

# **Climate Change Related Plant Protection ITKs and their Scientific Rationality**

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## **ABSTRACT**

The study focuses on documentation and scientific rationality of Indigenous Traditional Knowledge (ITK) on plant protection which are local knowledge related to farming under climate change condition. The Indigenous Technical Knowledge is necessary for preservation, development and sustainability of local wisdom. The study is based on both secondary and primary sources. A lot of ITKs were collected from various sources including from the farmers. Sample farmers are belongs to area of Zone-1 (Krishna Godavari) and Zone-6 (Scarce Rainfall) of Andhra Pradesh. A total 40 ITKs were filtered to analyse the scientific rationality. An interview schedule was prepared to assess 40 ITKs scientific rationality and was introduced to 30 plant protection experts. Experts were asked to rate ITKs based on the extent at which they perceive ITKs as scientifically rational. The rating was based on their knowledge and academic experience in the field. Based on their ratings ITKs were categorised into three groups using mean and standard deviation. From the results 5 ITKs were highly rationalise, 15 ITKs are moderately rational and 20 are less rational ITKs. Being low in cost to adopt in filed it will also benefit farmers economic condition and sustainable agricultural development.

**Keywords:** *Climate change, Plant protection, ITKs and Scientific Rationality.*