PESTICIDE ALTERNATIVES QUESTIONNAIRE

Name of Respondent: FERRIS, H.  
County/Campus: Yolo/Davis  
Crop: Alfalfa  
Target Pesticide (TP): DICHLOROPROPENE  
How is the standard method of application for this pesticide? Soil injection  
How is the frequency of application? Once - transplant  

Section I. Chemical Alternatives Not in the Catalogue to the Replace the Loss of the Above Pesticide

Identify your first choice as an alternative pesticide: Methomyl  
What is the expected crop yield with this pesticide compared to the target pesticide (TP)? (Circle number) VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP  
What is the expected crop quality with this pesticide compared to the target pesticide (TP)? VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP  
What is the standard method of application for this pesticide? Preplant  
What is the frequency of application? Once - transplant  
Describe deficiencies or problems with this alternative: Too expensive for farm  
Coach and not registered  
Identify your second choice as an alternative pesticide: Fenamiphos  
What is the expected crop yield with this pesticide compared to the target pesticide (TP)? VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP  
What is the expected crop quality with this pesticide compared to the target pesticide (TP)? VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP  
What is the standard method of application for this pesticide? Soil injection  
What is the frequency of application? Annual - one per year  
Describe deficiencies or problems with this alternative: Lower efficacy, higher pesticide load, not registered  

Section II. Non-Chemical Alternatives to the Replace the Loss of the Target Pesticide

Identify your first choice for a non-chemical alternative or alternative program for replacing this pesticide:  

How would you describe this alternative? (Circle number of answer.)  
1 BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)  
2 PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy mgnt etc.)  
3 MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)  
4 REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)  
5 A COMBINATION OF SEVERAL OF THE ABOVE
What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or identify the kind of costs that need to be estimated to determine cost:

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be studied or researched to provide an effective alternative:

Identify your second choice for an alternative or alternative program for replacing this pesticide:

How would you describe this alternative? (Circle number of answer.)

1) BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)
2) PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy mag., etc.)
3) MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)
4) REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)
5) A COMBINATION OF SEVERAL OF THE ABOVE

What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or identify the kind of costs that need to be estimated to determine cost:

Is alternative proposed available now? Yes (No) (Circle answer)

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be overcome to provide an effective alternative:

Section III. Research, Development and Implementation Activities

Describe what research, development or implementation activities you have underway that might provide an alternative to the pest problem and indicate the time frame that you would predict the alternative might be available as a practical treatment or control program: (Use additional sheet if needed)
PESTICIDE ALTERNATIVES QUESTIONNAIRE

Name of Respondent: WESTERDAHL, B. B.  
County/Campus: Yolo/Davis  
Crop: Alfalfa  FS  
Target Pesticide (TP): Diclofop

What is the standard method of application for this pesticide? Shank

What is the frequency of application? Once per crop

Section I. Chemical Alternatives Not in the Catalogue to the Replace the Loss of the Above Pesticide
Use of chemical has not been shown to be economic on alfalfa in CA
Identify your first choice as an alternative pesticide:

What is the expected crop yield with this pesticide compared to the target pesticide (TP)? (Circle number)
VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the expected crop quality with this pesticide compared to the target pesticide (TP)?
VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the standard method of application for this pesticide? Shank injection

Describe deficiencies or problems with this alternative: Lack of efficiency

Identify your second choice as an alternative pesticide: Cloropicrin

What is the expected crop yield with this pesticide compared to the target pesticide (TP)?
VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the expected crop quality with this pesticide compared to the target pesticide (TP)?
VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the standard method of application for this pesticide? Shank injection

What is the frequency of application? Once per crop

Describe deficiencies or problems with this alternative: Lack of efficacy

Section II. Non-Chemical Alternatives to the Replace the Loss of the Target Pesticide

Identify your first choice for a non-chemical alternative or alternative program for replacing this pesticide:

How would you describe this alternative? (Circle number of answer.)
3 BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)
2 PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy mgmt., etc.)
3 MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)
4 REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)
5 A COMBINATION OF SEVERAL OF THE ABOVE
What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or, identify the kind of costs that need to be estimated to determine cost:

Cost of resistant or susceptible cultivars means to be determined.

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be studied or researched to provide an effective alternative:

Identify your second choice for an alternative or alternative program for replacing this pesticide: follow

How would you describe this alternative? (Circle number of answer.)

1. BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)
2. PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy magt., etc.)
3. MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)
4. REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)
5. A COMBINATION OF SEVERAL OF THE ABOVE

What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or, identify the kind of costs that need to be estimated to determine cost:

Costs needs to be determined.

Is alternative proposed available now? Yes No (Circle answer)

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be overcome to provide an effective alternative: length of follow up and need to be determined.

Section III. Research, Development and Implementation Activities

Describe what research, development or implementation activities you have underway that might provide an alternative to the pest problem and indicate the time frame that you would predict the alternative might be available as a practical treatment or control program: (Use additional sheet if needed)

Working on resistance in Tripanels Valley
Seed companies working on new resistant varieties
Working on resistance in Organic Valley
Seed companies working on new resistant varieties
PESTICIDE ALTERNATIVES QUESTIONNAIRE

Name of Respondent: CASWELL, E. P. County/Campus: Yolo/Davis

Crop: ALFALFA ES Target Pesticide (TP): Dichloropropene

What is the standard method of application for this pesticide? FUMIGANT

What is the frequency of application? PREPLANT

Section I. Chemical Alternatives Not in the Catalogue to the Replace the Loss of the Above Pesticide

Identify your first choice as an alternative pesticide: MEBr, Hettyn Bromide

What is the expected crop yield with this pesticide compared to the target pesticide (TP)? (Circle number)

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this pesticide compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the standard method of application for this pesticide? FUMIGANT

What is the frequency of application? EXPENSIVE

Describe deficiencies or problems with this alternative: NOT REGISTERED

Identify your second choice as an alternative pesticide: JAPAN, Mettran

What is the expected crop yield with this pesticide compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the expected crop quality with this pesticide compared to the target pesticide (TP)?

VERY LOW = 1 2 3 4 5 6 7 8 9 10 = AS HIGH AS TP

What is the standard method of application for this pesticide? DRENCH or FUMIGANT

What is the frequency of application? ANNUAL or BANNUAL

Describe deficiencies or problems with this alternative: Not as Effective

Section II. Non-Chemical Alternatives to the Replace the Loss of the Target Pesticide

Identify your first choice for a non-chemical alternative or alternative program for replacing this pesticide:

Host plant resistance probably the best

How would you describe this alternative? (Circle number of answer.)

1. BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)
2. PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy mgmt., etc.)
3. MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)
4. REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)
5. A COMBINATION OF SEVERAL OF THE ABOVE
What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or, identify the kind of costs that need to be estimated to determine cost: Plant material more expensive

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be studied or researched to provide an effective alternative: Problems with ND of Nema species, and stability of resistance.

Identify your second choice for an alternative or alternative program for replacing this pesticide: Biological control

How would you describe this alternative? (Circle number of answer.)

1. BIOLOGICAL (such as biological control, a biopesticide, host/plant resistance, bacteria, etc.)
2. PHYSICAL (such as flaming, mechanical incorporation, cultivation, flooding, canopy magl., etc.)
3. MANAGEMENT (such as time or location of planting, cultivar, not to plant the crop, rotation, etc.)
4. REGULATORY (such as mandatory host-free periods, crop termination, seed indexing, etc.)
5. A COMBINATION OF SEVERAL OF THE ABOVE

What is the expected crop yield with this alternative compared to the target pesticide (TP)?

VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

What is the expected crop quality with this alternative compared to the target pesticide (TP)?

VERY LOW = 1  2  3  4  5  6  7  8  9  10 = AS HIGH AS TP

Estimate the cost of this alternative on a per acre basis, or, identify the kind of costs that need to be estimated to determine cost:

Is alternative proposed available now? Yes No (Circle answer)

Describe difficulties or constraints to the use of this alternative or alternative system that you feel need to be overcome to provide an effective alternative: Need to understand soil ecology, requires research.

Section III. Research, Development and Implementation Activities

Describe what research, development or implementation activities you have underway that might provide an alternative to the pest problem and indicate the time frame that you would predict the alternative might be available as a practical treatment or control program: (Use additional sheet if needed)

None available