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

Rural Advancement Foundation International

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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

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

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

Mapping Specialty Crop Risk

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

Cash Receipts for Specialty Crops
- $0.00 - $25,881.00
- $25,881.01 - $71,679.00
- $71,679.01 - $167,478.00
- $167,478.01 - $342,830.00
- $342,830.01 - $620,703.00

Number of Disaster Declarations
- 1 - 2
- 3 - 4
- 5
- 6 - 7
- 8 - 12
Analysis of Grower Survey Data
Greatest Financial Risk Sources

- Weather damage to crops: 2.71
- Labor costs: 4.48
- Pest damage to crops: 2.96
- Increasing operation expenses (e.g. increased fuel prices): 3.88
- Food safety personal liability (i.e. outbreak on my farm): 4.61
- Market disruption due to food safety concerns: 4.71
- Crop price drop: 4.59
Weather Events Causing the Greatest Financial Loss

- Excessive rain: 31%
- Drought: 27%
- Freezing temperatures: 19%
- Hail: 14%
- Hurricanes and high wind: 8%
- Other: 1%
Is Crop Insurance Available for Your Specialty Crop?

- 49.6% Yes
- 28.5% No
- 21.9% Unknown
Knowledge of Crop Insurance

- Not at all knowledgeable: 30.7%
- A little knowledgeable: 35.0%
- Moderately knowledgeable: 16.8%
- Knowledgeable: 14.6%
- Very knowledgeable: 2.9%
Knowledge of Crop Insurance & Specialty Crop Acres in Cultivation

![Graph showing the relationship between Knowledge of Crop Insurance and Specialty Crop Acres. The graph indicates a positive correlation, with data points scattered along a trend line. The x-axis represents Specialty Crop Acres, ranging from 0 to 1000, and the y-axis represents Knowledge of Crop Insurance, ranging from 0 to 6.]
Knowledge of Crop Insurance & Years Farming
Type of Crop Insurance Best for Your Specialty Crop Operation

[Bar chart showing the percentages of different crop insurance types]
Importance of Crop Insurance When Determining Crops Grown

- Unimportant: 38.0%
- Of little importance: 28.5%
- Moderately important: 14.6%
- Important: 10.2%
- Very important: 8.8%
Production-based Risk Management Practices Used Other Than Crop Insurance

- Save for a rainy day
- Cost sharing (i.e., machinery cost, shared storage or processing)
- Crop diversification
- Crop rotation
- Marketing contracts
- Off-farm income
- Production contracts
- Soil conservation
- Technical assistance
- Weather mitigation (i.e., rain exclusion, frost protection, irrigation)
Conclusions
1. Expand grower outreach and education about crop insurance.

2. Develop additional specialty crop single-crop 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