

# HISTOPATHOLOGICAL CHANGES IN *CUCURBITA PEPO* L. PLANTS BY SINGLE AND COMBINED INFECTION OF WATERMELON MOSAIC VIRUS AND POWDERY MILDEW FUNGUS *OIDIUM CARICAE*

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**ABSTRACT** : Histopathological changes induced in pumpkin leaves inoculated with watermelon mosaic virus (WMV) and *Oidium caricae* alone or in different combinations by these pathogens were studied. The plants inoculated with virus alone exhibited the disintegration of palisade tissues and the development of wider spaces in spongy parenchyma, whereas the broken epidermal cell wall, necrosis and collapse of epidermal tissue were found as predominant changes in the plants inoculated with *Oidium caricae* alone. The presence of broken and thinner palisade tissues with a fewer number of chloroplasts were seen in plants inoculated simultaneously with both the pathogens. The establishment of virus infection at different periods prior to fungal infection showed pronounced changes of disintegration of palisade cells with a fewer number of chloroplasts. However, in the reverse sequence, the necrosis and collapsing of tissue was much in advanced stages of fungal infection.

**Key Words** : Histopathology, WMV, *Oidium caricae*.