

A Guelph study not only indicates that current treatment methods failed to reduce the risk of infection, but that the effects of coccidiosis continue on into the nursery as well

A new investigation into the impact of the parasite coccidiosis on pigs shows it reduces weight gain significantly through five weeks of age. The study also suggests that current treatments do not appear to be effective.

"Everyone has always assumed that coccidia is only a problem of suckling piglets," says principal investigator Dr. Andrew Peregrine of the Department of Pathobiology, Ontario Veterinary College at the University of Guelph, "but our work shows that coccidiosis needs to be considered as a cause of diarrhea and slow growth rate in the nursery as well."

In the most recent study, carried out on three farms between May and September of 2007, fecal samples were collected from 218 randomly selected pigs. Weights were recorded weekly up to eight weeks of age from the 218 pigs and 467 litter mates. "Quite surprisingly," the study's final report states, "at four weeks of age, pigs that were detected positive for coccidia at two or three weeks of age were an

As Dr. Peregrine sees it, the problem with the latest study is that it doesn't give farmers anything new to go on, at least on the treatment side.

"Since there is no drug licensed now," Dr. Peregrine said, "we are trying to use the data to stimulate the licensing body to change the ruling on Baycox or be receptive to companies if they come along with alternative therapies that could be licensed in Canada." Although Baycox was never licensed for use in Canada, it was used under veterinary supervision with an emergency permit. In 2005, the use of Baycox in pigs was banned by the Canadian Food Inspection Agency because of human safety concerns. However, it continues to be widely used in other countries

Two recommended treatments – mixing Deccox with oral iron in the creep area throughout sucking, or a single treatment with Clinacox in the first week of life – were evaluated. "Unfortunately," the study concluded, "neither treatment reduced the risk of coccidia infections, or the risk of diarrhea, in pigs aged 7-21 days. Similarly, neither treatment had any beneficial effect on growth rates during this period."

Peregrine says indications are that "cleaning farrowing crates regularly is highly beneficial" in the fight against coccidiosis.

Viable treatments for coccidiosis prove study shows

by MIKE MULHERN

average of 435 grams lighter than pigs that originated from litters that were negative for coccidia."

Similarly, at five weeks, pigs from positive litters were an average 703 grams lighter than pigs which tested negative for coccidia, although at eight weeks there was no difference in weights between pigs that had had the parasite and those that did not. A 2006 study, which detected coccidia infections on 70 per cent of 50 Ontario farms, showed weaning weights on farms with the infection were an average of 6.3 kilograms. Weaning weights on coccidia-negative farms averaged 6.7 kilograms.

Drs. Bob Friendship, Cate Dewey and Andrea Aliaga-Leyton, Department of Population Medicine, Ontario Veterinary College, as well as Dr. Kevin Vilaca from the Maitland Veterinary Clinic, collaborated on this study. The research was funded in part through contributions by Ontario Pork and by Canada and the Province of Ontario under the Canada-Ontario Research and Development (CORD) Program. AlphaPharma kindly donated Sweet Iron and Deccox that were evaluated in the work.

"Of the most practical significance to producers," he says, "we found that farms not using detergent to clean the farrowing crate environment were 1.7 times more likely to be positive for coccidia than farms that do use detergent." However, he noted that the use of disinfectant in the farrowing crate environment did not affect the risk of coccidia.

*Cory Todd and
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