



Development of a Temperature Sensitive Trivalent Bordetella Avium Vaccine

BYU #2016-021

DESCRIPTION

Researchers at BYU developed three temperature sensitive mutants, a trivalent vaccine as a preventive treatment for turkeys against Bordetella Avium. This bacterium causes poultry Coryza, which is a highly infectious upper respiratory tract infection of turkeys and chickens, and it is common between the age of 2-8 weeks. The vaccine is easy to administer as it is added in the bird's water, and stimulates their immunity to protect them from disease.

PROBLEM SOLVED

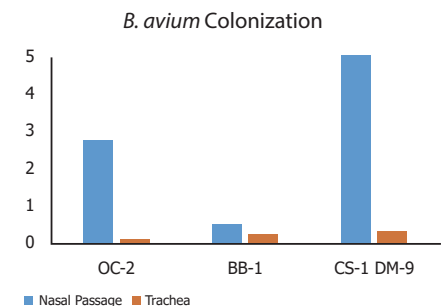
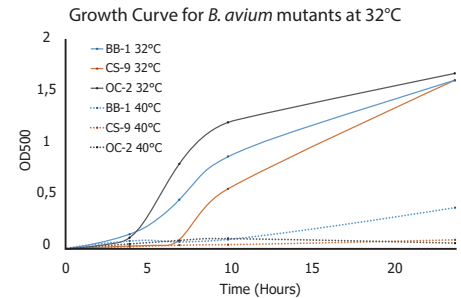
Bordetella avium is easily carried between farms, being responsible for the death of about 10% of birds in the flock, and causing the remaining affected birds to eat less and lose weight. The three temperature sensitive mutants developed at BYU are designed to grow only in the nasal passage at 32°C, and not in the lungs at 40°C, thus increasing the immune system of the poultry and presenting no side effects. The invention has the potential to provide poultry producers with the means to protect their flocks against harmful Bordetella Avium infections without the use of antibiotics, accommodating consumer taste and demand while protecting the health and subsequent meat yields of their flocks.

KEY ADVANTAGES

- » *Live vaccine can be communicated between individuals*
- » *Easy to administer*
- » *Cost effective*

APPLICATIONS

The invention will be used as a preventive treatment for Coryza in turkeys and chickens.



Offer:
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IP Status:
Patent Pending



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