

## ABSTRACTS

the necessity of a sanitary program in Brazil to control BHV-1 in order to improve the country importance on the international commerce, considering that there are some European countries which eradicated the BHV-1 with a sanitary program. Beyond the program is a good alternative to decrease the productive losses that the virus infection causes in the dairy cattle herds.

### 097 - CITRUS LEPROSIS VIRUS (CiLV-C)/VECTOR RELATIONSHIP ASSESSED BY BEAN AS TEST PLANT\*

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The study of the virus/vector relationship in the citrus leprosis pathosystem has been hampered by the fact that the development of the lesions after the inoculation of the virus by *Brevipalpus phoenicis* mite takes 4-6 weeks on sweet orange leaves. The discovery that necrotic lesions caused by the CiLV-C develop 5-6 days after mite inoculation provided an excellent system to obtain some parameters of the virus/vector relationship such as: virus acquisition feeding period (AFP), virus inoculation feeding period (IFP) and the percentage of viruliferous mites in a population. The experiments indicated that AFP is 2-3 days, IFP, 1-2 days, and that an average of 40% of *B. phoenicis* mites collected from a colony kept on CiLV-C infected fruits were viruliferous. A statistical analysis indicated that lesions on bean leaves are clustered, suggesting that the mites tend to feed in nearby areas. Experiments also confirmed previous data revealing that all the developmental active phases of the mite are able to transmit the virus. Preliminary experiment by daily transfer of the mites showed that viruliferous mites are able to transmit the virus at least after 3 transfers, without access to a virus source. Confirmation that the lesions were caused by CiLV-C was made by examination of the sections by transmission electron microscopy to detect cytopathology characteristic to CiLV-C infection and by RT-PCR using specific primers for CiLV-C.

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### 098 - CITRUS LEPROSIS IN FLORIDA MAY HAVE BEEN OF THE NUCLEAR TYPE

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A citrus disease characterized by stem, leaf and fruit lesions was first reported in Florida in the early 1900's and referred to as scaly bark or nail head rust. It disappeared from citrus groves before the 1970'. Similar disease was observed on sweet orange plantations in Argentina and Paraguay around 1930' and named "lepra explosiva" and also in Brazil, where it was first called "variola" and later "leprose". Based on symptom and association with *Brevipalpus* mites, both diseases were considered similar by 1950' and they were referred to as citrus leprosis. Further investigations revealed that there are two different viruses causing symptoms of leprosis on citrus, both transmitted by *Brevipalpus* mites: cytoplasmic type (CiLV-C, a *Cilevirus*) and nuclear type (CiLV-N, possibly *Dichorhabdovirus*). CiLV-C is the prevalent form and has been found from Argentina to Mexico in the American continent. CiLV-N is rare and was found in cooler areas of Panama and Brazil (states of S. Paulo and R.G. Sul). Leaf lesions caused by CiLV-C are pale green, usually with concentric gummy rings while those caused by CiLV-N are smaller, with a necrotic center surrounded by a bright yellow halo. Examination of published pictures of leprotic leaf lesions from Florida gave a hint that they could be caused by CiLV-N. Herbarized material of leprosis from Florida, received by Dr. A.A. Bitancourt, and maintained at the Instituto Biológico was analyzed. Though dried, leaf symptoms in this material strongly resemble those caused by the CiLV-N. Other herbarized materials from different sources (Argentina and Brazil) clearly exhibit symptoms caused by the CiLV-C. Attempts to detect CiLV-C by RT-PCR are being made, but preliminary results have been negative, possibly due to the fact that these samples are about 60 years old.

### 099 - HPV DNA DETECTION IN ARCHIVAL PARAFFIN EMBEDDED TISSUE FROM DIFFERENT ANATOMICAL SITES

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Persistent infection with high-risk human papillomavirus (HPV) is the main cause of cervical cancer and its precursor lesions. In addition, HPV infection has also been associated with the development of tumors in other anatomical sites including the conjunctiva, anus, vulva, vagina and head and neck cancers. Detection of HPV DNA in archival paraffin embedded biopsies is a challenge once many factors may influence DNA quality, thus impacting the ability to amplify and further genotype HPV

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