ANNUAL REPORT OF COOPERATIVE REGIONAL
RESEARCH PROJECTS
January 1 to December 31, 1970

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

Technical Advisory Committee	Region
Mr. J. E. Fahey, Chm., Indiana	North Central
Dr. C. H. VanMiddelem, Fla.	Southern
Dr. V. H. Freed, Ore.	Western
Dr. B. B. Pepper, N. J.	North Eastern

Administrative Advisory Committee
(States)

Dr. J. P. Mahlstede, Iowa	North Central
Dr. H. H. Wilkowske, Chm., Fla.	Southern
Dr. K. W. Hill, Utah	Western
Dr. W. C. Kennard, Conn.	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. John E. Swift, Cal.
Dr. K. R. Hill - ARS
Mr. L. B. Reed - ARS
Mr. C. L. Smith - USDA-PRD

Project Leaders

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

In addition to the Technical Committee a State Experiment Station staff member appointed by the Experiment Station Director for each of the 50 states and Puerto Rico, serves as a liaison person for the IR-4 Project.

A tolerance of 5 ppm for calcium cyanide (HCN) was established for greenhouse grown tomatoes, cucumbers, lettuce and radishes for the control of greenhouse whitefly.

A tolerance of 1 ppm for malathion was established for hops and a label registered for the control of aphids and spider mites.

As a result of state experiment station requests, a tolerance for ethion was established through cooperation with industry for chestnuts, filberts and pecans.

Likewise petitions for a tolerance for 4-(2,4-DB) on peas and legumes and for MCPB on peas were submitted through cooperation with industry.

Petitions submitted in 1970 are still under review for the most part. As this Report is prepared (Jan. 1971) the establishment of tolerances and label registrations are being brought under the Environmental Protection Agency (EPA) and progress in these areas will require more effort. Because of the large number of petitions submitted to EPA-FDA and EPA-PRD, it is understood that label extensions will be forthcoming for those pesticides for which petitions were filed on or before December 31, 1970 but in no event will they be extended beyond December 31, 1971.

4. USEFULNESS OF FINDINGS

Until December 31, 1971 farmers and growers can continue to use the pesticides that have been under threat of label cancellations since April 1966. IR-4 has submitted petitions for tolerances covering those pesticides for which we have received state experiment station requests. Action on these petitions await review by EPA-FDA and EPA-PRD for tolerances and label registrations.

With the exception of DDT label cancellations IR-4 has not found it necessary to date to drop the use of any pesticide until a suitable substitute has been cleared.

5. WORK PLANNED FOR NEXT YEAR (1971)

With the majority of petitions it is necessary after review to supply additional information or amend the petitions. After the tolerances are established labels must be registered. New label registrations resulting from past IR-4 activities must be consummated as rapidly as possible. Major emphasis will be given to these areas during 1971.

The publication of the IR-4 Crop List "Food and Feed Crops of the United States" a descriptive list classified according to potentials for pesticide residues, is in the final printing state and will be distributed in 1971.

January 20, 1971
APPROVED:

C. O. Compton
IR-4 Project Coordinator

Jan. 29, 1971
Date

Jack E. Fahey
Chairman - Technical Committee

Jan. 25, 1971
Date

H. H. Wilkowske
Administrative Advisor

Hydrogen cyanide (HCN) for the control of scale insects, mealybugs and whiteflies on mature citrus entering certain interstate shipments.

DDVP (dichlorvos) and naled for the control of Phorids and Sciarids on mushrooms.

Thiram for the control of onion smut when applied as granules or sprays to the seed furrow.

Streptomycin for the control of downy mildew on hops; bacterial leaf spot on tomatoes and peppers in the plant bed; bacterial blight on celery in the plant bed; black leg and soft rot on the potato seed piece.

Zineb for the control of fusarium seed piece decay on potato seed piece.

Naphthaleneacetamide on apples and pears as a growth regulator.

2,4-D on potatoes applied at low acre rate to improve skin color and texture of white potatoes (red varieties).

2,4-D use on low bush blueberries on basis of Industry 2,4-D Task Force Petition.

Sodium trichloroacetate on sugar cane and sugar beets for the control of grasses.

Sodium arsenite as a dormant application on grapes in California to control black measles, dead arm and crown gall.

Dichlone on mint to control mint rust.

Beta-naphthoxyacetic acid on strawberries and tomatoes as a growth regulator.

Pyrethrins and piperonyl butoxide to control Drosophila sp. on stored potatoes and potato chips.

Pyrethrins and piperonyl butoxide for the control of flies in chicken houses. Tolerances in eggs, fat, meat and meat products.

Additional activities 1970. IR-4 has arranged for additional residue data to complete our 4-CPA petition for a tolerance when applied as a growth regulator on tomatoes.

As a result of an IR-4 petition tolerances were established for dichlorvos (DDVP) on greenhouse grown lettuce (1.0 ppm) and on greenhouse grown cucumbers, radishes and tomatoes (0.5 ppm).

3. PROGRESS OF WORK AND PRINCIPAL ACCOMPLISHMENTS

A joint statement by the Secretary of Agriculture and the Secretary of Health, Education and Welfare for Implementation of the National Research Council Pesticide Residue Committee's "Report on 'No Residue' and 'Zero Tolerance'" was published in the Federal Register on April 13, 1966. It was agreed that registrations of all pesticide products specifying uses involving reasonable expectation of small residue in food or feed at harvest in the absence of a finite tolerance or exemption should be discontinued as of December 31, 1967, unless evidence was presented to support a finite tolerance or to show that enough progress had been made in investigations to warrant continued use without undue hazard to the public health. Restrictions of such no residue or zero tolerance labels could not be continued later than December 31, 1970 unless the foregoing requirements were met. With progress reports and accumulation of additional or missing data further extensions were allowed on a year to year basis. Those uses for which IR-4 had substantial experiment station requests were extended until sufficient information was at hand to obtain tolerances, extension of a tolerance, or tolerance exemptions.

As a result of the 1966 order numerous pesticide labels were cancelled in 1968, 1969 and 1970. On the other hand many pesticide petitions were reviewed by HEW-FDA and USDA-PRD, tolerances established and new labels registered.

By December 31, 1970 many pesticides and crops were not covered by tolerances and labels. A major portion of IR-4 activities since 1966 has been devoted to outlining experiments to produce the required pesticide residue data; correlating residue data from various sources, preparing pesticide petitions and labels and arranging for animal toxicology studies where such data were not available. To obtain the necessary residue and animal toxicology data IR-4 has successfully arranged for appropriation by grower associations to finance the required studies at several state experiment stations or commercial laboratories where state experiment stations are not equipped to carry out the required studies. Since the IR-4 Project was initiated the requirements for pesticide residue data have expanded greatly and the requirements for additional animal toxicology data have increased. In addition the requirements for information on the effects of the proposed use of each pesticide on the environment must be met. During 1970 IR-4 has submitted 18 new tolerance petitions and have 6 new petitions ready for submission in early 1971. A brief summary of the pesticides involved follow:

1-Naphthaleneacetic acid on olives as a plant growth regulator.

DNOC on apples as a blossom thinner.

DDT on Chinese Chestnuts for the control of the chestnut weevil on disease resistant chestnuts

Copper arsenate on pears for the control of fire blight in Oregon only.