

# The Influence of Climatic Factors on the Disease Prevalence of Bacterial Leaf Blight of Rice in the North-West Region of Taiwan

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## Summary

The influence of spring and fall climatic variation on the prevalence of rice bacterial blight disease during 1967-1990 was studied by the correlation and regression analysis. In the first crop season, disease prevalence was positively correlated with March precipitation and number of precipitation days, negatively correlated with April and May relative humidity. No significant simple correlation between disease prevalence and climatic factors for the second crop season was observed at 5% level.

Two forecasting models were developed for two crop seasons. Coefficients of determination indicated that the climatic variables accounted for 80% above of variation in disease prevalence.

Key words: Climatic factor, Disease prevalence, Bacterial leaf blight.

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