





Classification of ILTV strains in Western Canada

Background

- Infectious

 laryngotracheitis virus:
 Causes acute upper
 respiratory disease in
 chickens
- Strains can be categorized as vaccine related or wild type related
- Information is scarce on the molecular nature of ILTV that is linked to ILT in Canada

Types of vaccines and limitations

- Live attenuated: Can revert to virulent form
- Recombinant viral vector:
 Does not prevent viral shedding and has low efficacy

Objective

Discriminate between wild type or vaccine ILTV isolates associated with ILT cases in Western Canada provinces (Alberta and British Columbia) during 2009-2018

<u>Samples</u>

- 27 samples form Alberta from backyard flocks
- 5 samples from British Columbia from commercial flocks







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<u>Materials and</u> <u>methods</u>

32 Samples

Propagation

DNA extraction

PCR of ORF a and

Purification

Sanger sequencing

Results

- 1. 26 samples were related to live attenuated vaccines
- 5 isolates classified as wild type



Conclusions

These results contribute to the ongoing discussion related to safety of using live attenuated vaccines and the quest for more effective and safer options. Additionally, these findings support the need to implement better biosecurity measures and effective vaccination strategies in backyard flocks.



Catalina Barboza Solís catalina.barboza@ucalgary.ca
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