# Abstracts

## Electromagnetic scattering from agricultural vegetation in clusters using Monte Carlo simulation

*Shu-Qing Li and Wen-Bing Wang. "Electromagnetic scattering from agricultural vegetation in clusters using Monte Carlo simulation." 1997 Microwave and Guided Wave Letters 7.10 (Oct. 1997 [MGWL]): 332-334.*

An electromagnetic scattering model for agricultural vegetation where leaves occur in clusters is developed in this letter. By applying the Monte Carlo simulation technique, the backscattering properties of vegetation are studied for two different cases where the position distribution of clusters is regular or random. The results show that the position distribution of clusters plays an important role in determining the observed coherent effects. The incoherent scattering parts in the two different cases are almost equal and the regular position distribution of clusters can lead to a strong coherent part despite the random orientation of leaves. The work of this letter indicates that it is necessary for theoretical scattering models to take the position distribution of clusters into account.

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