Abstract

The leprosis disease shows a viral etiology and the citrus leprosis virus is considered its etiologic agent. The disease may show two types of cytopatologic symptom caused by two virus: nuclear (CiLV-N) and cytoplasmic (CiLV-C) types. The aim of this study was to compare the morpho-anatomical differences in the lesions caused by leprosis virus-cytoplasmic and nuclear types in Citrus sinensis (L.) Osbeck ‘Pêra’. Leaf and fruit lesions were collected in Piracicaba/São Paulo (cytoplasmic type) and Monte Alegre do Sul/São Paulo and Amparo/São Paulo (nuclear type). The lesions were photographed and then fixed in Karnovsky solution, dehydrated in a graded ethylic series, embedded in hydroxy-ethyl methacrylate resin (Leica Historesin), sectioned (5 μm thick), stained and mounted in synthetic resin. The digital images were acquired in a microscope with digital video camera. Leaf and fruit lesions caused by the two viruses were morphologically distinct. Only the lesion caused by CiLV-N virus presented three well-defined regions. In both lesions there was the accumulation of lipidic substances in necrotic areas that were surrounded by cells with amorphous or droplets protein. Only leaf and fruit lesions caused by CiLV-N virus exhibited traumatic gum ducts in the vascular bundles.

Keywords

Anatoy, hyperplasy, hypertrophy, traumatic gum ducts.