

RESEARCH ARTICLE

RF radiation effects on green house vegetation and protection methodologies using integrated EM protectors

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ABSTRACT: This paper presents the design of an intelligent embedded system to analyze the natural growth and yield from agricultural plantations. The system is used to analyze the effect of R.F radiation on plantations with and without radiation. The microwave radiation sources on plantations using R.F Microwave sources in C-Band (4-6GHz) and X-Band (8-12GHz) is applied to study the effects. The system displays the adverse effects of radiation on growth of plantations and products, using the intelligent embedded monitoring system. The paper also presents a novel concept to construct a model plantation with R.F radiation blocking structures to minimize the radiation effects into the artificially made Green House Plantations. The design helps to produce agricultural products without the influence of radiation effects.

KEY WORDS: Green house vegetation, Microwave antenna, Embedded, Radiations

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