

COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCE
Department of Entomology and Economic Zoology
New Brunswick, New Jersey 08903

ANNUAL REPORT OF COOPERATIVE REGIONAL
RESEARCH PROJECTS
INTERREGIONAL RESEARCH PROJECT NO. 4
January 1 to December 31, 1971

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 Committee

Dr. C. H. Van Middellem, Chm., Florida
Dr. V. H. Freed, Oregon
Mr. J. E. Fahey, Indiana
Dr. B. R. Wilson, New Jersey

Region

Southern
Western
North Central
North Eastern

Administrative Advisory Committee
(States)

Dr. H. H. Wilkowske, Chm., Florida
Dr. W. C. Kennard, Connecticut
Dr. J. P. Mahlstedt, Iowa
Dr. L. W. Rasmussen, Washington

Southern
North Eastern
North Central
Western

USDA

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

Consultants

Dr. John W. Swift, Cal., Statewide Pesticide Coordinator
Dr. W. D. McClellan, USDA-ARS-PSRD
Dr. K. R. Hill - USDA-ARS-ENT
Mr. C. L. Smith - EPA-PRD
Mr. D. M. Baker, Jr., EPA-PTD

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.

3. PROGRESS OF WORK AND PRINCIPAL ACCOMPLISHMENTS

All cancellations of the "older" pesticides registered on a "No Residue - Zero Tolerance" basis prior to April 13, 1966 were cancelled December 31, 1970 unless tolerances or exemption from tolerances had been established OR unless bona fide pesticide tolerance petitions were filed by that date. Of the 19 tolerance petitions filed by IR-4 during 1970 EPA-PTD proposed tolerances for four pesticide chemicals during 1971. Thiram on onions, zineb on potatoes (potato seed piece treatment), naphthaleneacetamide on apples and pears and sodium TCA on sugarcane and sugar beets. Tolerances were established for five pesticide chemicals. Hydrogen cyanide (HCN) on mature citrus fruits, dichlorvos and naled on mushrooms, pyrethrins and piperonyl butoxide on white potatoes (storage for potato chip manufacture). Tolerance petitions are still under review or await additional data required for final action for ten pesticide chemicals. Naphthaleneacetic acid on olives, DNOC on apples, DDT on chinese chestnuts, copper arsenate on pears, streptomycin sulfate on tomatoes, peppers, celery and potato seed pieces, 2,4-D on potatoes (low dosage application to growing crop), 2,4-D on low bush blueberries, sodium arsenite on dormant grapes, Beta-naphthoxyacetic acid on strawberries and tomatoes and pyrethrins and piperonyl butoxide on eggs, fat, meat and meat by-products of poultry. A tolerance petition for dichlone on mint hay and mint oil was dropped during 1971 because of the lack of animal toxicology data and the development of a satisfactory substitute fungicide by the Indiana Agricultural Experiment Station.

During 1971 six additional pesticide petitions were completed and filed with EPA; Thiabendazole (TBZ) on hubbard squash, sodium dehydroacetate on snap beans, diuron on papayas, gibberellic acid on blueberries, linuron on celery and captan on taro.

An additional five pesticide tolerance petitions were nearing completion by the end of 1971 and will be submitted to EPA in early 1972. Benomyl on mushrooms, diuron on peaches, Kelthane (dicofol) on carrots, dimethoate on strawberries and the milky disease, B. popillae for Japanese beetle control in pastures.

At the end of 1971 over 300 requests for label clearances involving 72 pesticides on 108 crops are awaiting the establishment of tolerances obtained by IR-4 or by industry on major crops and data to meet environmental requirements, performance and phytotoxicity. In some instances additional residue data may be required.

As the remaining clearances resulting from the final cancellation of all "No Residue - Zero Tolerance" pesticide labels are finalized, IR-4 is entering a new era in pesticide clearances on minor crops. IR-4 records show a total of more than 900 additional clearance requests in all categories have been received through the state IR-4 liaison representatives since the IR-4 Project was activated. Of these approximately 300 crop clearances can be cleared up as IR-4 and Industry tolerance petitions are resolved favorably. The remaining clearances are primarily dependent upon resolving plant and animal metabolite and/or animal toxicology requirements. In order to expedite the foregoing clearance requests IR-4 has prepared a summary of all requests received from the fifty states and its territories. The summary listing of the requests by regions has been or will be shortly sent to the regional IR-4 Technical Committee member for evaluation as to current needs, assignment of priorities and estimates covering availability of required residue and performance data as well as information to meet environmental impact and phytotoxicity requirements.

USEFULNESS OF FINDINGS:

Tolerance proposals by EPA validate registered labels previously subject to cancellation under the "No Residue - Zero Tolerance" order of April 13, 1966. Tolerance rules establish tolerances leading to new label registrations. Registered labels under EPA-PRD complete pesticide clearances. Registered labels permit the farmer-grower to employ legally cleared pesticides to protect his crops and assures the public of wholesome vegetables, fruits and other foodstuffs including meats through the clearance of pesticides on animal feeds.

WORK PLANNED FOR NEXT YEAR 1972

Continued work on pesticide clearances through pesticide tolerance petitions and registered labels as summarized under PROGRESS in this report.

With the majority of pesticide petitions it is necessary frequently, after review by EPA, to develop additional information or amend the petitions. After tolerances are established labels must be registered to complete clearances. New label registrations resulting from past and continuing IR-4 activities must be consummated as rapidly as possible. Major emphasis will be given to these areas during 1972.

6. PUBLICATIONS ISSUED. June 1971. IR - Bulletin No. 1, Interregional Research Project No. 4 (Published by New Jersey Agricultural Experiment Station as Bulletin 828) - FOOD AND FEED CROPS OF THE UNITED STATES, A Descriptive List Classified According to Potentials for Pesticide Residues.

The purpose of the Bulletin is to propose a working classification of crops based on growth characteristics, to provide for the possible grouping of minor crops within established major crop groups. By this procedure we hope to materially shorten the time required to clear minor crops through establishing tolerances and label registrations.

January 20, 1972

C. D. Doughton
IR-4 Project Coordinator

Approved:

February 2, 1972
Date

24 Jan. 1972
Date

C. H. Van Middelstum
Chairman - Technical Committee

H. H. Wilkerson
Administrative Advisor