

ANNUAL REPORT
COMPREHENSIVE RESEARCH ON RICE
January 1, 1994- December 31, 1994

PROJECT TITLE: Incorporation of New Technology for Best Management Practices into CALEX/Rice

PROJECT LEADERS:

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LEVEL OF 1994 FUNDING: \$11,981

OBJECTIVES:

The expert system CALEX/Rice has been released effective February 1994 for general use by rice growers and PCAs. The expert system provides assistance with record keeping and provides management guidelines for effective rice production. Modules include variety selection, fertilization, water use, harvest date estimation, phenological stages, and pest management.

Although development has been completed, work will need to continue on the project, to evaluate its effectiveness, to make changes in response to suggestions from growers, PCA's, and other users, to incorporate new software technology, and to incorporate new information on crop management. This project seeks to accomplish this.

We are also planning to begin work on an end-of-season analysis of rice production that will attempt to correlate yield actually achieved with recorded management practices and climatic conditions.

ACCOMPLISHMENTS :

The aspect of the program focused on in 1994 was the user interface. Commercial software was used to improve the appearance and functionality of the guideline display screens, making them more spreadsheet-like in appearance.

Registered CALEX/Rice users were surveyed at the end of the season for specific comments and criticism. We will work during the offseason to incorporate these suggestions in time for release in 1995.

PUBLICATIONS AND REPORTS:

R.E. Plant et al. Incorporation of New Technology for Best Management Practices into CALEX/Rice. Rice Progress Reports, 1994

Real, J.R. et al. An Expert Decision Support System for Temperate Zone Rice Production. Proceedings of the International Conference on Temperate Rice, Yanco, NSW, Australia, 1994.

CONCISE GENERAL SUMMARY OF CURRENT YEAR'S RESULTS

The expert system CALEX/Rice has been released effective February 1994 for general use by rice growers and PCAs. Approximately 125 copies of the program were sold. The expert system provides assistance with record keeping and provides management guidelines for effective rice production. Modules include variety selection, fertilization, water use, harvest date estimation, phenological stages, and pest management. The program was awarded the American Society of Agronomy 1994 Certificate of Excellence for educational software.

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