### Survey of Organic Growers Toolbox: Information Gaps and Research Needs

Tom Pitts, Cascade Ag Services; Dain Craver, DAC Consulting David Granatstein, WSU-TFREC Nick Stephens, Columbia IPM

### Introduction

Organic Research & The Funding Trail

Total fresh packed boxes plus processors multiplied by the assessment rate equals total dollars generated by organic fruit for research.



### ?? QUESTION ??

How many research dollars are generated by the assessments on organic fruit?



Organic Apples:
2010 estimate = 7.61 million 40 lb. boxes
Assessment of \$1 per ton
\$152,200 generated by organic apples
this is 7.4% of total fresh crop

Yield: 20.6 bins/ac



Organic Pears:
2010 estimate = 778,920 44 lb. boxes
Assessment of \$.031 per box
\$24,147 generated by organic pears (roughly 4-4.5% of the total pear tonnage)

Yield: 16.8 tons/ac



Organic Cherries:
2010 crop = 2234 tons
assessment \$4 per ton
\$8,936 generated by organic cherries

Yield: 1.04 tons/ac



### **Total Dollar**\$

\$152,200 organic apples
+ \$ 24,147 organic pears
+ \$ 8,936 organic cherries
= \$185,283 funds from organic fruit for research

### Total tree fruit research assessments ~\$3 million



Why does this matter? Are you satisfied with how this money is being spent? Does WTFRC research benefit organic growers? Should there be organic-specific research? Do we need an organic research committee? Is sufficient money generated by assessments on organic fruit to fund strictly organic research?

### Organic growers depend on "crossover" projects

- Funded research is composed of very few purely organic projects
- Many conventional projects crossover and benefit organic growers
  - insecticide evaluation trials: cherry fruit fly, codling moth mating disruption
  - □ biological control of pests
  - □ crop load management
  - rootstock and variety development



### Strictly Speaking...

- Organic-only projects must have specific targets
- Must be highest priority for organic growers
- Not addressed by conventional/crossover projects
- Develop priority list
- Certain problems in the organic industry warrant organic specific projects.

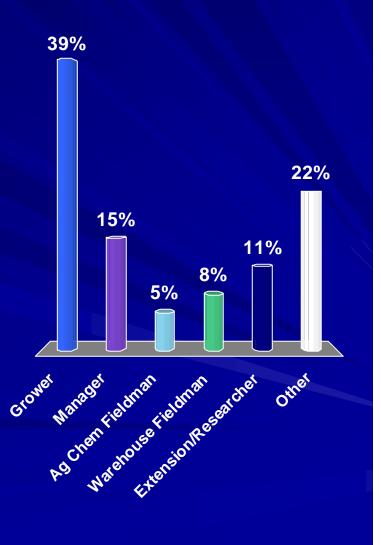
### What are YOUR Priorities?





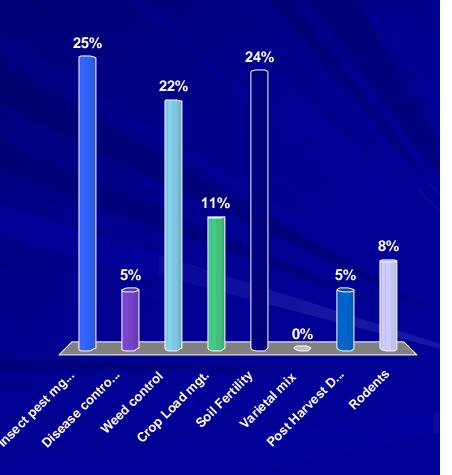
#### Are you a:

- 1. Grower
- 2. Manager
- 3. Ag Chem Fieldman
- 4. Warehouse Fieldman
- 5. Extension/Researcher
- 6. Other



## What do you feel is the most limiting factor in organic production?

- 1. Insect pest mgt.
- 2. Disease control
- 3. Weed control
- 4. Crop Load mgt.
- 5. Soil Fertility
- 6. Varietal mix
- 7. Post Harvest Disease Control
- 8. Rodents



### **Fertility** How frequently do you take soil samples?

57%

Once every 2 years

Once a year

14% 11%

Once every 4.5 years

Once every 3 years

12%

Never

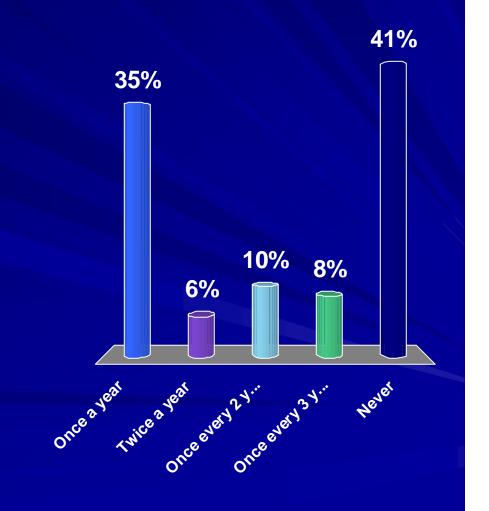
7%

1. Once a year 2. Once every 2 years 3. Once every 3 years 4. Once every 4 -5 years

5. Never

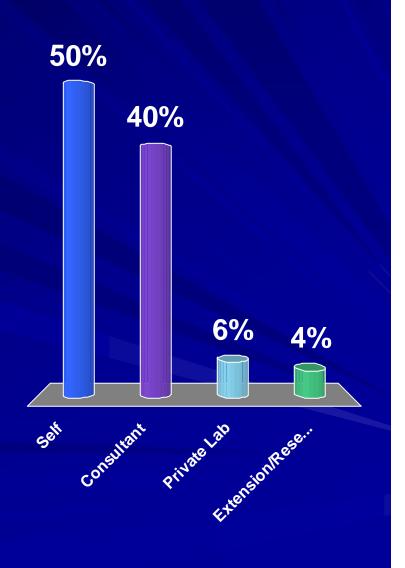
### How frequently do you take leaf samples?

- 1. Once a year
- 2. Twice a year
- 3. Once every 2 years
- 4. Once every 3 years
- 5. Never



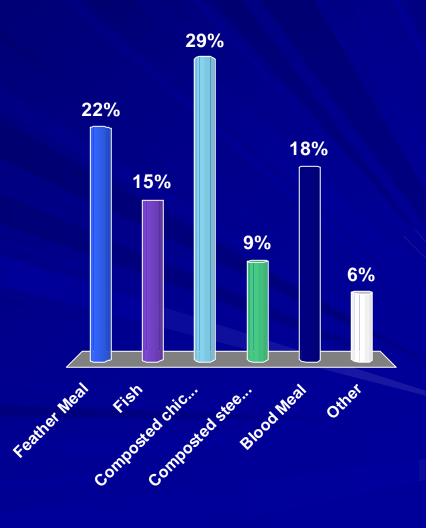
## Who determines your annual N rate and form?

- 1. Self
- 2. Consultant
- 3. Private Lab
- 4. Extension/Researcher



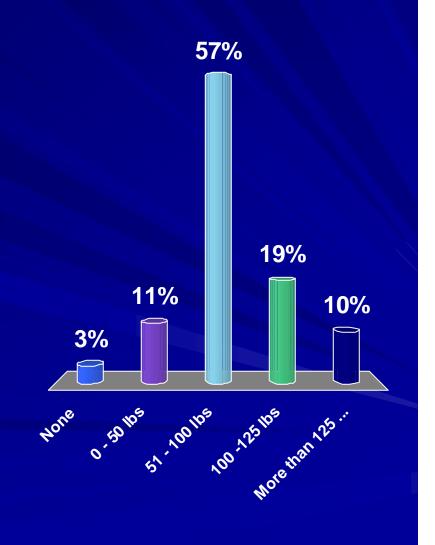
## What are your main forms of N for soil application? (Choose up to 3, in order)

- 1. Feather Meal
- 2. Fish
- 3. Composted chicken / DPW
- 4. Composted steer
- 5. Blood Meal
- 6. Other



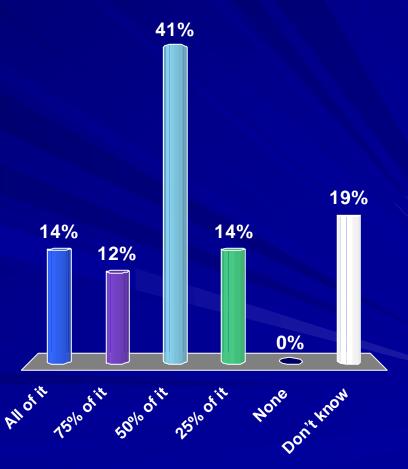
#### How much total Nitrogen in your amendments do you apply annually to the soil?

- None
   0 50 lbs
- 3. 51 100 lbs
- 4. 100 -125 lbs
- 5. More than 125 lbs



1000 lbs of feathermeal (12% N) contains 120 lb N. How much of this do you count towards the current year crop?

- 1. All of it
- 2. 75% of it
- 3. 50% of it
- 4. 25% of it
- 5. None
- 6. Don't know



#### Do you use the Organic Fertilizer Calculator (OFC) to help you determine your Soil N needs?

54%

26%

20

20%

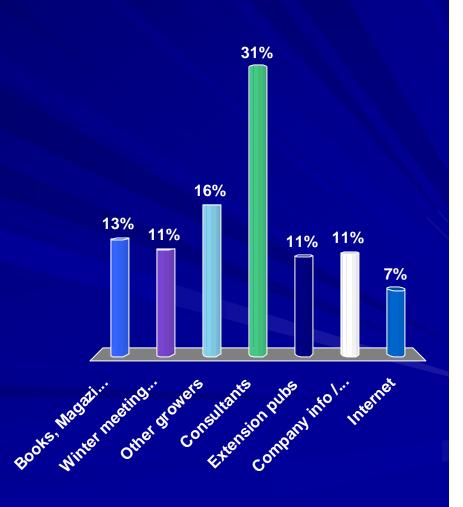
105

Yes
 No
 I don't know about the OFC

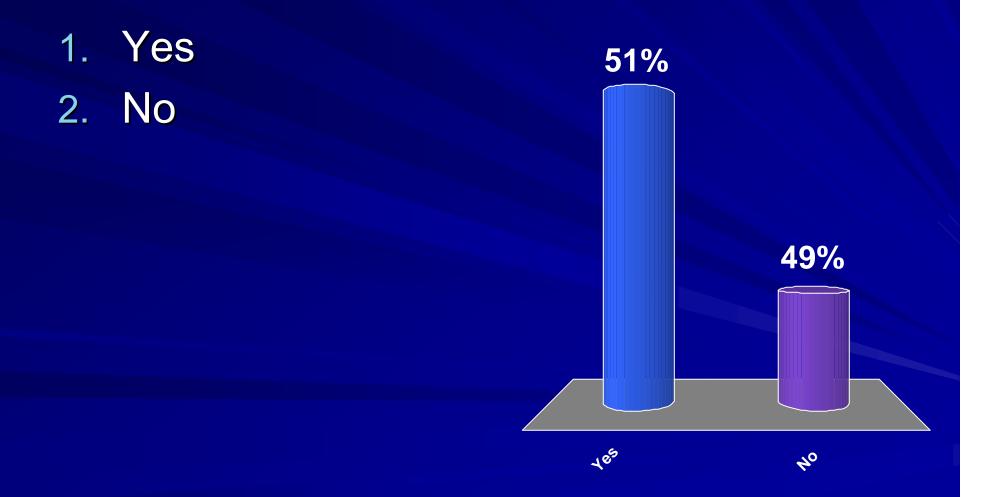


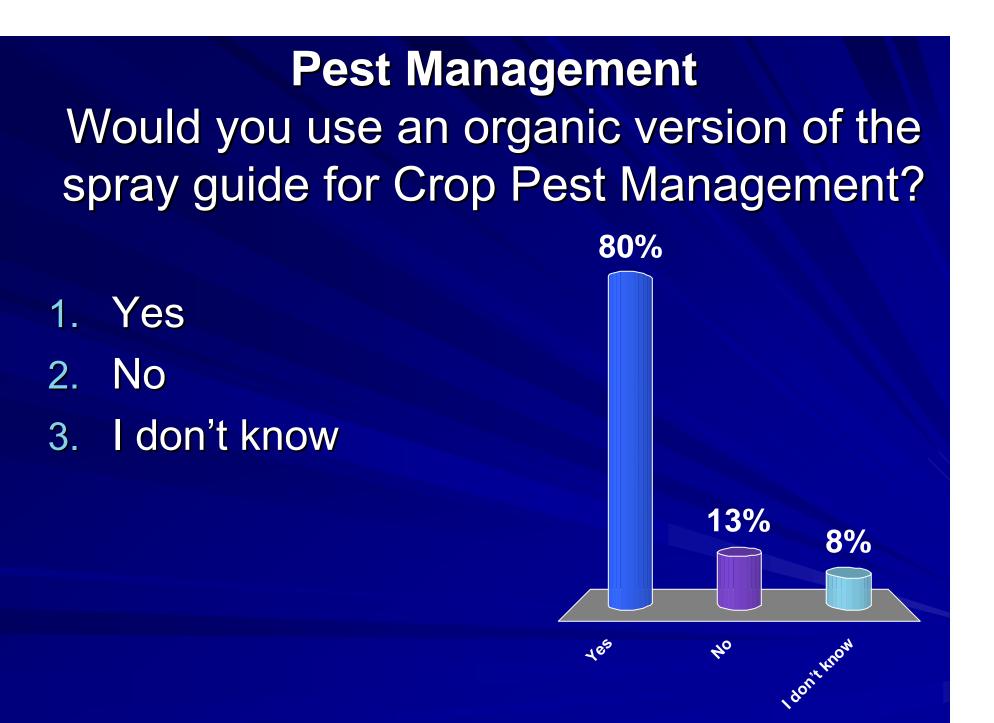
What are your top 3 (in order) sources of information for developing fertility program?

- Books, Magazines
   Winter meetings
- 3. Other growers
- 4. Consultants
- 5. Extension pubs
- 6. Company info / reps
- 7. Internet



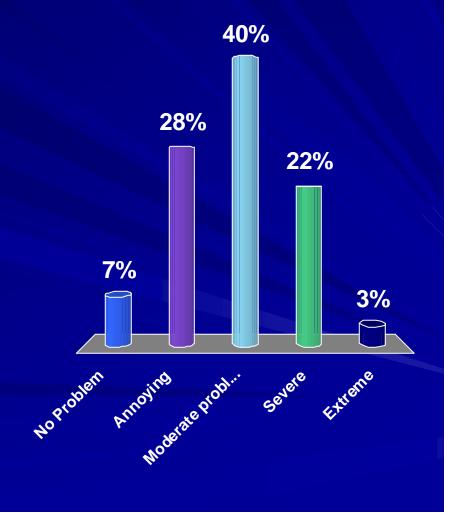
## Do you seed legume cover crops to supply N?





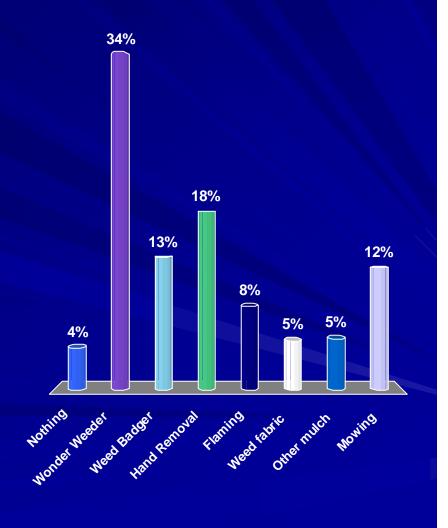
## How would you rate the severity of your vole and gopher problem in your orchard?

No Problem
 Annoying
 Moderate problem
 Severe
 Extreme



## What is your primary weed control in the tree row? (choose top 2, in order)

- 1. Nothing
- 2. Wonder Weeder
- 3. Weed Badger
- 4. Hand Removal
- 5. Flaming
- 6. Weed fabric
- 7. Other mulch
- 8. Mowing



 "Enhancing Western Biological Control" (Vince Jones) is a large project that will likely benefit your organic orchard. Have you heard of it?

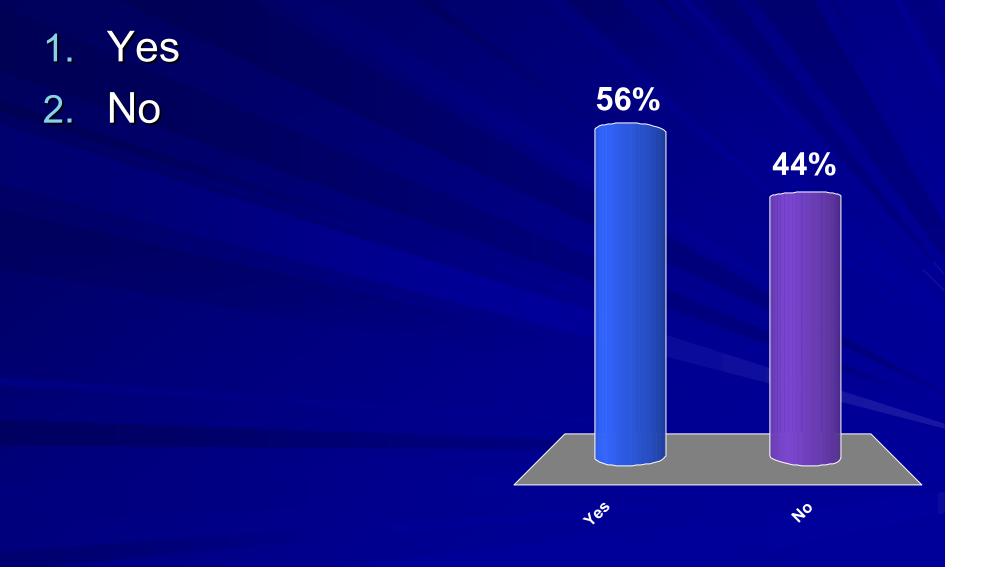
32%

18

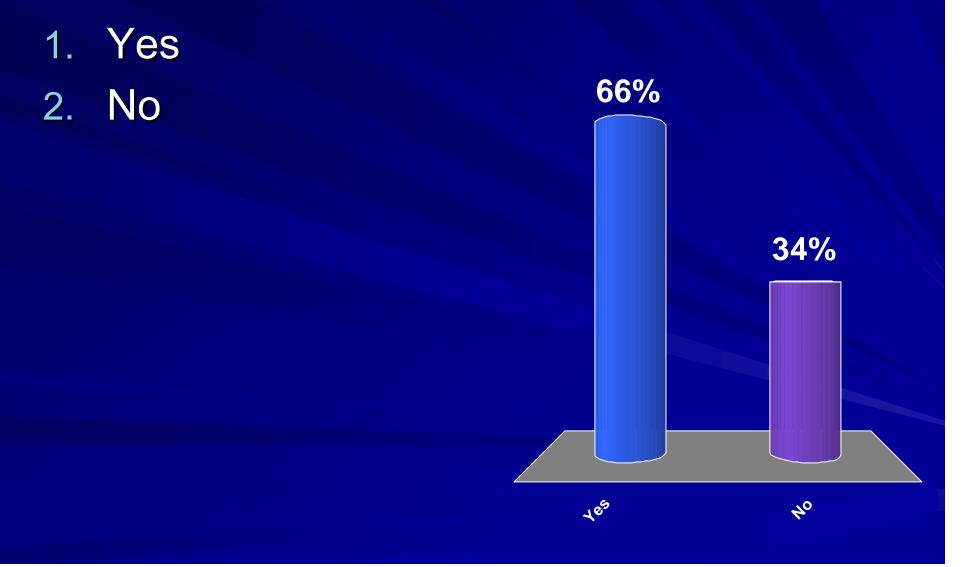
20

- 1. Yes
- 2. No

#### Are you able to successfully manage Pear Rust mites?

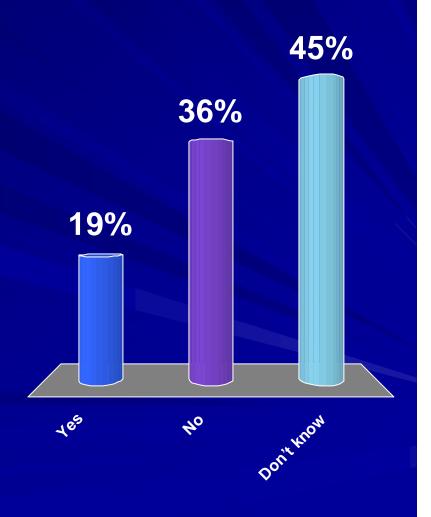


#### Are you able to successfully manage Pear Psylla?



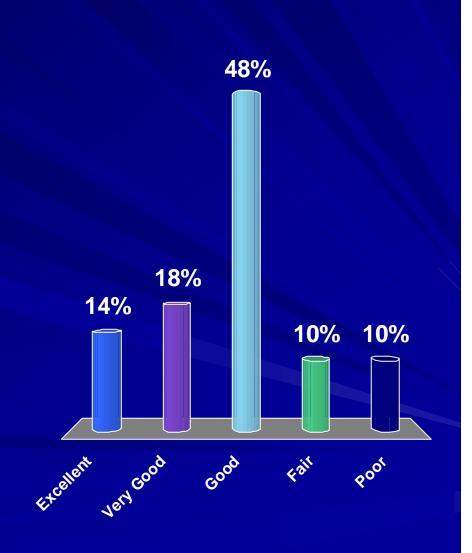
Do you think you can control Spotted Wing Drosophila in cherries using organic methods?

- 1. Yes
- 2. No
- 3. Don't know



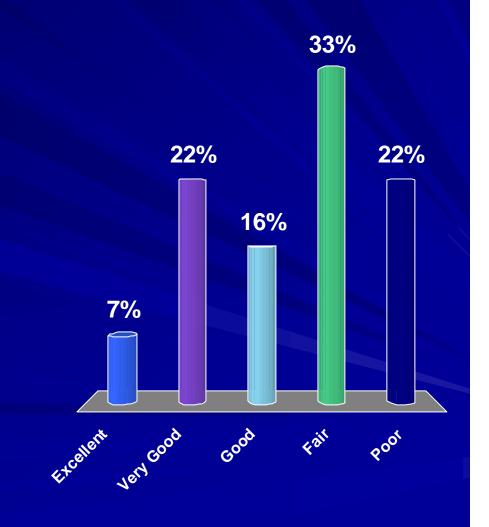
How would you rate your control of Cherry Powdery Mildew ?

- Excellent
   Very Good
   Good
   Fair
- 5. Poor



#### How would you rate your control of Black Cherry Aphid?

Excellent
 Very Good
 Good
 Fair
 Poor



# Rank these organic-specific research needs for priority of funding (top 3, in order):

- 1. Nitrogen fertility
- 2. Voles / gopher control
- 3. Spotted wing drosophila
- 4. Post harvest diseases
- 5. Weeds
- 6. Fire blight

