

SASKATCHEWAN GOAT INTERNAL PARASITE SURVEILLANCE 2021 – STUDY INFORMATION

Why test? Parasite resistance to dewormers is a known problem in Saskatchewan goat herds. Resistance can be slowed by deworming goats less frequently, not deworming all goats in a herd all the time and only deworming when it is actually needed based on lab or clinical evidence as opposed to routine practice. Testing fecal samples to gain a better understanding of the parasite burden in goats or whether treatment was effective is one very important approach in a sustainable integrated parasite management control program.

Each producer is **eligible to submit samples** to Prairie Diagnostic Services (PDS) **until October 2021**. Each submission may be for multiple samples. Costs for laboratory analyses of fecal samples will be paid for by the Saskatchewan Ministry of Agriculture.

Submission (testing) Options: please contact the project coordinators by phone or email (information below) for the most applicable sample collection and for available testing options prior to submitting samples. Appropriate timing of collection and targeted sampling from specific age groups can greatly enhance the resulting information and the project coordinators would be happy to help you decide on the sampling option(s) that are most meaningful to your specific situation. Additionally, individual as well as pooled fecal testing is available; which testing is most useful depends on a number of factors and may differ from herd to herd.

Recommended reasons for testing:

1. **To determine whether deworming is actually warranted**, collect fecal samples once before deworming; the decision to deworm or not is then based on the individual or group fecal egg count result which should be available within about 1 week of collection.
2. **To determine whether deworming treatment was effective**, collect fecal samples at the time of deworming and again 14 days later (same animals). We will calculate the percent reduction in fecal egg count after deworming and let you know whether your treatment was effective or not.

Timing of fecal sample collection: The **timing of collection** is important for best results and most accurate interpretation. **Fecal egg counts are often not very meaningful if collected in late fall**; therefore, submissions at that time of the year are generally discouraged unless previously discussed with your regular veterinarian or the project coordinator, Dr. Schumann.

- ✓ Recommended times of fecal sample collection:
 - **Does around kidding** (about 2-4 weeks before to 2-4 weeks after kidding) tend to have a higher-than-usual fecal parasite egg count during that time period. Heavily parasitized does around kidding will also increase pasture contamination and, therefore, the risk of infection to kids during the grazing season. Therefore, to limit unnecessary deworming, understanding whether does around kidding actually benefit from deworming is important.

- **Kids during the grazing season.** As kids are most susceptible to internal parasites, monitoring them during their first grazing season is beneficial to determine most appropriate time of deworming.
- ✓ In all situations, sampling is most meaningful in goats that have been **on pasture for at least 5-6 weeks** and have **not been dewormed for at least 8 weeks** prior to fecal sample collection.
- ✓ Individual samples in the winter or late fall are less meaningful and are generally discouraged.

Please note: ALL samples must be collected and stored INDIVIDUALLY. For pooled samples, the lab will pool the samples - please **DO NOT POOL** fecal samples from multiple animals in the same storage container or else the resulting fecal egg count will not be representative of the group!

Ineligible samples: some samples may be ineligible for testing and may not be accepted (e.g. collected at the wrong time). **Please contact the project coordinators to discuss your situation and to ensure that your samples yield meaningful results.**

How to collect fecal samples? Please refer to the separate document “**How to collect fecal samples**” for detailed instructions on fecal sample collection. The following video is also very useful. **Please use individual Ziploc bags for each fecal sample and do not send in the inverted glove containing the fecal sample as shown in the video:** <https://www.youtube.com/watch?v=X2C9sVstce0&feature=relmfu>

How to store the fecal samples? **Samples should be sent to the lab as soon after collection as possible.** Any delay may result in the hatching of parasite eggs in the fecal sample which will lower the number of eggs that can be counted and result in a falsely low fecal egg count. **Samples should also be kept cool (e.g. around 4° Celsius) but never frozen!** Ideally, ship them to the lab by courier in a box with cooling elements or ice packs. If you are using ice packs, please put an insulating layer of newspaper or paper towel between the samples and the ice packs to avoid freezing of the samples. Freezing may destroy the eggs in the sample, resulting in a falsely low fecal egg count.

Questions? Please speak to your regular veterinarian or contact Dr. Fritz Schumann at
EMAIL: goat.parasites@usask.ca; PHONE: 306-221-5861

Johne’s Surveillance Program

Did you know? Saskatchewan goat producers are also eligible to participate in the **Johne’s surveillance program** developed by the Ministry of Agriculture and administered through the Saskatchewan Stock Growers Association. For more information, click [here](#).