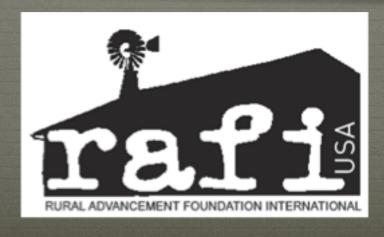
#### Managing Specialty Crop Risk in North Carolina: A Working Paper

James Robinson, Research & Policy Associate, RAFI Scott Marlow, Executive Director, RAFI Michelle Madeley, MPH-MCRP Candidate, UNC Chapel Hill

Rural Advancement Foundation International

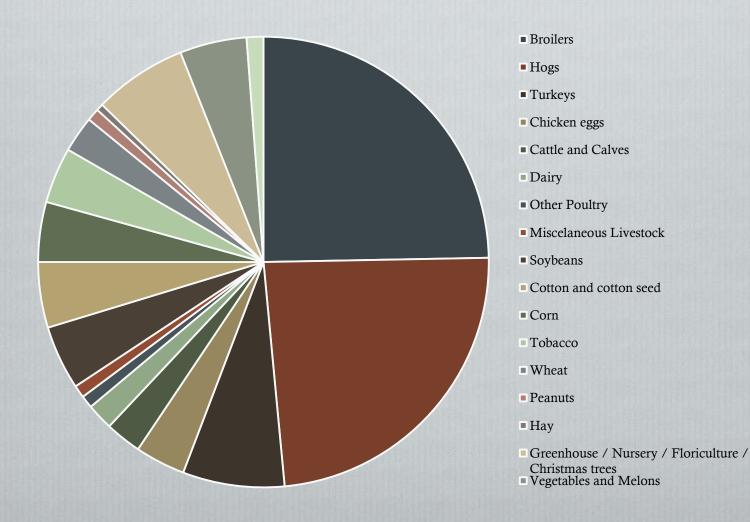
October 9, 2013

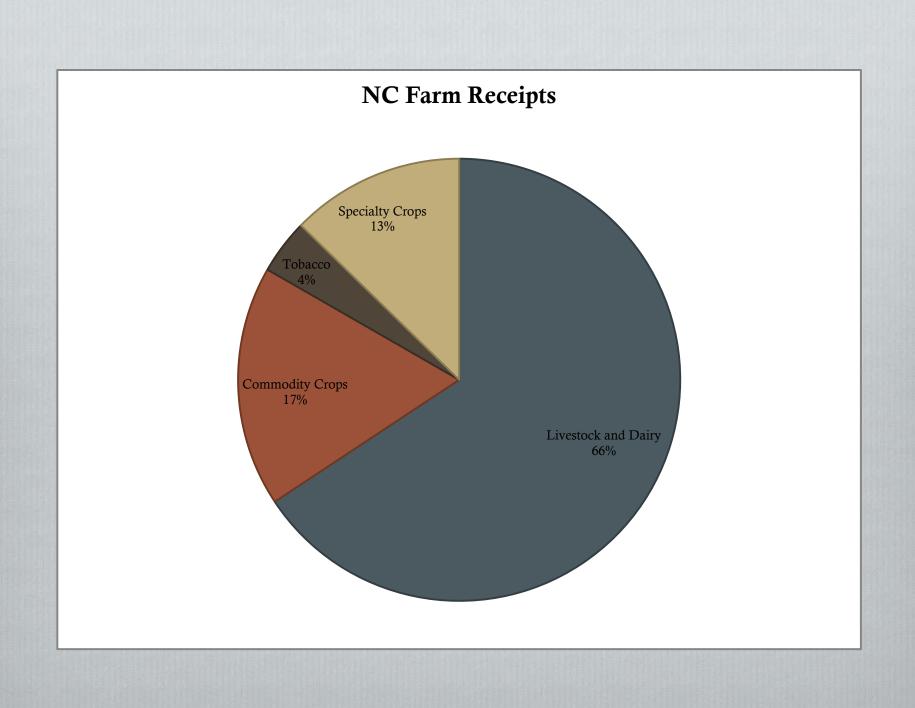


## Introduction



# NC Farm Receipts by Commodity





#### Research Overview

\* Purpose of Research: Prioritize specialty crops for the development of crop insurance policies based on crop vulnerability to disaster losses and specialty crop producer needs, as well as identify needed reforms to existing policies.

#### **\*** Focus of Report:

- Identify specialty crops that are most vulnerable due to the lack of crop insurance availability,
- Identify crop insurance and risk management programs for specialty crops that can serve as models to build on,
- Determine what farmers want in a crop insurance policy so that future crop insurance policies will provide coverage based on farmers' needs, and
- Use farmer input and data analysis to suggest changes to existing specialty crop insurance policies as well as propose new policies.

### Research Components

- Analysis of RMA data on availability and use of crop insurance by specialty crop growers.
- Mapping of North Carolina specialty crop risk through analysis of Farm Service Agency Data on disaster declarations by county and North Carolina Department of Agriculture data on specialty crop income by county.
- Collection of data from specialty crop growers related to their knowledge of, use of, and recommendations for crop insurance reform.

## Methods

#### Grower Data Collection Methods

- Survey of Specialty Crop Growers from North Carolina
  - 157 growers responding
  - Wide variety of specialty crops grown by respondents
  - Small-scale farmers overrepresented in survey

#### Focus Groups

- \* 7 focus groups with 3 to 8 growers participating per group
- Sit Visits
  - \* 11 sit visits with growers ranging from 1 acre to 450 acres

## Analysis of Crop Insurance Availability and Need

# Crop Insurance Needs Analysis

- Value of uninsured crops
- Enrollment rate for insured crops
- \* Yield per acre variance of each crop
- Price per unit

## Uninsured Specialty Crops in North Carolina

2012 Uninsured Crops	2011 Value of Production	Yield Per Acre Variance Between 2003 and 2011	2011 Price Per Unit/Unit
Floriculture	\$250,495,000	No Data	N/A
Sweet Potatoes	\$208,675,000	.12	17.7/Cwt
Christmas Trees	\$75,000,000	No Data	N/A
Tomatoes	\$52,800,000	.18	37.5/Cwt
Bell Peppers	\$30,134,000	.49	38/Cwt
Watermelons	\$29,070,000	.25	15/Cwt
Cucumbers	\$27,897,000	.11	23.3/Cwt
Strawberries	\$27,300,000	.09	140/Cwt
Squash	\$25,740,000	.13	60/Cwt
Sweet Corn	\$13,132,000	.12	28/Cwt
Snap Beans	\$7,028,000	.24	44.2/Cwt
Total	\$747,271,000.00	N/A	N/A

# Insured Specialty Crops In North Carolina

2012 Insured Crops	2011 Value of Production	2012 Percentage Insured Acres	Yield Per Acre Variance Between 2003 and 2011	2011 Price Per Unit
Blueberries	\$66,320,000	100%	.18	1.83/Lb
Potatoes	\$24,478,000	84%	.09	12.3/Cwt
Apples	\$22,532,000	71%	.24	0.192/Lb
Cabbage	\$12,827,000	21%	.13	14.3/Cwt
Peaches	\$5,150,000	48%	.40	1000/Ton
Grapes	\$5,101,000	13%	.11	1030/Ton
Total	\$136,408,000.00	N/A	N/A	N/A

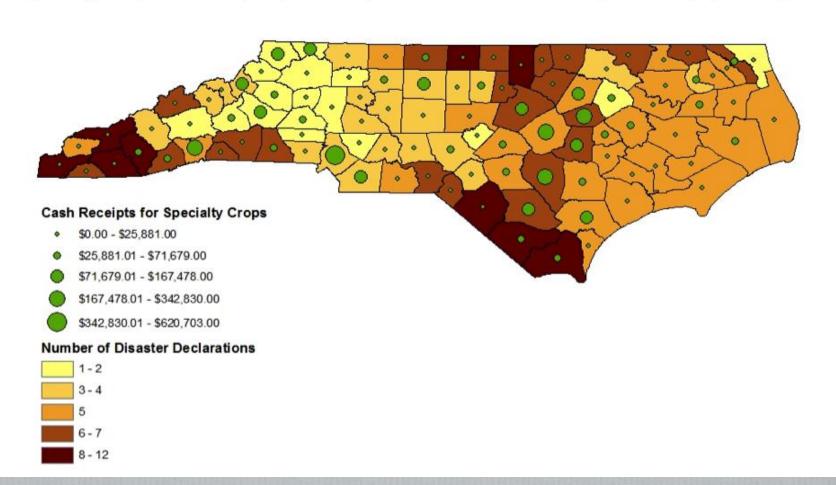
# Mapping Specialty Crop Risk in North Carolina

## Mapping Risk Data Methods

- USDA's Farm Service Agency total disasters declared, for each county, from 2008 to 2012
- Specialty crop production in each North Carolina county from 2008-2011 from the North Carolina Department of Agriculture (NCDA) AgStat Report.

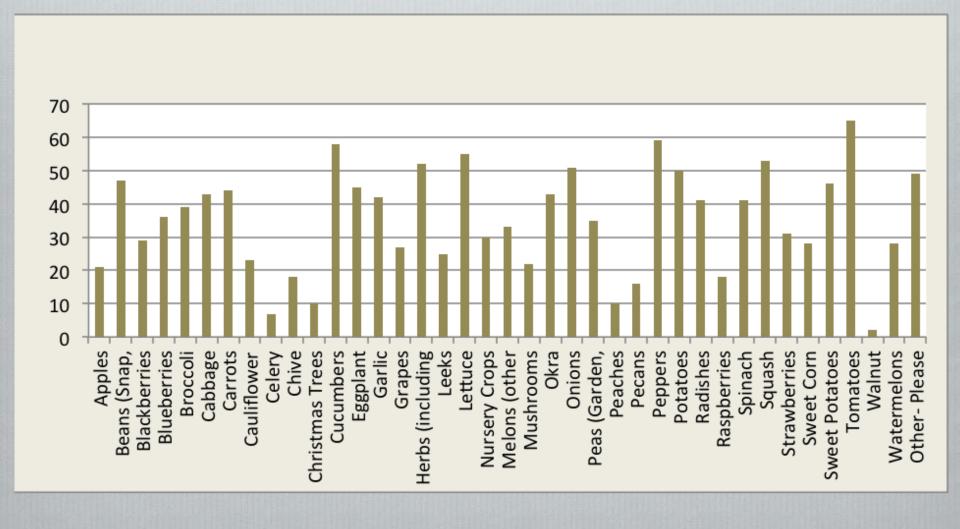
#### Mapping Specialty Crop Risk

Specialty Crop Cash Receipts (2008-2011) and Disaster Declarations (2008-2012) by County

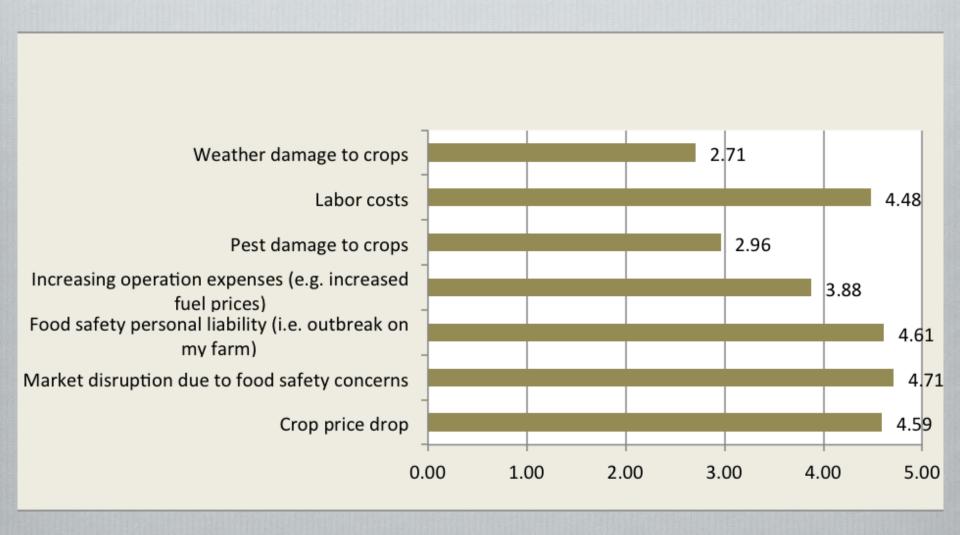


# Analysis of Grower Survey Data

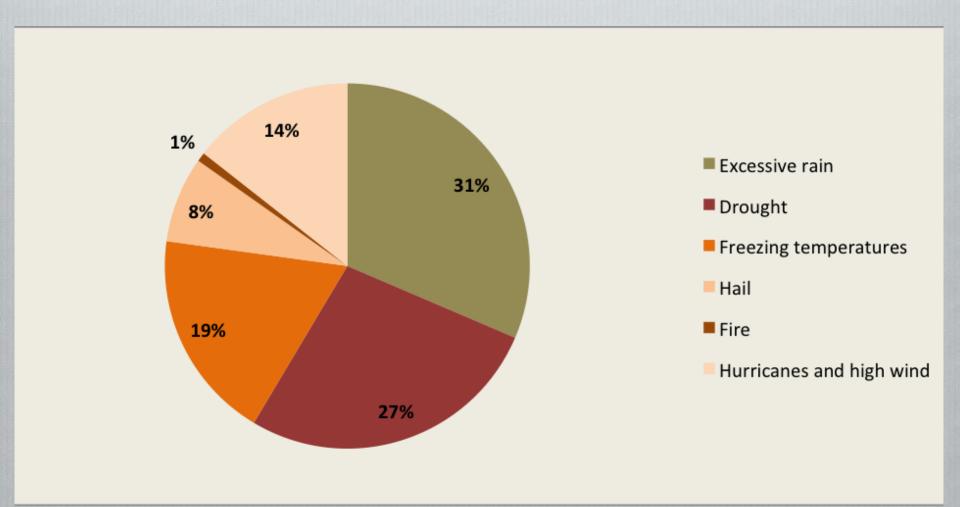
## Specialty Crops Grown



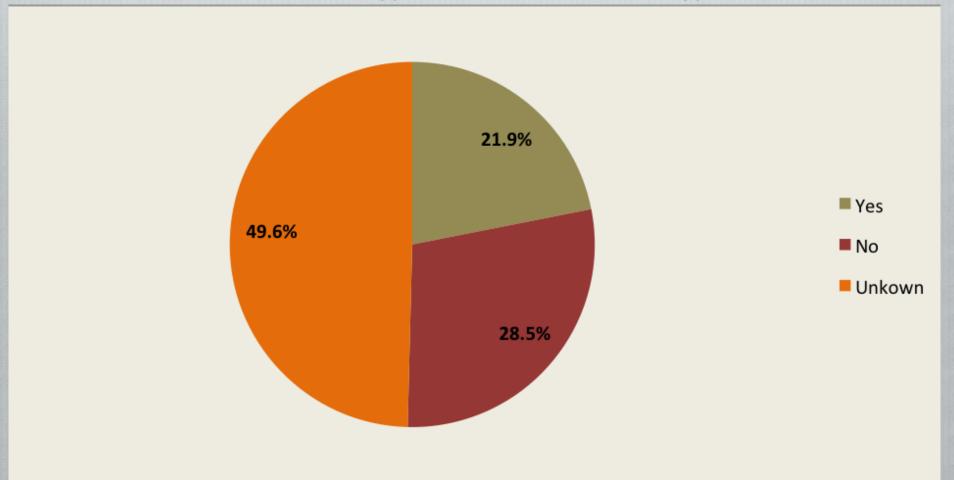
#### Greatest Financial Risk Sources



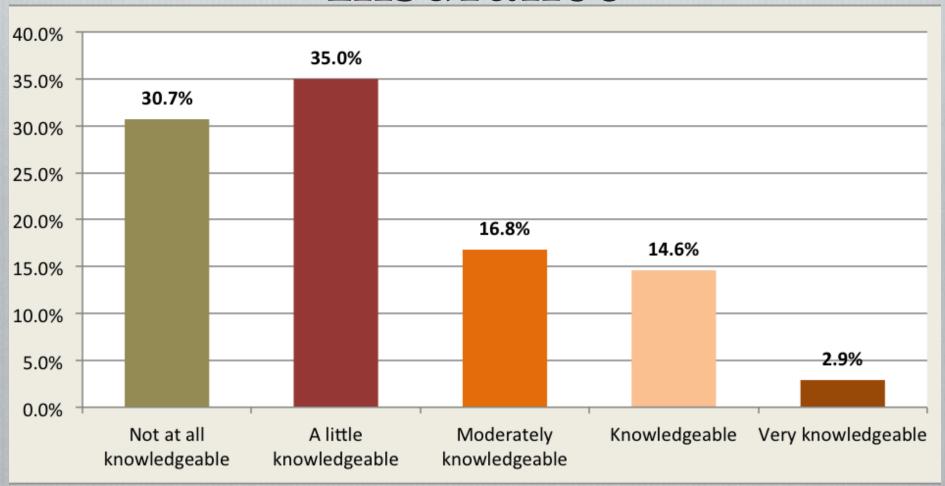
## Weather Events Causing the Greatest Financial Loss



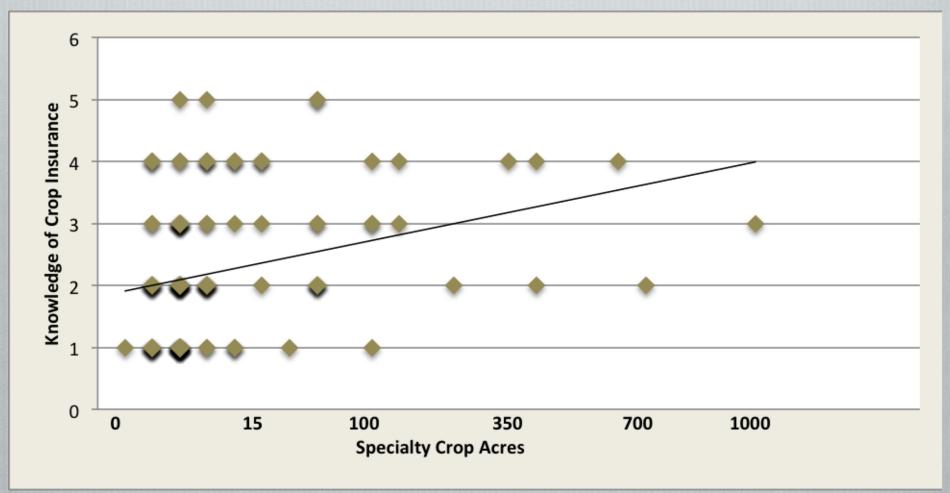
## Is Crop Insurance Available for Your Specialty Crop?



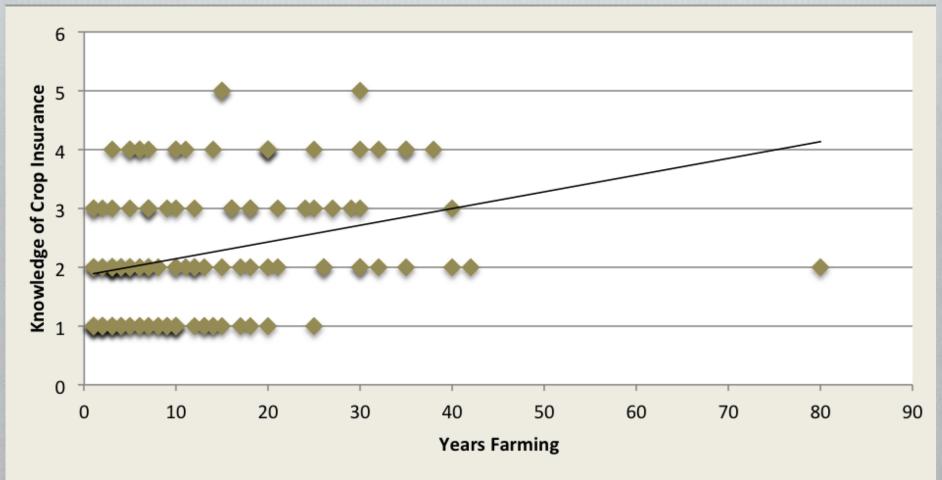
# Knowledge of Crop Insurance



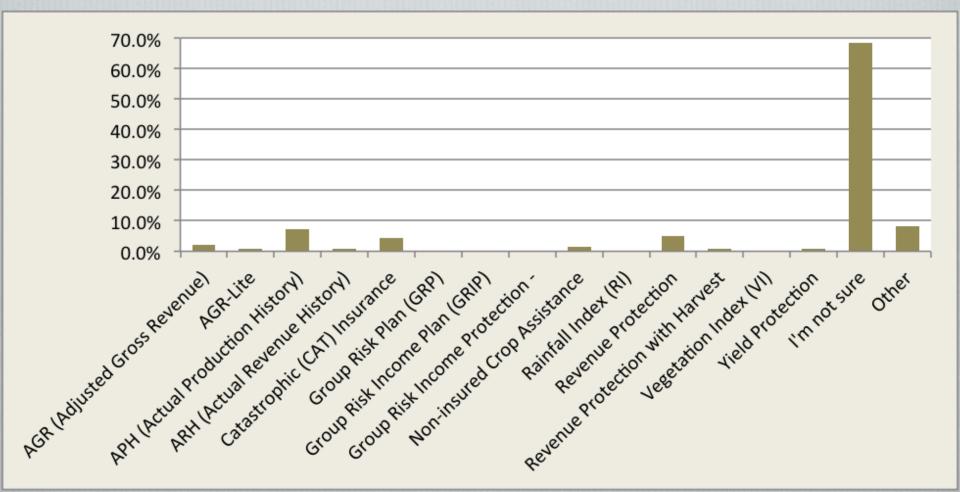
## Knowledge of Crop Insurance & Specialty Crop Acres in Cultivation



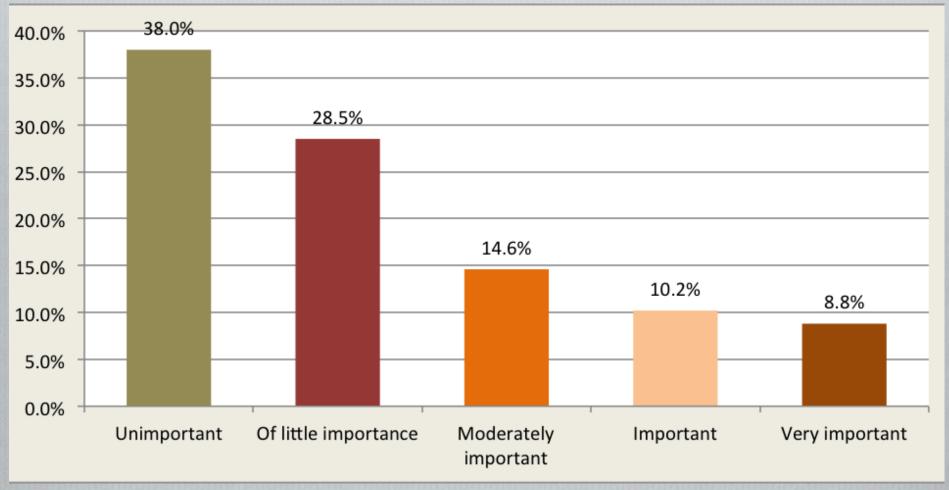
# Knowledge of Crop Insurance & Years Farming



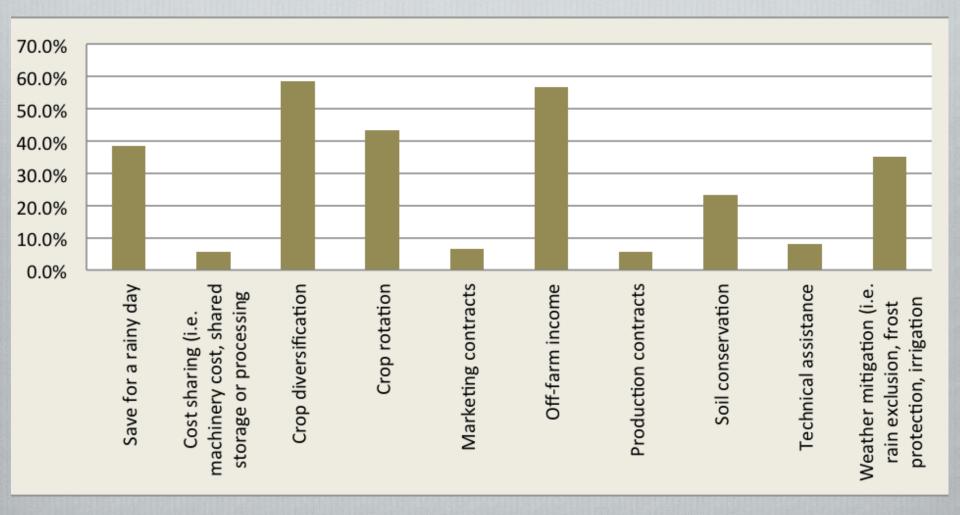
## Type of Crop Insurance Best for Your Specialty Crop Operation



### Importance of Crop Insurance When Determining Crops Grown



#### Production-based Risk Management Practices Used Other Than Crop Insurance



## Conclusions

- 1. Expand grower outreach and education about crop insurance.
- 2. Develop additional specialty crop singlecrop policies to cover currently uninsurable crops.
- 3. Reform whole-farm revenue insurance to better cover beginning farmers and expanded crop production.
- 4. Incentivize production-based risk management in crop insurance policies through premium reductions for best practices.

Contact Scott Marlow or James Robinson with any questions.

James Robinson: james@rafiusa.org 919-542-1396 ext. 209

Scott Marlow: smarlow@rafiusa.org 919-542-1396 ext. 210

