

RESEARCH PROJECTS COMPLETED 2008	Date Completed
<p>Dr. S. Gomis University of Saskatchewan</p> <p>‘Identification and control of Infectious Bursal Disease (IBD) in broilers in Saskatchewan’</p> <p>In an earlier study, Dr. Gomis identified variant strains of the IBD virus in Saskatchewan. Variant strains are troublesome because they do not show obvious clinical signs, but induce severe immunosuppression. The purpose of this study was to identify and characterize the presence of IBD at the time of processing in all broiler flocks in the province.</p> <p>In July, 2006, the SCIDF Board approved funding of \$35,000 over two years for this project. The clinical form of IBD, with clinical signs and high mortality, is not present in Canada. However, the subclinical form is present in Saskatchewan. In the subclinical form, there are no observable signs but affected chickens have reduced antibody response to vaccination, strong postvaccinal reactions and increased susceptibility to concurrent or secondary infections such as <i>E. coli</i>. Moderate to severe bursal damage was discovered in 110 of 201 flocks in 28 of 67 premises. Two variant subclinical strains of IBD were identified in 16 of 28 premises. A followup study to estimate production losses due to IBD and, if economically justified, implement management and control measures is now underway.</p> <p><i>Journal Articles:</i></p> <p>A manuscript is in preparation.</p>	2008/06/10

<p>Dr. S. Gomis University of Saskatchewan</p> <p>‘Control of Inclusion Body Hepatitis (IBH) by Vaccination’</p> <p>IBH is a major disease in broiler chickens in Saskatchewan, the other three western provinces and Ontario. Fowl adenovirus (FAdV), the causative agent of IBH, causes acute inflammation of the liver and sudden mortality that peaks after 3-4 days of life. In an earlier study, Dr. Gomis discovered that IBH in Saskatchewan broilers is in large part a primary disease with no association with other immunosuppressive diseases. This study also produced strong evidence that the virus is transmitted from broiler breeders to their chicks through the eggs. Based on this study and since there was no vaccine available in North America to control IBH, in August 2005, SCIDF approved funding of \$116,400 over four years to develop an IBH vaccine and test its effectiveness. Dr Gomis was able to secure equivalent levels of funding from the Alberta Funding Consortium and from NSERC.</p> <p>With the funding provided by SCIDF, Dr. Gomis was able to develop an effective live vaccine to immunize broiler breeders to control IBH in broilers. Currently, the University of Saskatchewan is searching for a commercial manufacturer to produce this vaccine.</p> <p><i>Journal Articles:</i></p> <p>Ekanayake S., Ojkic D., Tikoo S., Willson P., Goodhope B., Mutwiri G., S. Gomis. Inclusion body hepatitis as vertically transmitted primary disease in broiler chickens. Avian Diseases (submitted)</p>	2008
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