

ANNUAL REPORT OF COOPERATIVE REGIONAL
RESEARCH PROJECTS
January 1 to December 31,
1968

1. PROJECT: IR-4 Evaluation of Current Data and Needed Research to Determine Tolerance Limits of Chemicals for Minor Uses on Agricultural Products.
2. COOPERATING AGENCIES AND PRINCIPAL LEADERS:

Technical Committee

Mr. J. E. Fahey, Indiana
Dr. C. H. VanMidelem, Fla.
Dr. V. H. Freed, Ore.
Dr. B. B. Pepper (Chm.) N.J.

Region

North Central
Southern
Western
North Eastern

Administrative Advisory Committee
(States)

Dr. J. A. Callenbach, N. D.
Dr. H. H. Wilkowske (Chm.) Fla.
Dr. K. W. Hill, Utah
Dr. W. C. Kennard, Conn.

North Central
Southern
Western
North Eastern

USDA

Dr. E. R. McGovran, CSRS
Dr. K. C. Walker, ARS

Consultants

Mr. H. G. Alford, USDA-PRD
Dr. F. H. Dale, USDI
Dr. W. D. McClellan, USDA-CRD
Dr. J. E. Swift, Cal.
Dr. K. R. Hill - ARS
Mr. L. B. Reed - ARS

Project Leaders

Dr. C. C. Compton, Rutgers - N. J. - Coordinator
Mr. G. M. Markle, Rutgers - N. J. - Asst. Project Coordinator
(Recording Secretary)

In addition the Experiment Station Director of each state has appointed a member of his staff to act as a liaison with the project coordinator.

3. PROGRESS OF WORK AND PRINCIPAL ACCOMPLISHMENTS

1968 will go down in history as the year of greater generally recognized change in the use of all pesticides than has occurred at any time since the use of pesticides first came under federal regulations. More significant changes are being concentrated in a comparatively short period of time.

The joint order of the USDA - Pesticides Regulation Division and HEW - Food and Drug Administration in April 1966 proposed cancellation of all labels then registered under "No Residue" and "Zero Tolerance" provisions. Use label extensions were provided for on an annual basis. Such extensions called for sufficient progress covering animal toxicology and pesticide residues to assure regulatory agencies that continued use would not result in any hazard to the consumer. Ultimate clearances to be obtained by establishing tolerances and registering labels. IR-4 actively pursued the matter of label extensions during 1967 as previously reported.

The provision in the regulations for label extensions on a yearly basis permitted IR-4 to obtain extensions for 1968 covering 47 pesticides for use on 154 crops without duplicating industry requests. In addition IR-4 obtained "non-food" use rulings permitting the unrestricted use of 5 pesticides on 27 specific crops. Therefore, 1968 IR-4 activities encompassed preparations for further label extensions to cover the year 1969 and additional label clearances through tolerance extensions and label registrations. Significant progress has been made toward clearances through tolerances.

It is important to note that IR-4 has accomplished as much through cooperative work with state experiment stations and industry to obtain tolerances and label extensions as through direct action with HEW-FDA and USDA-PRD.

Since the activation of the IR-4 Project in January 1964, IR-4 has been able to obtain a significant number of clearances with a minimum of wasted effort through the close cooperation of HEW-FDA and USDA-PRD. With the small IR-4 staff this has been important because of the significant changes in requirements for pesticide clearances.

The rapidly changing pesticide clearance procedures have a special significance because so many of the minor crops were not covered prior to the initiation of the IR-4 Project. Pesticide clearances have had to be worked out from scratch. With no previous clearances, extensions have been out of the question.

The 1968 reductions in DDT tolerances from essentially across-the-board tolerances of 7 ppm for the majority of crops has resulted in significant changes in the use of this long established pesticide. The proposed further reduction at the end of 1968 of all DDT tolerances to 1 ppm unless higher tolerance can be justified as necessary to control pests has increased the load IR-4 is carrying. The minor use of DDT on peppers, post harvest use of DDT on sweet

potatoes and the use of DDT on leafy vegetables are areas where IR-4 is attempting to justify tolerances higher than 1 ppm.

During 1968 IR-4 has experienced an increase of over 300 per cent in correspondence relating to plans for research leading to obtaining the required data for pesticide clearances. We are entering a period of transition from label extensions to tolerances and label registrations.

Since the activation of the IR-4 Project in January 1964, IR-4 has been successful in clearing pesticides without finding it necessary to repeat clearances as the regulations have changed. Our efforts will be most productive in 1969 through pesticide coverage through tolerances.

The IR-4 crop "list" of edible plants categorized according to edible parts and pesticide residues in order to include minor crops in established, related crop groupings has been under critical review during 1968. Hopefully, the "list" will be ready for publication in 1969. The objective in preparing the "list" is to obtain pesticide clearances for use on minor crops more promptly than has been possible in the past.

4. USEFULNESS OF FINDINGS

Label extensions obtained by IR-4 during 1968 enable farmers to control aphids and mosaic on parsley both on the green crop and for the dehydrated crop; to use 2,4-D and 2,4,5-T to control weeds in wild blueberries; 2,4-D to improve the color and skin texture of red potatoes grown in the Red River Valley; to use parachlorophenoxyacetic acid to improve the "set" of tomatoes; to use DDT on the principal nuts; to continue the use of DNOC as a thinning agent on apples, plums, prunes and peaches; to use metaldehyde for the control of slugs on a variety of vegetables; to use naphthaleneacetic acid on olives; to use streptomycin on hops for the control of mildew; greenhouse operators to use calcium cyanide (cyanogas) as a fumigant for the control of whiteflies on tomatoes and others.

IR-4 has obtained a nonfood ruling for the use of trisodium phosphate on tomato seed to control tomato virus mosaic; soil application of metaldehyde baits to control slugs; sodium hypochlorite as a seed treatment for rice and others.

5. WORK PLANNED FOR NEXT YEAR (1969)

Major emphasis will be placed on converting label extensions to full clearances through establishment of finite tolerances.

December 30, 1968

APPROVED:

CA Hampton
IR-4 Project Coordinator

January 14, 1969
Date

Bailey B. Pepper
Chairman - Technical Committee - Pro Tem

January 14, 1969
Date

JWH Wilbourn
Administrative Advisor