Protocol to select for sheep and goats resistant or resilient to wireworm in the Summer Rainfall area

Question: I have read that there can be selected for sheep that are resistant to wireworm. How do I go about achieving this goal?

Answer: Protocols are described for the different sheep farming systems

Key:

FAM = FAMACHA
BCS = Body condition score
FEC = Faecal egg count
TST = Target Selected Treatment

Target group: Stud breeders and group breeding schemes – selection for resistance

Do normal worm management during the period until weaning

Optional: Individual FEC’s can be done on ram lambs before their first treatments – low egg counts will select for innate resistant rams.

Selection group: Ram and ewe lambs post weaning

- FAM and BCS scores every 1 to 2 weeks after weaning in summer.
- Individual animal FEC done 3 times: at beginning of summer and a further 2 samples done at peak of the worm season on undrenched lamb.
- Only treat lambs with a FAM score of more than 2,5 with an effective anthelmintic – TST.
- Evaluate RAMS on their lambs’ performance (FAM + BCS + FEC).
- Only buy in resistant sires and cull rams on high FEC.
- Mark and cull all lambs needing drenching.
- Select lambs on average FAM:BCS:FEC index.
  High average FEC will eliminate resilient lambs after the first summer season.
- Calculate estimated breeding values (EBV) for FEC.
- Adult ewes – only treat ewes on TST and cull ewes with high FAMACHA scores.

Target group: Commercial sheep flock – selection for resilience/resistant sheep

Do normal worm management during the pre-weaning period.
Do only routine bulk FEC monitoring.

Selection group: Ewe lambs post weaning

- FAM and BCS every 1-2 weeks in summer after weaning. No individual FEC’s.
• Dung samples (bulk FEC from 10 marked lambs) monthly to monitor flock parasite levels.
• Only treat lambs with an effective anthelmintic that have FAMACHA scores above 2,5 (TST)
• Mark and cull all lambs needing drenching (more than once?).
• Select lambs on FAM only.

Selection group: Rams
Buy in only resistant sires if at all possible.
FEC of SIRES (untreated) at peak season and cull all rams with high egg counts.

Selection group: Adult ewes
Only treat on TST and mark and cull on high FAM

Importance:

• Treat all sheep once a year if nodularworm is present.
• Make sure that liver fluke is not a problem on the farm as they cause anaemia.

For information on FAMACHA, Five point check and faecal egg counts visit:
www.landbou.com
Click on: Indeks van antwoorde
Click on: Skape en bokke
Click on: Interne parasiete

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Also visit:
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