ANNUAL REPORT OF COOPERATIVE REGIONAL 
RESEARCH PROJECTS 
January 1 to December 31, 
1966

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

Dr. R. L. Janes, Michigan
Dr. C. H. VanMiddeken, Fla.
Dr. V. H. Freed (Chm.), Oreg.
Dr. B. B. Pepper, 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.

Region
North Central
Southern
Western
North Eastern

(USDA)

Dr. E. R. McGovran, CSRS
Dr. K. C. Walker (Sec.)ARS

Consultants

Mr. H. G. Alford, USDA-PRD
Dr. F. H. Dale, USDI
Dr. W. D. McClellan USDA-CRD
Dr. J. E. Swift, Cal.

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

A major development during 1966 has been the completion of a list of 
"Edible Crops and Plants Growing in the United States." The Latin binomials have been 
checked by USDA-ARS-Crop Protection Research Branch and New Crops Research Branch. 
This list is now in process of descriptive categorization to permit the inclusion of 
all minor crops in categories established by the FDA for pesticide tolerance purposes
and by USDA-PRD for label registration purposes. At present there is no available listing of all edible crops grown in the United States and territories or any recognized listing of minor crops. The IR-4 list will provide a basis for future pesticide tolerance extensions and label registrations. With the elimination of pesticide label registrations under a zero tolerance or on No Residue basis the categorization of minor crops become a necessity.

Although the IR-4 Project is limiting its activities to crops grown in the United States and its territories, a listing of the food plants of world would lay the basis for establishing pesticide tolerances on many imported crops not now covered. In addition foreign governments would be provided with a valuable aid for establishing tolerances on indigenous crops. In this way world-wide pesticide tolerances could be coordinated, a necessity for the future.

A number of edible plants grown in the United States that have been utilized in the past only as food plants in the wild state are now grown commercially in well established commercial plantings of up to 50,000 acres or more without the benefit of a single pesticide clearance. With the ever increasing demands for food, it is anticipated that many food plants occasionally eaten as grown in the wild will become important cultivated food crops of the future. Many crops are or may be suitable for for food crops when grown on soils unsuited to the growing of conventional food or feed crops.

During the past year 57 pesticides have been cleared for use on 22 minor crops. The number of clearances obtained in 1966 is lower than those reported for 1965 due to the elimination of the provision for label registrations under the "zero tolerance" and "No Residue" concept as permitted prior to April 1966. At the same time acreages of crops that can be treated under the 1966 pesticide clearances were greatly increased.

Major emphasis has been given to minor crop tolerances. For example, the 2,4-D tolerance of 5 ppm covering oranges, lemons, and grapefruit has been extended to include all citrus. 2,4-D labels can now be registered for any citrus food crop under use conditions that meet the 5 ppm residue requirements.

Removal of the restrictions for "Michigan-Indiana area only" for the use of low volume concentrate - malathion on blueberries opened the use of this pesticide to all blueberry growing areas in the United States.

The clarification of label requirements for the use of a petroleum mulch as an aid to germination and plant stand in dry vegetable growing areas resulted in large acreage use, particularly in California.
SUMMARY OF PESTICIDE CLEARANCES SINCE ACTIVATION OF PROJECT IN 1964

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Clearance Requests Rec'd.</th>
<th>No Registrations Completed</th>
<th>No Pesticide Chemicals Involved</th>
<th>No Crops Involved</th>
<th>No. Clearances in Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>446</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>1965</td>
<td>379</td>
<td>72</td>
<td>42</td>
<td>63</td>
<td>132</td>
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<tr>
<td>1966</td>
<td>159</td>
<td>57</td>
<td>15</td>
<td>22</td>
<td>163</td>
</tr>
</tbody>
</table>

4. USEFULNESS OF FINDINGS:

Pesticide clearances are more restrictive than they were even a year ago. Pesticide clearances on minor crops are necessary for the manufacturer of pesticide to offer a product for sale, for extension personnel to make recommendations for farmer-grower use, and for the farmer-grower to make pesticide applications to his crops. Over one thousand requests for pesticide clearances on minor crops have been received since the IR-4 Project was activated in January 1964. This is indicative of the lack of pesticide clearances on minor crops.

5. WORK PLANNED FOR NEXT YEAR (1967)

With the joint action taken by HEW-FDA and USDA-PRD setting cancellation dates for all pesticides now registered on a no tolerance (No Residue) or zero tolerance basis (Federal Register, April 13, 1966) the IR-4 Program will give major emphasis to tolerance extensions for use of pesticides on minor crops. This activity will be tied in with the addition of minor crops to establishing crop grouping used for tolerance establishing purposes. The clearance of pesticides on specified minor crops and minor uses on specified major crops will be continued. Where it is beneficial to the IR-4 Project assistance will be given to experiment station personnel for clearing up pesticide tolerances on certain major crops.

6. PUBLICATIONS ISSUED:


January 10, 1967
APPROVED:

[Signature]
IR-4 Project Coordinator

January 10, 1967
Date

[Signature]
Chairman - Technical Committee

January 10, 1967
Administrative Advisor