EFEFCT OF PROMETRYN ON ROTATIONAL CROPS (SPINACH)
IR-4 Projects: P12029
Other crops included: BRUSSELS SPROUTS, PEPPER, and NAPA CABBAGE

Date: 02/2018

PROJECT TITLE, JUSTIFICATION AND OBJECTIVES:

Effect of Prometryn on rotational crops Spinach, Brussels Sprouts, Pepper, and Napa Cabbage.
The purpose of this research is to collect performance data to support reduction of registered rotational intervals for spinach, Brussels sprouts, pepper and napa cabbage to 60 or 90 days following application of prometryn. Adherence to Good Laboratory Practices (GLPs) is not required for trials conducted under this research plan.

IR-4 PRODUCT PERFORMANCE RESEARCH COORDINATOR:

Consult with the Research Coordinator listed below regarding desired changes in this research plan prior to occurrence.

William P. Barney, IR-4 Project Headquarters, 500 College Road East, Suite 201 W, Princeton, NJ 08540, (732) 932-9575 X4603, FAX# (609) 514-2612, E-mail: barney@njaes.rutgers.edu

TEST SITE, TEST SUBSTANCES AND STATISTICAL ANALYSIS:

Field trials should be conducted at appropriate sites to determine the rotational effects of prometryn on spinach, Brussels sprouts, pepper, and napa cabbage when planted at intervals less than currently labeled. **Spinach and napa cabbage will be seeded, while Brussels sprouts and pepper will be transplanted**. Evaluate the test material listed below. Do not use old product for trial conducted under this research plan. If needed, the IR-4 Research Coordinator will arrange for fresh test substance to be delivered. If unsure, contact the IR-4 Research Coordinator for guidance.

Follow local agricultural practices for the production of rotational crops including fertilization, irrigation, if necessary and available, and other practices that ensure good crop production. Use locally-grown, commercial varieties of the rotational crops.

Each test site will include at least three replicates of each treatment, arranged in an appropriate statistical design. **The individual plots should be large enough to permit accurate application of the test substance in a manner that represents the major application technique that will be used commercially. Individual plots shall also be large enough to accommodate three plantings of each rotational crop; one at 60 days after treatment (DAT), one at 90 DAT, and one at 120 DAT, each of sufficient size to allow meaningful scientific evaluation. Each rotational planting shall include normal land preparations for the particular crop. All tillage and land preparation operations for each rotational crop will be recorded in the final report.** Conduct appropriate statistical analysis to determine if significant differences exist between treatments. Statistical analysis from commonly used agricultural data programs, such as Agricultural Research Manager (ARM), is acceptable.

TREATMENTS AND TIMING: Use application equipment that will provide uniform application of the test substance and simulates the intended commercial application technique as specified below. To ensure accurate delivery, calibrate test application equipment prior to application of the test substance(s).

Trt#	Product(s)	Active ingredient(s)	Rate of formulated product(s)	Rate of active ingredient(s)	Application Placement & Timing	Spray Volume Range*
01	Untreated	N/A	N/A	N/A	N/A	N/A
02	Caparol 4L	prometryn	3.2 pt/acre	1.6 lb ai/acre	Soil Broadcast	≥20 GPA
03	Caparol 4L	prometryn	6.4 pt/acre	3.2 lb ai/acre	Soil Broadcast	≥20 GPA

*GPA=gallons per acre

Application Description: Make one post plant, preemergence application in cilantro. Cilantro crop will be managed for commercial production, including maintenance pest control, but no evaluations will be recorded during the cilantro crop season.

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DATA COLLECTION:

Rotational Crop Response: YES__X__ NO_____ OPTIONAL_____

1. Rotational crop stand will be collected at 14, 28, and 42 days after each planting by documenting the number of viable plants in a known area or length of row.

2. A general rating of rotational crop vigor will be done at 14, 28, and 42 days after each planting. A description of the method used to rate vigor will be included in the final report. If significant crop injury is observed, photo images of the injury should be collected and included in the final report

Weed Control: YES_____ NO__X___ OPTIONAL_____
Weed control data will not be collected in these trials.

Rotational Crop Yield: YES__X___ NO_____ OPTIONAL_____
Yield data will not be collected for rotational crops.

FINAL REPORT:

At trial completion, please submit a final report to the Research Coordinator and the appropriate ARS/Regional Field Coordinator listed below within 60 days of last data collection. This shall include but not be limited to:

- Data requirements listed above
- Test site and application information; including soil characteristics, crop maintenance pesticides and cultural practices, description of the application equipment, environmental conditions at applications(s), meteorological and irrigation records, and other pertinent information, such as photos of significant crop injury.

The final report will also include a thorough narrative that analyzes the results and evaluates the potential of the tested products for use in the tested crop(s). The final report may be in paper or electronic format.

TRIAL SITE INFORMATION

Researcher	Field ID NO.	RFC
Steve Fennimore, US Agricultural Research Station, UC Davis, Weed Science Program, Dept of Plant Sciences, 1636 E. Alisal St, Salinas, CA 93905; ph: 831-755-2896, cell: 831-594-1333; fax: 831-755-2814; e-mail: safennimore@ucdavis.edu	P12029.18-CAP06 (Spinach Only)	WSR
Dr. Peter Dittmar, University of Florida, Plant Science & Education Unit, 2556 W. Hwy 318, Citra FL 32113-2132; Phone: 352-273-4771; e-mail: pdittmar@ufl.edu	P12029.18-FLP04 (Multi-crop: spinach, pepper, Brussel sprouts)	SOR

RFC = Regional/ARS Field Coordinator

Location:

WSR: Dr. Michael Horak, Regional Field Coordinator, Western Region IR-4 Project, 4218 Meyer Hall, University of California-Davis, Davis, CA 95616 (530) 752-7634; Cell# 530-219-8466; e-mail: mjhorak@ucdavis.edu

SOR: Mr. Roger B. Batts, MAILING: NCSU Campus Box 7654, Raleigh, NC 27695-7654, (919) 515-1668, Fax# (919) 513-7226; e-mail: rbbatts@ncsu.edu

W P Barney
Signature of IR-4 Product Performance Research Coordinator
Mr. William P. Barney

2/22/18
Date