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SPARC
Sustainable PARasite Control in Grazing Ruminants

Control Programme for Gastrointestinal Parasites in Transhumant Sheep and Goat Farms

Programme objectives

1. Control of gastrointestinal nematodes (*Haemonchus, Teladorsagia, Trichostrongylus*, etc.)
2. Reduction of animal losses and productivity losses on the farm
3. Prevention of **anthelmintic resistance**
4. Adaptation to **seasonal movement**

Transhumant sheep and goat farms face:

- Alternation between **winter pastures (low altitude)** and **summer pastures (mountainous)**
- Large variation in the **environmental parasite burden**
- Higher risk of parasite spread and infection in **spring and autumn**

As a result, the risk of gastrointestinal parasite infection on these farms varies markedly with season, altitude and pasture.

Control and Prevention Programme

1. Before moving to summer pastures (Spring)

Goal: move only animals with a low parasite burden to "clean" pastures and **limit contamination of summer pastures**

Assessment of body condition and anaemia (**FAMACHA**)

Faecal examination

Targeted selective treatment (TST) before departure

If needed, treatment of high-risk groups:

- Replacement animals
- First-parity ewes and does

2. Summer grazing period (Mountain pastures)

Dry conditions mean a **low to moderate risk of infection**

Grazing on pastures rich in plants with bioactive antiparasitic properties

TST for animals:

- with weight loss
- with diarrhoea
- with anaemia
- with a drop in milk yield

Close monitoring of young animals, the most susceptible group

3. Before returning to winter pastures (Late summer – early autumn)

Goal: move only animals with a low parasite burden to "clean" pastures and limit contamination of winter pastures

Assessment of body condition and anaemia (**FAMACHA**)

TST before departure for:

- animals in poor body condition
- young animals

Provision of feed with bioactive antiparasitic properties

4. Winter period (low-altitude pastures with mild winters, with or without housing)

✓ **High risk of parasite infection due to:**

- Humidity and mild climatic conditions
- Crowding of animals
- Lambing/kidding and the **periparturient rise in parasitism**

Good nutrition (balanced diet rich in crude protein), plus:

- Avoidance of overgrazing
- Grazing on pastures rich in bioactive plants
- Provision of feed with bioactive antiparasitic properties
- No mixing with flocks of unknown health status
- Selection of animals with natural resistance
- Assessment of body condition and anaemia (**FAMACHA**)
- Faecal examination

TST:

- before parturition (in selected animals)
- in animals with clinical signs





Treat only the animals that need it, at the right point in the seasonal movement, to protect both the flock and the effectiveness of anthelmintics.

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