ANNUAL REPORT
COMPREHENSIVE RESEARCH ON RICE
January 1, 1995 - December 31, 1995

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

PROJECT LEADERS:

Project Leaders:
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LEVEL OF 1995 FUNDING: $12,596

OBJECTIVES AND WORK CONDUCTED TO ACCOMPLISH OBJECTIVES:

1) Conduct a telephone survey of registered CALEX/Rice users to determine the strengths and weaknesses of the program and how the program can be improved.

2) Examine new computer technology and incorporate this technology into CALEX/Rice where appropriate.

SUMMARY OF 1995 RESEARCH:

Objective 1:
A survey was constructed based on consultations with Farm Advisors and with Gail Nishimoto, a biometrician experienced in survey design. A copy of the survey form is attached. The questions asked were modified slightly from the survey in that individuals who had not used the program were asked what features they would find most useful.

The telephone survey was begun in June, 1995, and carried forward until September, 1995, at which time it was suspended for the rice harvest period. The survey will be begun again in December, 1995 and carried through the winter. Of the 140 registered CALEX/Rice users, 103 were identified as rice growers or industry-affiliated individuals (e.g., consultants, sales representatives, etc.) who had included their telephone number on their registration card. R. Plant made telephone calls to each of these individuals during the late afternoon or evening. A total of 26 individuals were successfully contacted or returned telephone messages. The preliminary results are based on the responses of these individuals. We hope to have more success in reaching people during the winter.

Of the 26 respondents, 13, or exactly 50%, had used the program enough to comment on it. Of those who did not use the program, 9 did not have the time, 3 no longer had working computers, and 1 did not recall buying the program. No respondent said that the program was not used because it was too difficult. Of the 13 respondents who had used the program, 4 used it regularly and 9 had used it 1 to 5 times.

Questions 5 through 7 were not posed to the respondents in a mechanical, survey style. Instead, respondents were asked in a conversational manner what features they found most and least useful and what additions they could suggest. The responses reported here combine those individuals who had used CALEX/Rice and those who had not used it but were asked which features they would find most useful. The most useful features were: phenology and staging (9); fertilization and topdressing (6); record keeping (4); and variety selection (3).

Of respondents who commented on ease of use, six said it was easy to use and two had problems with using it. One respondent commented that it is slow to get around in, and the other commented that the codes for various forms of fertilizer are awkward. A third respondent who found the program easy to use pointed out an awkward feature of the file handling that needs to be corrected. No-one who used this year's IMPACT software reported problems with downloading weather data.

Seventeen of the respondents were asked the final questions about computer hardware. All but one have color monitors and at least a 386-based computer. Of the seventeen, seven presently have access to the Internet. Ten would prefer to see the program run under Windows, four under DOS, and three have no preference.

Based on the results of the survey so far, the following preliminary conclusions may be drawn:

1) The most useful components of the program are the phenology, fertilizer application, record keeping, and variety selection.

2) There are already a reasonably large number of individuals with access to the Internet, so it is reasonable to provide information through this venue.

3) The majority of users would prefer that the program be run in Windows.

Regarding the last two conclusions, it is likely that the number of persons with access to the Internet, and the number using Windows, will increase rather than decrease or stay constant.

Objective 2:

Early in the year, the decision was made to make the CALEX/Rice herbicide module available on the World Wide Web. The reasons for choosing this module were:

1) The World Wide Web provides ready access to graphics, so that pictures of weeds in various growth stages and other visual information can be easily incorporated.

2) The World Wide Web format allows links to other information sources, so that up-to-date information on pesticides can be made available most easily through this venue.

3) The hypertext format of the World Wide Web fits naturally with the key-like process of weed identification.

Based on these considerations, the project of developing a Web site for rice weed identification and herbicide information was undertaken. The project was completed late this fall and the information is now available through the UC Statewide IPM Project Web site. The URL (i.e., address) of this site is http://www.ipm.ucdavis.edu.

PUBLICATIONS OR REPORTS:

Plant, R.E., J.E. Hill, and J.F. Strand. Incorporation of New Technology for Best Management Practices into CALEX/Rice. Annual Report, Comprehensive Rice Research, 41-42, 1994

CONCISE GENERAL SUMMARY OF CURRENT YEAR'S RESULTS:

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Name:

Phone:

Date:

CALEX/Rice User Survey

1. Have you used the CALEX/Rice program?
   y / n

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2. If not, why?
   a. Not enough time
   b. Too difficult
   c. Other

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3. How many times have you used the program?
   a. 0
   b. 1-5
   c. 6-10
   d. > 10

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4. Has the program influenced your decision-making?
   y / n

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5. What features have you found most useful?
   a. Recordkeeping
   b. Reports
   c. Agronomic management information
      Varieties
      Developmental Stage
      Fertility
      Harvesting
      Water usage
   d. Pest management information
      Weeds
      Seedling Pests
      Invertebrate

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6. What features have you found least useful?
   a. Recordkeeping
   b. Reports
   c. Agronomic management information
      Varieties
      Developmental Stage
      Fertility
      Harvesting
      Water usage

d. Pest management information
   Weeds
   Seedling Pests
   Invertebrates

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7. What additional features would you like to see?

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8. How would you define ease of use?
   a. Easy, intuitive
   b. Moderately easy, referred to Quick Reference
   c. Difficult, required reading all documentation

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9. How would you describe the documentation?
   a. Useful, complete
   b. Somewhat incomplete
   c. Difficult to understand, or too brief

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10. Did you download weather data from the IMPACT program?
    y / n

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11. How would you rate the ease of downloading weather data?
    a. Easy
    b. Moderately difficult
    c. Very difficult

Additional Computer Information

12. What type of processor do you have?
    a. 386
    b. 486
    c. Pentium
    d. Don't know

13. What type of monitor?
    a. Black/white
    b. Color

14. Do you have Internet access?
    y / n

15. What type of operating system do you use?
    a. DOS
    b. Windows 3.1
    c. Windows for Workgroups 3.11
    d. Windows NT
    e. Other