

# **STUDY OF SCATTERING PROPERTIES AND EMISSION PROPERTIES OF VEGETATION CANOPY AT X-BAND**

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## **ABSTRACT**

Vegetation Canopy consists of different crops, trees and other vegetation. It is a dielectric mixture consisting of discrete dielectric inclusions like leaves, fruits, stem, bark etc. distributed in a host material or air. Its behaviour is different for the active microwave remote sensing and passive microwave remote sensing and both active and passive microwave remote sensing of vegetation canopy depends upon the electrical properties. In the present paper, the dielectric constant of neem leaves has been measured at X-band and the estimation of scattering coefficient and emissivity of the same vegetation canopy of neem has been done using the measured values of dielectric constant.