can drastically differ from one farm to another, each farm needs to perform these analyses, no matter how close they are
- Respect deadlines: efficiency control has to be carried out on the 13th, 14th or 15th (at the latest) day post-treatment.
- Cost: 12-15€/analysis (per group). The laboratory will charge 30€, but the amount of time dedicated to the protocol's implementation also has to be taken into account, as well as the expenses related to the small items of equipment (plastic bags, etc.) and the pest control treatments tested.

Topic:

- [X] Health
- [ ] Nutrition
- [ ] Management

Level of solution:

- [ ] Knowledge
- [X] Practical

% of reduction:

= ((1 - (treated group's EPG/control group EPG) x 100)

- If > 95%, the tested anthelmintic molecule is considered efficient.
- If < 95%, a resistance will be suspected.
- The closer this percentage is to 0%, the stronger will this suspicion be.

Country: France

Dairy and meat sheep

Category of Animal: All

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