Breaking the Parasite Cycle

with BioWorma®

by Kim Gooding

ne topic that will often launch into passionate discussions among sheep people is parasite management. I have met hardcore sheep people who scoff at using natural means to battle parasites in ruminants. They question the effectiveness of various herbal or garlic based remedies and rely heavily on available anthelmintics in treating parasite infestations. I have also met shepherds who swear by natural remedies and their effectiveness. On my farm, I am constantly walking a careful line between effectively treating without creating a resistance to medications in the parasite population and finding natural means to reduce the parasite burden in my flock. I spend much of my grazing season, doing intensive rotational grazing, checking mucous membranes and taking routine fecal samples to monitor the status of my flock.

This summer I have made a concentrated effort to break the parasite cycle in my fields by using Livamol with BioWorma®, a product developed and highly researched in Australia. BioWorma® contains Duddingtonia flagrans, a fungus which when ingested by ruminants, is passed through their rumen and into their manure. The fungus then consumes parasite larvae in the manure, therefore reducing the number of nematodes released into the field. (www.bioworma.com)

BioWorma® has undergone 20

years of research in a variety of ruminants including horses, cows, sheep, and goats. Studies show that Duddingtonia flagrans can significantly reduce nematode larvae on sheep pasture by 68%. With resistance to chemical dewormers

becoming more and more widespread, this product has hit the market at a critical time for shepherds.

Steps Taken

Per the label instructions, I dewormed all of our sheep with an effective anthelmintic prior to being put on pasture this spring. I then began daily feeding Livamol with BioWorma® per label dosing. I mixed the BioWorma® with Chaffhaye, a ferminted alfalfa product which my sheep love. With the first few feedings, I had to feed quite a bit of Chaffhaye to make it palatable to the sheep. Slowly, I began reducing the amount of Chaffehaye as they adjusted to the flavor of the BioWorma®. The sheep were then put out on clean pasture that had not been grazed in a year.

I have continued this routine of feeding BioWorma® daily in combination with rotational grazing, moving the flock to new pasture every two days. I have done fecal sample tests monthly, as well as conducted body scoring and FAMACHA checks periodically to monitor the flock health.

Results of BioWorma®

As a result of feeding BioWorma® I have seen drastic changes in my



flock compared to previous years.

- 1.Per fecal sample testing, I have seen a tremendous reduction in overall parasite loads in our flock compared to previous years. Fecal test results were interesting. Many of the sheep showed zero parasite eggs or only a few, putting them into a low risk category. I have only needed to treat a few sheep. Testing showed that the only sheep who carry a high load are lambs which were bottle fed. Though these lambs were given mom's colostrum at birth, they were bottle fed using a manufactured milk replacer. I feel this directly impacts their immune system and their ability to fight parasites. I also needed to treat a ram that I purchased from another farm from a different geographical region. Again, I felt this logical, as he is being introduced to new parasites than what he is used to.
- 2.My breeding ewes regained their body condition in record time after weaning. They are going into breeding season in top body condition.
- 3. Our lamb growth has far exceeded growth in previous years.

Pros & Cons to Using BioWorma®

Pros:

- Healthier sheep
- Less reliance on chemical dewormers
- Less chance of building resistance to anthelmintics
- Higher lamb growth
- Less stress on the shepherd

Cons:

- Expensive to use
- Must be sure to continually have BioWorma® on hand
- Must be able to feed daily being careful to dose properly

Clearly, the pros stack up nicely in favor of using BioWorma®. The only con which will make it prohibitive to many, is the cost. Thus far, I have spent a total of \$1,192 for Livamol with BioWorma® and \$90 for Chaffhaye. At first, I was feeding it to a flock of 33 sheep which included 17 lambs. Since the end of June, I have been feeding it to 13 sheep consistently. I suspect I will end up spending about \$1,800-\$2,000 on this project before grazing season ends.

Would I use it again? Yes, definitely, I plan to use Livamol with BioWorma® on a two year rotation. In consulting with my vet, she feels that if I use it two years in a row, it will drastically reduce the parasite burden in my fields.

Kim Goodling is shepherdess to a flock of Gotland sheep at Vermont Grand View Farm.

