ANNUAL REPORT OF COOPERATIVE REGIONAL RESEARCH PROJECTS
INTERREGIONAL RESEARCH PROJECT NO. 4

JANUARY 1 to DECEMBER 31, 1974

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:

PROJECT PERSONNEL

Technical Committee

Dr. W. C. Eden, Florida
Dr. V. H. Freed, Chrm., Oregon
Dr. P. A. Dahm, Iowa
Dr. B. R. Wilson, New Jersey
Mr. K. C. Walker

Region
Southern
Western
North Central
North Eastern
USDA-ARS

Administrative Advisory Committee

Dr. H. H. Wilkowske, Chrm., Florida
Dr. R. M. Heermann, New York
Dr. J. P. Mahlstede, Iowa
Dr. L. W. Rasmussen, Washington
Dr. R. C. Riley
Dr. R. J. Sauer

Region
Southern
North Eastern
North Central
Western
USDA-CSRS
USDA-CSRS

Consultants

Dr. John W. Swift, Cal., Statewide Pesticide Coordinator
Mr. C. L. Smith - EPA-PRD
Mr. D. M. Baker, Jr., EPA-PRD
Dr. H. Wade Fowler, Jr., EPA-PRD
Mr. R. E. Hamman, NACA
Dr. K. R. Hill - USDA-ARS

Project Coordinators (located at Rutgers University, New Jersey)

Dr. C. C. Compton, Coordinator
Mr. G. M. Markle, Ass't. Coordinator
Dr. R. T. Guest, Ass't Coordinator

In addition to the Technical Committee, State Experiment Station staff members appointed by the Experiment Station Director for each of the 50 states, Puerto Rico, Virgin Islands and Guam, and three USDA-ARS persons from each region serve as liaison representatives for the IR-4 Project.
3. PROGRESS OF THE WORK AND PRINCIPAL ACCOMPLISHMENTS:

IR-4 Project operations during 1974 where characterized by the first real impact of the Federal Environmental Pesticide Control Act of 1972, not only on our pesticide tolerance and registered label activities but also on planning future activities. Progress in clearing pesticide usages on minor crops was good as well as improved coordination of all activities (See Appendices). This is in a great measure due to a recognition by all Federal and State research and regulatory agencies of the magnitude of the problems involved in clearing pesticides for use on the great numbers of minor crops both food and feed crops and on ornamentals. Progress has been enhanced by greatly improved communications between these agencies, IR-4 and industry and the recognition by extension workers that there must be greater interest at the state level in obtaining the required data for pesticide label registrations.

1974 and future activities of IR-4 were advances (1) thru meetings with Regional IR-4 committees (2) progress made in the regional development of pesticide clearance priority goals (3) progress in the areas of crop groupings for minor food and feed crops for pesticide tolerances and registered labels (4) progress in crop groupings for registered labels for pesticide usage on ornamentals (5) development of SIRSP a "Selective Information Retrieval System in Pesticides" (6) the assignment of K. C. Walker, a member of the IR-4 Technical Committee and an active participant in IR-4 Project activities since the Projects's inception in 1963, as National Coordinator of Pesticides for Minor Uses, Office of the Secretary, USDA, (7) the appointment by John B. Ritch Jr., Director, EPA, Registration Division of Drew M. Baker, Jr. as Minor Uses Officer, EPA, Registration Division and Dr. Wade Fowler, Jr., Associate Director for Special Projects, EPA, Registration Division to work with IR-4 on pesticide clearance problems (8) the designation by the State Agricultural Experiment Station Regional Directors of a leader laboratory for each region to assist IR-4 in developing required pesticide residue data for raw agricultural commodities for pesticide tolerances and registered labels with anticipated financial assistance for or through each leader laboratory, under leadership of Dr. J. P. Mahlstede.

4. USEFULNESS OF FINDINGS:

As a result of successful Pesticide Petitions submitted to EPA-PRD during 1974 and earlier years, rules published in the Federal Register during 1974 establishing pesticide tolerances, exemptions from the requirement of tolerance and other regulations led to new label registration. See APPENDIX page 1-6. Pesticide clearances are completed when industry registers labels with EPA-PESTICIDE REGISTRATION DIVISION based on information developed by State Agricultural Experiment Stations, the U.S. Department of Agriculture and industry. Labels registered with EPA-PRD permit producers of agricultural commodities to use legally cleared pesticides to protect all crops and livestock. Thus the public is assured of safe and wholesome foods. The relatively large number of small farmers is benefitted directly in the production of a variety of minor crops.
5. WORK PLANNED FOR NEXT YEAR - 1975:

Major efforts will be concentrated on the clearance of pesticides on food and feed crops as covered in this report and its appendixes.

Every effort will be made to assist in resolving the problems associated with state registered labels.

Special efforts will continue to obtain much needed additional financial support for residue data collection through leader laboratories.

Attention will be given the eight points under 3. PROGRESS OF WORK AND PRINCIPAL ACCOMPLISHMENTS of this report since the activities are major responsibilities of this project and need continuing emphasis.

6. PUBLICATIONS ISSUED:

Quarterly Numbers of the IR-4 Newsletter were issued by the IR-4 Project office and distributed by the IR-4 Technical Committee Members for each region.

7. December 31, 1974

8. ENCLOSURES Appendix 1, 6 pages
   Appendix 2, 5 pages.

C. C. Compton, IR-4 Project Coordinator

Approved:

January 15, 1975

V. H. Freed - Chairman, Technical Committee

January 15, 1975

H. H. Wilkskowske, Administrative Advisor
APPENDIX 1

SUMMARY OF IR-4 PROJECT PESTICIDE CLEARANCE ACTIVITIES BY PESTICIDE - 1974

Keeping in mind that there are three steps to the completion of a pesticide clearance namely, the tolerance proposal, the tolerance rule and the registered label by EPA - PRD, IR-4 reports the following progress toward pesticide clearances during 1974.

A-Tolerance Proposals and Temporary Tolerances

ACETALDEHYDE - APPLES AND STRAWBERRIES. A proposal for exempting acetaldehyde from the requirement of a tolerance when used as a postharvest fumigant of apples and strawberries for the control of Botrytis cinerea (green mold) and Rhizopus stolonifer (soft rot) on strawberries and Penicillium expansum (blue mold) on apples (delicious) was published in the Federal Register Vol 39, No. 240 December 12, 1974.

2,4-D - ASPARAGUS. A proposal for establishing a tolerance of 5ppm for residues of 2,4-D sodium salt and alkanolamine salts (of the ethanol and isopropanol series) calculated as 2,4-D (2,4-D dichlorophenoxy acetic acid) in or on asparagus was published in the Federal Register, Vol 39, No. 230 November 27, 1974.

2,4-D STRAWBERRIES. A proposal for establishing a tolerance of 0.05ppm of 2,4-D - acid in or on strawberries resulting from the application of 2,4-D alkanolamine salts (of the ethanol and isopropanol series) was published in the Federal Register, Vol 39, No. 249 December 26, 1974. The 2,4-D as indicated above for the control of specified annual and perennial broadleaf weeds.

PARAQUAT - PARAQUAT CL DENOTES THE DICHLORIDE-GUAR. IR-4 submitted a Pesticide Petition requesting a tolerance of 0.5ppm for this desiccant in or on guar beans when applied at the rate of 0.5 lb/Acre. The publication of the proposed establishment of the requested tolerance was published in the Federal Register Vol 39, No. 211 October 31, 1974.

PHOSALONE (ZOLONE®) - CARROTS. A temporary tolerance of 1ppm in or on carrots grown for processing for the use of phosalone at 1 to 1 1/2 lbs/Acre to control the carrot weevil was published in the Federal Register Vol 39, No. 106 May 31, 1974. Use restricted to carrots grown for processing in Delaware and New Jersey to replace DDT as the only known control. The temporary tolerance expires May 22, 1975 subject to the completion of required additional data.

B-Tolerance Rules - Tolerance Exemptions

CAPTAFOL (DIFOLATAN®) - TARO. The EPA in answer to an IR-4 Pesticide Petition submitted February 18, 1974 established a tolerance of 0.02ppm in or on taro corms when the fungicide is applied to the growing plants in the field at 7 to 14 days intervals at the rate of 1.5 lb/Acre actual pesticide not to exceed 36 pounds actual Difolatan per season for the control of phytophthora leaf blight, Phytophthora colocasiae in Hawaii only. Federal Register Vo. 39, No. 199 October 11, 1974.

NITROGEN (TOK®) - TARO IN HAWAII. A tolerance of 0.02ppm was established on wetland taro in Hawaii only on February 15, 1974 when this herbicide is applied at
the rate of 5.34 lbs/Acres for the control of barnyard grass, Echinochloa crus-galli; junglerice, E. colonum; Cyperus difformis; tarweed cuphea, Cuphea carthagenesis; primrose willow, Jussiæa suffruticosa; Dgbatrium juncæ. The use of the herbicide is part of an overall program to increase the production of this crop in Hawaii.

SODIUM CHLORATE - SORGHUM was exempted from the requirement of a tolerance when used with urea as a fire retardant on sorghum grown for seed and when grown for food or feed; February 22, 1974. With a preharvest application limitation, the forage and refuse may be fed to livestock, Federal Register Vol. 39, No. 37 February 22, 1974.

BHC AND LINDANE - PECANS. A tolerance of 0.01ppm in or on pecans was established April 17, 1974 for these insecticides when used for the control of pecan phylloxera and shoot curculio with the limitation that treated areas are not to be grazed. Federal Register Vol 39, No. 75 April 17, 1974.

2,4-D - POTATOES. A tolerance of 0.2ppm for 2,4-D residues in or on potato tubers resulting from the application of low level applications of 2,4-D as a growth regulator at the time the young potatoes are "setting" to improve the red color and skin texture was established, Federal Register Vol 39, No. 240 December 12, 1974.

p-CHLOROPHENOXYACETIC ACID - 4 CPA - TOMATOES. A tolerance of 0.05ppm was established August 30, 1974 for p-chlorophenoxyacetic acid and its metabolites p-chlorophenol in or on the raw agricultural commodity tomatoes when the 4-CPA is used to improve fruit set by spraying individual blossom clusters as they develop on the plant. Federal Register, Vol 39, No. 170 August 30, 1974.

DNOC (94,6-Dinitro-o-cresol and its Sodium Salt). - APPLES. A negligible tolerance of 0.02ppm for residues of the plant regulators 4,6-Dinitro-o-cresol and its sodium salt in or on the raw agricultural commodity apples resulting from the application to apple trees at the blossom stage as a fruit thinning agent. Federal Register Vol 36, No. 64 April 2, 1974.

GIBBERELLIC ACID - STRAWBERRIES. IR-4 submitted a Pesticide petition on July 19, 1974 proposing an exemption from the requirement of a tolerance for gibberellic acid in or on strawberry plants when applied to "mother plants" in the field to increase the production of "runners" on the variety Olympus. Under date of November 14 EPA notified us that the proposed use represents a nonfood use and is acceptable for label registration.

3,5-DICHLORO - N - (1-DIMETHYL - 2 PROPYNYL) BENZAMIDE (KERB®) - BLUEBERRIES. A negligible tolerance of 0.05ppm for residues of this herbicide in or on blueberries was established May 24, 1974, Federal Register Vol 39, No. 102.

TRICYCLOHEXYLTIN HYDROXIDE (PLITRAN®) - HOPS. A tolerance of 30ppm in or on fresh hops and 90ppm in or on dried hops for the combined residues of the insecticide (ascaricide) tricyclohexyltin hydroxide and its organotin metabolites (calculated as tricyclohexyltin hydroxide) when the pesticide is applied to three applications at the rate of 1.0 lb to 1.7 lb per application per acre and not to exceed a total of 4.5 pounds per crop for the control of the two-spotted spider mite. Federal Register Vol 39, No. 171 September 3, 1974.

THIABENDAZOLE (MERTECT® - TBZ®) - WHITE POTATOES. A tolerance of 0.1ppm (negli-
gible residue) was established in or on potatoes (white) which have been grown from seed potatoes treated postharvest in storage with thiabendazole at a dilution of 1440ppm (1.2 pounds actual fungicide per 100 gallons water) for the control of Fusarium tuber rot. Federal Register Vol 39, No. 181 September 17, 1974.

THIABENDAZOLE (MERTECT®-TBZ®) - SWEET POTATOES. A label was registered with EPA-PRD by Merck & Co. Inc. Rahway, N. J. in February 1974 for the use of thiabendazole as a seed dip for the control of black rot, Ceratocystis fimbriata, scurf, Monilochaetes infuscans, and food rot, Plenodomus destruens of seed sweet potatoes.

METALDEHYDE - STRAWBERRIES. IR-4 submitted a Pesticide Petition June 11, 1974 requesting a tolerance of 1.0ppm for metaldehyde in or on strawberries when applied at the rate of 1 pound per acre, per application as a bait, dust or spray no closer than 4 days between last application and harvest for the control of slugs. EPA-PRD has requested IR-4 to revise Section F of the petition to propose the establishment of an exemption from the requirement of a tolerance for residues of the molluscicide metaldehyde when used before harvest in the production of strawberries.

C - 1974 Petition Submitted and Under Review by EPA

BENOMYL (BENLATE®) - BLUEBERRIES. IR-4 submitted a Petition February 28, 1974 requesting a tolerance of 7ppm for the combined residues of the fungicide benomyl [methyl (1- butoxycarbamoyl) -2- benzimidazolcarbamate] and its metabolites containing the benzimidazole moiety (calculated as benomyl) in or on blueberries when applied to blueberries for the control of Mummyberry, Botrytis and Anthracnose. The petition was amended by IR-4 August 28, 1974 at the request of EPA reducing the proposed dosage per acre from 1 lb/acre to 0.5 lb/acre with 4 applications per year and providing validation and recovery data for the liquid chromatographic analytical method.

CHLOROTHALONIL (BRAVO®) - ONIONS. On April 13, 1974 IR-4 submitted a pesticide petition requesting a tolerance of 5ppm in or on green onions and 0.5ppm in or on dry bulb onions, exclusive of Spanish onions when used for the control of Botrytis leaf blight, downy mildew and purple blotch. EPA requested additional information with the result, the IR-4 petition was amended October 22, 1974.

HEPTACHLOR - PROCESSED PUMPKIN. On December 20, 1973, IR-4 submitted a Pesticide Petition on behalf of the IR-4 Technical Committee and the Illinois Agricultural Experiment Station requesting a tolerance of 0.1ppm for heptachlor and its epoxide to cover unavoidable residues in or on pumpkins used for canning purpose. This request is still under review by EPA, December 31, 1974.

CHLOROTHALONIL (BRAVO®) - PASSION FRUIT. IR-4 submitted a Pesticide Petition on October 31, 1974 requesting a tolerance of 3ppm in or on passion fruit grown in Hawaii, with no more than 0.1ppm in the edible pulp resulting from the application of the fungicide to the raw agricultural commodity, passion fruit for the control of Alternaria fruit and leaf spot, passion fruit brown spot. Sufficient time has not elapsed for completing the petition review.

2,4-D - APRICOTS - IR-4 submitted a Pesticide Petition on June 29, 1972 requesting a tolerance of 2ppm in or on apricots (Fresh and dried fruit) when the dimethylamine salt of 2,4-D is applied as a growth regulator at a single application at a dilution of 50 parts per million equivalent of 2,4-D acid. IR-4 has yet to obtain from the requesting parties residue data to show the extent of bound residues, specifically residue determinations by the Chow method.
CARBARYL (SEVIN®) - SUNFLOWER SEED. IR-4 submitted a Pesticide Petition October 9, 1974 requesting a tolerance of 1ppm for carbaryl in or on sunflower seed when carbaryl is applied as a 5% bait applied to the soil at the rate of 30 pounds per acre. Use limited to N. Dakota and Minnesota. Petition is under initial review by EPA.

CYANAZINE (BLADEX®). On September 28, 1974 IR-4 submitted a Pesticide Petition requesting an increase in the tolerance from 0.05ppm to 0.2ppm to cover residues in or on corn forage and fodder resulting from the application of cyanazine to corn after layby as a directed spray beneath and between corn plants for the control of witchweed, Striga lutea in North and S. Carolina. Petition under initial review by EPA.

DODINE (CYPREX®) - SPINACH. IR-4 submitted a Pesticide Petition February 4, 1974 requesting a tolerance of 12ppm for dodine in or on spinach when applied to spinach grown for commercial processing for the control of white rust. Review of the petition by EPA awaits data from cooking studies. This work is under way.

DINOCAP (KARATHANE®) - CANEBERRIES. On October 10, 1974, IR-4 revised Section F of a Pesticide Petition originally submitted February 21, 1973 to request a tolerance of 0.1ppm for this insecticide and fungicide when applied to caneberrries (blackberries, boysenberries, loganberries, raspberries) and gooseberries for the control of powdery mildew. Revision under review by EPA.

CARBOPHENOTHION (TRITHION®) - LOW BUSH BLUEBERRIES. October 24, 1974 IR-4 submitted a revised Pesticide Petition requesting a tolerance of 4ppm in or on low-bush blueberries when this insecticide-acaricide is applied at the rate of 0.6 pounds per acre (20 pounds of a 3% dust) per application (maximum 2 applications) for the control of blueberry maggot. Petition under initial review by EPA.

CARBOPHENOTHION (THRTHION®) - PEANUTS. October 26, 1974 IR-4 submitted revision data for our Pesticide Petition requesting a tolerance of 0.1ppm for this insecticide-acaricide in or on peanuts when applied at 1 pound in a minimum of 25 gallons per acre for the control of mites. Revision under review by EPA.

DINOSEB - SNBP - PEAS. IR-4 attempted to obtain a tolerance of 3ppm at the request of Washington State for this herbicide to control "hard to control" weeds in edible peas and pea vines when applied as a postemergence spray at 4.5 lbs/acre. The postemergence application was not allowed by EPA without large animal radiotracer metabolism data. We have been unable to obtain this information to date, December 15, 1974. The preemergence application of this herbicide at 4.5 lbs/acre has been granted to Dow Chemical Company with a tolerance of 0.1ppm for peas, pea forage and hay. Federal Register, Vol 39, No. 240 December 21, 1974.

DIPHENAMID (DYMID®, ENIDE®) - RASPBERRIES. IR-4 petitioned EPA for a tolerance of 0.1ppm in or on raspberries when this herbicide is applied at the rate of 5 pounds per acre as a directed spray prior to weed germination for the control of pegweed, lambsquarter, quackgrass and foxtail. The EPA-PRD advised IR-4 May 16, 1974 that residue and recovery data would have to be supplied for the metabolite nordiphenamid (N-methyl - 2,2 - diphenylacetamide) before the petition review could be completed.
SILVES (KURON®) – CITRUS. IR-4 submitted a Pesticide Petition February 22, 1974 requesting a tolerance of 0.1ppm for silvex – \(2\) (2,4,5 Trichlorophenoxy) propionic acid in Florida only to cover either or both applications under specific use directions for each use as growth regulator at 20ppm for reducing preharvest drop of "pineapple" and "temple" oranges and at 2 pounds acid equivalent per acre as a herbicide for the control of perennial vines (Virginia creeper, milkweed vine and annual vine, Balsam vine). On June 25, 1974 EPA requested additional information relating to the Meager analytical method, a food additive tolerance for residues in citrus pulp, possibly for residues in molasses from a simulated commercial process using fruit from field treated plots and a resolution of the problem of residues in meat and milk, the latter depending on the tolerance level needed for residues on dried citrus pulp. IR-4 is awaiting this information from Florida.

SODIUM ARSENITE – GRAPES. Following the establishment of interim tolerance of 0.05 for residues of sodium arsenite in or on grapes when applied to dormant vines after pruning as a fungicide for the control of black measles, dead arm and crown gall, Federal Register, Vol 37, No. 233 December 2, 1972 the IR-4 Pesticide Petition was amended to include a food additive tolerance of 0.225ppm for sodium arsenite (calculated as As2 05) in or on raisins resulting from its use on grapes as above. Federal Register, Vol 39, No. 99 May 21, 1974.

FORMETANATE HYDROCHLORIDE (CARZOL®SP) – HOPS. On September 20, 1974 IR-4 submitted a Pesticide Petition requesting a tolerance of 65ppm in or on fresh hops resulting from the application of formetanate hydrochloride soluble powder 92% to growing hops for the control of two-spotted spider mites. EPA-PRD normally does not complete review of Pesticide Petitions in less than 3 months – tolerance proposal pending.

SODIUM PENTACHLOROPHENATE – BLUEBERRIES. On September 4, 1974 IR-4 asked EPA-PRD (letter of C. L. Smith) for a nonfood designation on the use of a dormant application of SPCP at a rate of 11.85 pound/Acre actual fungicide for the eradication of the apothecia stage of mummyberry disease on blueberries. This has not been removed.

ZINC ION AND MANEB COMPLEX (DITHANE® M-45) – TARO. May 20, 1974 IR-4 submitted a Pesticide Petition requesting a tolerance of 0.3ppm for this coordination product in or on the raw agricultural commodity taro (corn), with no ethylenethiourues residues above the sensitivity of the analytical method of 0.005ppm for the control of Phytophthora leaf blight, Phytophthora coleocasiae. On September 3, 1974 EPA requested additional data as usually happens when we attempt to obtain new uses for old pesticides for which labels were registered years ago before present restrictions and requirements were in force.

ZINC PHOSPHIDE – GRAPES – RODENTICIDE. IR-4 submitted a petition September 9, 1974 requesting a tolerance of 0.01ppm for phosphine in or on grapes resulting from the use of the rodenticide zinc phosphide baits for mouse control in vineyards in the Northeast Region of the United States. Petition under review.
D - Labels registered by EPA - Pesticide Registration Division as a result of IR-4 Project activities in obtaining pesticide tolerances, tolerance extensions, exemptions from the requirement of a tolerance, and nonfood use rulings.

Because of the number of pesticide chemical manufacturers and pesticide formulators, the continual revisions in registered labels; the transition from state registered labels to EPA - PRD registered labels; label violation interpretations; and label cancellations or suspensions, IR-4 has not developed a system for recording up-to-date listings for registered labels resulting from IR-4 Project activities. We suggest that you follow the entries in the EPA Compendium of Registered Pesticides or industry registered labels exhibiting the EPA Registration Numbers.
APPENDIX 2

The reference to the IR-4 Selective Information Retrieval System in Pesticides (SIRSIP) in this report, reflects the development of a revised program called SIRSIP # 4, which was accepted at the IR-4 annual meeting in April and reviewed in detail in August. The revised program will encompass additional parameters and should be ready and debugged in Jan. 75 for the input of the Priority requests. The three IR-4 forms used in conjunction with the computer are enclosed. Form A is completely entered in the computer and retrievable 15 ways. Form B (performance data) Form C (residue data) are used for specific information necessary for pesticide clearance. In addition we have taken Forms B and C and arranged the same information in tabular format under B. 1 and C. 1

On October 22, 1974 Dr. H. H. Wilkowske, Chairman, IR-4 Administrative Advisory Committee appointed an IR-4 SIRSIP Advisory Committee, Dr. R. M. Heerman, Chairman to serve in an advisory and counseling capacity in the development of SIRSIP.
### PESTICIDE CLEARANCE REQUEST SUMMARY

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<th>Commodity Class</th>
<th>Type Activity</th>
<th>Liaison</th>
<th>State</th>
<th>Region</th>
<th>Date</th>
<th>Priority</th>
<th>Req.</th>
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</table>

2. Commodity:

3. Investigator (name, address, phone):

4. Chemical (standard name/trade name/mfg):

5. General Use Pattern (e.g., field, greenhouse, rangeland, water, etc.):

6. Part of commodity consumed (e.g., whole fruit, vegetable with husk removed, tuber, etc.):

7. Reason for use (e.g., pest controlled, increased production, thinning, etc.):

8. Alternative treatments (list advantages and disadvantages):

9. Importance of use (e.g., acres involved, economics, etc.):

10. Proposed Labeling:
    Formulation (s):

    Dosage (active ingredients/A)

    Method of application (Ground, air, etc.):

    Directions for use:

11. Limitations:

12. Special safety precautions:

13. Total dosage/A and total No. applications/season:

14. Mammalian toxicology (what is available and from whom):

15. Methods for removing residues from edible commodity:

16. Proposed tolerance:
Environmental data (wildlife, soil, degradation, etc.):

Manufacturer's interest: Prior contacts: With whom:

Patent status:

Requestor's Comments:

Additional States/Agencies:

Status update:

Cleared: Tolerance: EPA REG. NO.

IR-4 Comments:

Performance Summary: OFFICE USE ONLY

Residue Summary:

Please complete as fully as possible through line 18 and return to: Cook College Office of IR-4, P.O. Box 231, Rutgers University, New Brunswick, NJ 08903
IR-4 Form A, SIRSIP-#4, 05/74
ATTACHMENTS: (Please check if enclosed)
IR-4 Form B (Performance Report) [ ]
IR-4 Form C (Residue Report) [ ]
SIRSIP-4, FORM-B
PERFORMANCE REPORT *
(Attach to Pesticide Clearance and Request Summary Form A)

Investigator (name, address, phone):

Commodity:
Pesticide, formulation, rates (incl. additives):

Manufacturer

Treatment location & dates:

Plot size & experimental design:

Type of appl. (e.g., foliar, soil, incorporation, etc.):

Method of appl. (e.g., ground, spray, dust, etc.):

Volume: Sprayer type:
Nozzles: Pressure:

Cultural practices (e.g., fertility, cultivation, other pesticide, etc.):

Soil type:
Rainfall & irrigation:
Planting date:
Harvest date:

Interval(s) last appl. to sampling:

Response to treatment (e.g., mortality of target organism, plant growth, etc.):

Phytotoxicity:

Yield:

Comments: (Use reverse side if necessary)

*Include all relevant field and/or performance data. Use separate forms for each experimental report. Attach copy of published information.
IR-4 Form B, SIRSIP #4, 05/74
PERFORMANCE REPORT
SIRSIP-4, FORM-B.1
(Attach to Pesticide Clearance Request Summary Form A)

INVESTIGATOR

COMMODOITY

PESTICIDE

CLASS

FORMULATION

RATES (a.i.)

SOURCE

NUMBER APPLICATIONS

LOCATION

DATE

PLOT SIZE

APPLICATION TYPE

APPLICATION METHOD

GALLONS OF WATER/A

NOZZLES & PRESSURE

SPRAYER TYPE

SOIL TYPE

RAINFALL & IRRIGATION

PLANTING DATE

HARVEST DATE

INTERVALS BETWEEN APPLICATION

INTERVALS LAST APPLICATION TO SAMPLING

DATE LAST APPLICATION

OTHER PESTICIDES APPLIED

FACTOR STUDIED

FIELD COMMENTS:
(Response to treatment, phytotoxicity and yield, etc.)

*Include all relevant field and/or performance data.
Use a separate form for each experimental report.
Attach copy of published information.
IR-4 Form B.1, SIRSIP #4. 05/74
Analyst (name, address, phone):

Sampling method:

Date(s) sampled:

Interval(s) last appl. to sampling:

Growth stage at sampling:
Date(s) Analyzed:

Analytical method & modifications (incl. published references, if available):

Instrument (incl. parameters):

Fortification levels:

Stage added:

Extraction method:

Cleanup:

Residue range:

Recovery:

Sensitivity:

Comments: (USE REVERSE SIDE IF NECESSARY)

*Include all relevant analytical data. Use separate forms for separate determinations.
Attach copy of published information.
SIRSIP #4, 05/74
IR-4 Form C
**RESIDUE REPORT**

**SIRSIP-4, FORM-C.1**

(Attach to Pesticide Clearance Request Summary Form A)

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<th>Date Anal.</th>
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* Include all relevant analytical data. Use separate form for separate determinations.

Attach copy of published information.

IR-4 Form C. 1 - SIRSIP #4, 05/74.