



Towards the development of a method for determining the antimicrobial susceptibility of *Brachyspira*

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This project is to develop, standardize and implement antimicrobial susceptibility testing methods for *Brachyspira* spp. so as to improve the Canadian swine industry's ability to combat *Brachyspira*-associated disease by providing evidence-based treatment recommendations.

Summary

The fundamental deliverable of this research is a set of tools that will arm the Canadian swine industry with the necessary information to develop targeted and more effective treatment strategies specific to each disease situation.

There are currently no standardized methods for conducting or interpreting antimicrobial susceptibility tests on *Brachyspira*. Unlike in the United States, Australia and several European countries, there are no published reports describing the antimicrobial susceptibility *Brachyspira* causing disease in swine in Canada. This leaves Canadian swine veterinarians with no *in vitro* evidence to guide their therapeutic selection. Furthermore, the antimicrobial susceptibility of '*B. hampsonii*' strain 30446, a recently-described organism causing disease in Western Canada, has not been published precluding the application of even general organism specific treatment guidelines from other countries. This research will provide the Canadian swine industry with the essential tools needed to effectively combat *Brachyspira*-associated disease, an important threat to the vitality of Canadian producers.

Collaborators

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