The Prevalence of Cryptosporidium in Various Ages of Calves

McWatters, Jessica (School: Pettisville High School)

Cryptosporidiosis is a disease caused by a parasite, Cryptosporidium, often found in neonatal calves. Roughly 57% of scours in young calves is caused by Cryptosporidium. Currently there is no vaccine or source of treatment to fight the disease.The objective of this experiment was to determine the prevalence of cryptosporidium in various age groups of cattle. The hypothesis was calves three weeks or 21 days old would show the most prevalence of cryptosporidium because it takes ten days for the calves to experience clinical signs and the calves immune system has not been exposed to Cryptosporidium before. Fecal sample collection was conducted in collaboration with a local veterinarian and a Henry County, Ohio farmer who raises young calves. Standard Animal husbandry practices and biosecurity measures were followed in the care of calves. Forty fecal samples were collected each week for six weeks. Five samples were collected from each age group of calves. Eight age groups were tested ranging from one to eight weeks old. The fecal samples were stained using an Acid Fast Stain kit. To identify the Cryptosporidium, a pink oocyst was seen under the microscope. Positive and negative results were recorded for each fecal sample. The amount of Cryptosporidium present increased as the age of calves increased through five weeks of age with an exception of week four. After week five, the presence of Cryptosporidium decreased. The hypothesis was partially supported.♀

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