

and unique short – US2, US3 and US9) The results obtained so far revealed that that the BuHV-1 gC region sequenced (UL44) shares features with its counterpart on the BoHV-5 gC, including two broad hydrophobic regions, six N-glycosylation sites and ten conserved cysteine residues in the gC intracellular domain. Phylogenetic analysis showed that the studied ruminant alphaherpesviruses form, together with BoHV-1, a consistent group within the  $\alpha 2$  subgroup of the herpesviruses. BoHV-5 and BuHV-1 clustered together, and are both closely related to BoHV-1. A remarkably high degree of sequence similarity was observed between BuHV-1 gC and its counterpart in BoHV-5. Further sequence and comparative analysis of other genomic regions of BuHV-1 may help to improve understanding other relatedness between BuHV-1, BoHV-1 and BoHV-5. Financial support: CAPES, FINEP, CNPq

**VV1490 - MOLECULAR DETECTION OF AVIAN GYROVIRUS TYPE 2 (AGV2) AND CHICKEN ANEMIA VIRUS (CAV) IN SENTINEL SPECIFIC PATHOGEN FREE (SPF) CHICKENS**

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Avian Gyrovirus Type 2 (AGV2) has been recently identified and suggested to belong to the Circoviridae family, genus Gyrovirus along with Chicken Anemia Virus (CAV). Although the characteristics of resistance and/or sensitivity of AGV2 to different environmental conditions are unknown, it's possible that it shows the same physicochemical characteristics of CAV (highly resistant to chemical and heat inactivation) once both viruses share the same genus. Here is reported the molecular detection of AGV2 and CAV DNA in SPF chickens housed in isolators chambers incubated in a previously CAV contaminated environment after decontamination process (fumigation 30 days after depopulation). After hatching, 80 birds were split in chambers (A to H, ten chickens/ chamber) and necropsied at 7 and 30 days post housing (dph) for clinical examination and organs harvesting (feathers, brain and liver). At 7 dph, 24 birds were humanely euthanized (chickens N<sup>o</sup> 1 to 24). AGV2 and CAV DNA were detected in the liver of 6 chickens (6/24). These six animals were housed in chambers C, D and E. In the livers from chickens of chamber C, two were positive for AGV2 only (N<sup>o</sup> 8) or AGV2 and CAV (N<sup>o</sup> 7). Chickens in chamber D (N<sup>o</sup>s 10 and 12) were positive for CAV, and in chamber E, the animals (N<sup>o</sup>s 13 and 15) were positive for both viruses. On the other hand, it was not possible to detect AGV2 nor CAV DNA from the 24 brains tested

(0/24). Based on the results obtained here, it seems that AGV2 is resistant to the action of disinfectants as CAV. The present work is still in progress. Analyzes on the material harvested from necropsy carried out on 30 dph are in processing. We believe that the results showed here contribute for a better understanding of AGV2 ecology, once the epidemiology, pathogenesis, routes of infection, transmission, as well the interaction agent-host-environment of such virus are not satisfactory known yet. Financial support: Embrapa Swine and Poultry & CNPq  
**KEYWORDS:** AGV2; Infectivity, Chicken; Broiler Litter

**VV1491 - IN VIVO ASSAY OF VACCINE PROTECTION TO INFECTIOUS BRONCHITIS VIRUS IN COMERCIAL BROILER AND SPF CHICKS**

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Infectious bronchitis virus (IBV) is the causative agent of highly contagious respiratory disease of chickens that affect mainly young chickens. Failure of protection as well as variation on clinical manifestations associated with the emergence of many different antigenic types of the IBV have been reported in the last years. Although vaccines may protect against heterologous strains, it has been speculated that the vaccine

serotype Massachusetts has not always been able to confer full protection against some field strains of IBV. Through protectotyping studies in SPF chickens, the immune response against an IBV sample is evaluated. It has been hypothesized that broilers are more susceptible to the in vivo assay than SPF chicks. To evaluate the use of SPF chicks in vaccine protection against IB, we evaluated two parameters: ciliary activity and viral recovery for IBV with standard strain (M41) in two poultry lineages (SPF and broilers). The experimental design (for both lineages) follows: 1) non-vaccinated and non-challenged birds (NVNC) and 2) vaccinated and non-challenged birds (VNC); 3) challenged with Massachusetts (CM41) and 4) vaccinated and challenged with Massachusetts (VCM41). Groups 2 and 4 received two doses of 103.5DIE50% H120 vaccine strain by eyedrop at 14 and 21 days-old. The VC birds were challenged five weeks after vaccination. Degrees of ciliary activity, and viral recovery were measured at 5 days after challenge to assess the ability of the vaccine to protect the chicks in different lineages. The results obtained in the present work showed no significant differences on the evaluated parameters (ciliary activity and viral recovery), supporting the use of SPF chicks for in vivo assay of IBV vaccine protection once the use of SPF birds facilitates the execution of such procedure in isolator chambers allowing the accommodation of larger number of birds due to its smaller size relative to the commercial poultry. Financial support: Embrapa Swine and Poultry & CNPq

**VV1495 - MOLECULAR CHARACTERIZATION OF ROTAVIRUS, NOROVIRUS**