The Identification of Parasites in Bovine Feces

Schmidt, Paige

The reason I did this project was to find how effective anthelmintics are when given to cattle. I wanted to see what parasites affect cattle that have not been given anthelmintics and how long the cattle stay parasite-free after being treated. I also wanted to know if feeding cattle on the ground, rather than in feed bunks, made a difference in the amount of parasite larvae in the feces. I collected twelve samples of feces, from different ranches. I used fecalyzers and a sugar-based solution to make the larvae eggs float to the top of the container and stick to the microscope slides. After sixteen minutes, I removed the microscope slides and placed them onto microscope lenses. I observed the different organisms under a microscope at 400 magnetisms. I predicted the samples that had received no anthelmintic would have many different parasite larvae in their feces. If the cattle hadn't been treated in the last three months, they would also contain small and few parasite larvae. I also thought cattle that were fed on the ground would have more parasite larvae in their feces. I discovered parasites in all twelve of my samples. The sample that hadn't been given anthelmintic had many different parasite larvae that were large and further developed. Samples that had been treated recently, also contained parasite larvae. However, these larvae were small, and harder to identify. In conclusion, I found that ranchers should deworm their cattle more frequently, to keep their cattle free of parasites.