



Agricultural
Research
Service

South
Atlantic
Area

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Presence and Survival of the Parasite *Cryptosporidium* in Swine Lagoons of Southern Piedmont and Coastal Plain Watersheds

Why Does it matter?

Cryptosporidium is a parasite that is excreted in feces of swine. The environmental form of *Cryptosporidium*, the oocyst, is known to survive outside its host for months and can pose a health risk. Because swine lagoons are used to irrigate cropped land knowing concentrations, viability status, and die-off rates of this parasite in lagoons and spray fields will improve swine waste management practices.

What was done?

Ten swine lagoons (for two nurseries, four farrowing and four finishing facilities) in the Southern Piedmont and Coastal Plain are being sampled monthly for one year. Oocyst concentrations and viability assessments are being made. Survival studies will be undertaken after the first year of sampling at lagoons with highest concentrations and most viable *Cryptosporidium* parasites observed.



What was found?

To date, the environmental form of *Cryptosporidium*, the oocyst, has been observed and its concentration determined for all the lagoons sampled. Live oocysts were observed in nursery and farrowing farms. In most cases all oocysts observed have been dead. How long oocysts can stay viable in a lagoon will be determined in the next step of this project.

What is the impact?

Knowing the distribution and survival times of *Cryptosporidium* parasites in swine lagoons will enable swine farmers to better manage their lagoon effluent and determine the amount of risk lagoon spray fields pose to public health.

Research Team and Contact information

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