

### Parasite Detection Techniques and Interpretation

Gastrointestinal parasites are responsible for a very high number of losses amongst small ruminants and camelids. This translates into financial losses to producers and also represents a serious welfare issue. Not that long ago clients were instructed to deworm their animals routinely and to rotate dewormers yearly to help fight the battle against parasites. This overuse of dewormers has played a major role in the development of resistance to anthelmintics making the fight against parasites a real challenge.

We now understand that the goal is not to eliminate all parasites from a host, but to find a balance between the host and the parasites so that production and health are not compromised. The current recommendation is to limit the use of dewormers. In order to be able to control parasites without simply relying on anthelmintics we need to educate our clients so that they adopt an integrative approach to the problem. Some of the current recommendations that may help fight parasites and decrease resistance are:

- Perform FAMACHA and body condition score routinely. Then, do fecal exams on problem animals
- Only deworm when needed. Need to understand which parasites are of clinical relevance and what number of eggs/gram may represent a threat
- Do fecal egg counts to identify high shedders. Cull or separate chronic high shedders
- Do FECRT when necessary or every two years
- Pasture rotation: need to allow 3 – 6 months (depending on weather) of pasture rest. It is a good practice to mow these pastures to allow UV light penetration
- Decrease stocking rate or commingling in shady areas
- Prevent grazing of pastures less than 2 inches tall (most larva are at the bottom)
- Consider multispecies grazing to decrease pasture contamination
- Consider the use of tannin rich pastures/plants
- Consider incorporation of breeds or genetic lines with higher resistance to parasites
- Consider the use of cooper oxide wire particles
- Avoid under dosing. Goats have higher metabolism than cattle or sheep
- Fast 24 hours before deworming
- Isolate and test new additions before incorporating them to the flock