

**A COMPREHENSIVE STUDY OF PLANT GROWTH REGULATORS  
AND VIRAL INFECTION**

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**ABSTRACT**

*Viral infections may stifle growth of plant and cause developmental distortions. The effects of infection on plant growth regulator metabolites are discussed in this article. In general, viral infections reduces gibberellin and auxin levels while increasing abscisic acid levels. In necrotic with chlorotic infections, ethylene synthesis is increased, but not when the disease infects systemically with necrosis. Though such general patterns are true for the majority of host-virus combinations examined, there have been a few instances when the virus has had different impacts on the concentration of growth substances. There is no consistent trend in cytokine changes following infection: both increases and reductions have been observed. Exogenous regulators' impact on viral growth and pathogenesis have been studied extensively. Diverse regulator, or even the similar regulators administered at varied periods or doses, showed extremely different effects, and in some instances changed viral proliferation and pathogenicity substantially. However, such research seems to have produced frustratingly little knowledge of the pharmacology of the host-virus relationship, as well as the potential role of growth factors. The potential for plant growth regulators to be used in viral disease treatment, as well as their role in natural or created resistance mechanisms, were addressed.*

**KEYWORDS:** *Chemotherapy, Growth, Host-Virus Interaction, Infection, Plant Regulators.*

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