

# MANAGING RISK IN GRAPE PRODUCTION WITH CROP INSURANCE

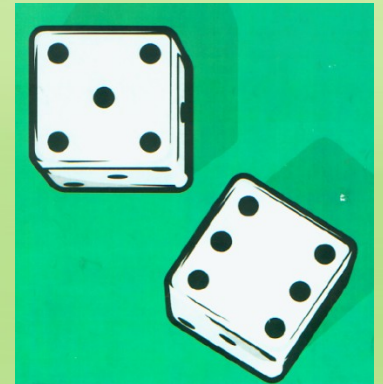
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# Types of Agricultural Risks

- Production
- Marketing
- Financial
- Legal
- Human resource
- Environmental



# **Risk Management Strategies:**

- 1) Retain**
- 2) Shift**
- 3) Reduce**
- 4) Self-insure**
- 5) Avoid**

# Yield Risk: Sources and Solutions

## Sources:

- Adverse weather
- Pest damage

## Solutions:

- Pest management practices
- Site selection
- Variety/hybrid selection
- Rotation/diversification
- Irrigation
- Crop insurance

# **Why crop insurance?**

- **Manage yield variability**
- **Meet cash flow requirements**
- **Self insurance is not enough**
- **Premiums are highly subsidized**

# Crops covered by MPCl in Pennsylvania:

- apples (45)
  - barley (54)
  - processing beans (15)
  - cabbage (1)
  - corn (grain and silage) (66)
  - forage production (66)
  - forage seedling (66)
  - grain sorghum (57)
  - grapes (1)
  - green peas (10)
  - grain sorghum
  - nursery (67)
  - oats (66)
  - pasture, rangeland, forage and apiculture (66)
  - peaches (30)
  - pears (1)
  - potatoes (13)
  - soybeans (51)
  - fresh-mkt. sweet corn (66)
  - processing sweet corn (12)
  - tobacco (3)
  - fresh-market tomatoes (4)
  - processing tomatoes (16)
  - wheat (57)
- Also:
- Whole farm coverage (AGR/AGR-Lite)
  - LGM Dairy & Swine
  - LRP Lamb

# Where is grape insurance available?

- Grapes are insurable in Erie county, but may be insurable in other counties by written agreement if specific criteria (including records for at least last 4 years of production history and minimum yield levels) are met.
- *Vinifera* grapes are only insurable by individual written agreement.
- A vineyard inspection is required for all new policyholders to evaluate risk.

Contact a crop insurance agent for more details on use of written agreements.

# What kinds of grapes are insurable?

Grape varieties grown for wine or juice are insurable if the vines have:

- 1) reached the fourth growing season after being set out for all Native varieties and the fifth growing season after being set out for all Hybrid varieties
- 2) produced an average of 2 tons per acre in at least one of the three most recent crop years.

Note: Table grapes are not insurable.



# Causes of Loss Covered

- Adverse weather conditions (natural perils such as hail, frost, freeze, wind, drought, excess moisture, etc.)
- Fire
- Insects and plant disease (damage due to insufficient or improper application of control measures is not covered)
- Wildlife

**Note:** The policy does **not** cover inability to market the crop unless caused by damage from an insurable peril.



# Insurable Grape Varieties and 2013 Prices

## Insurable Native Varieties

### Price/Ton

Niagara	\$260
Concord	\$260
Catawba	\$320
Elvira	\$275
Dutchess	\$410
Isabella	\$480
Diamond	\$445
Delaware	\$355
Ives	\$410
Golden Muscat	\$375
Labrusca	

## Insurable Hybrid Varieties

### Price/Ton

Chambourcin	\$820
Traminette	\$940
Baco Noir	\$605
Geneva Red 7	\$565
Dechaunac	\$500
Rosette	\$395
Seyval Blanc	\$615
Vignoles	\$735
Aurore	\$380
Cayuga White	\$590
Vidal Blanc	\$640

## Insurable Hybrid Varieties

### Price/Ton

Chancellor	\$675
Valvin Muscat	\$705
Castel	\$565
Colobel	\$650
Rougeon	\$525
Villard Blanc	\$755
Melody	\$545
Noiret	\$565
Chelois	\$755
St Vincent	\$470
Marechal Foch	\$640

# Crop Insurance Program Basics:

## 1) Determine actual production history (APH) yield

minimum of 4 successive years of records

maximum of 10 successive years of records (5 years for fruit crops)

## 2) Select desired coverage level

- 50, 55, 60, 65, 70, 75, 80, and 85% of APH yield

*50% for catastrophic (CAT) coverage*

## 3) Choose a price election

- Up to 100% of indemnity price

*55% for catastrophic (CAT) coverage*

# *Crop insurance calculations:*

**Yield guarantee = APH • coverage level**

**Premium/acre = yield guarantee • county premium rate • price election**

**Because of the Federal subsidy for crop insurance, the premium you pay is between 33% and 62% of the actual cost**

**Notes:**

- CAT program has a **\$300/crop/county** administrative fee.
- MPCJ has a **\$30/crop** administrative fee



# Native Grape Example: Premiums and Protection

**Lambrusca (6 tons/A), Erie County, PA (100% price election)**

	Coverage Level							
	<u>50%</u>	<u>55%</u>	<u>60%</u>	<u>65%</u>	<u>70%</u>	<u>75%</u>	<u>80%</u>	<u>85%</u>
<b>Total cost</b>	<b>\$34</b>	<b>\$42</b>	<b>\$54</b>	<b>\$69</b>	<b>\$93</b>	<b>\$125</b>	<b>\$166</b>	<b>\$219</b>
<b>Your cost</b>	<b>\$11</b>	<b>\$15</b>	<b>\$19</b>	<b>\$28</b>	<b>\$38</b>	<b>\$56</b>	<b>\$86</b>	<b>\$136</b>
<b>Protection/ A</b>	<b>\$765</b>	<b>\$842</b>	<b>\$918</b>	<b>\$995</b>	<b>\$1,071</b>	<b>\$1,148</b>	<b>\$1,224</b>	<b>\$1,301</b>
<b>Cost/ \$1,000 of protection</b>	<b>\$14.38</b>	<b>\$17.81</b>	<b>\$20.70</b>	<b>\$28.14</b>	<b>\$35.48</b>	<b>\$48.78</b>	<b>\$70.26</b>	<b>\$104.53</b>
<b>Cash flow guaranteed</b>	<b>\$754</b>	<b>\$827</b>	<b>\$899</b>	<b>\$967</b>	<b>\$1,033</b>	<b>\$1,092</b>	<b>\$1,138</b>	<b>\$1,165</b>

# ***Vinifera Grape Example: Premiums and Protection***

***Traminette (6 tons/A), Erie County, PA (100% price election)***

	Coverage Level							
	<b>50%</b>	<b>55%</b>	<b>60%</b>	<b>65%</b>	<b>70%</b>	<b>75%</b>	<b>80%</b>	<b>85%</b>
<b>Total cost</b>	<b>\$157</b>	<b>\$190</b>	<b>\$235</b>	<b>\$297</b>	<b>\$397</b>	<b>\$530</b>	<b>\$700</b>	<b>\$916</b>
<b>Your cost</b>	<b>\$52</b>	<b>\$68</b>	<b>\$85</b>	<b>\$122</b>	<b>\$163</b>	<b>\$238</b>	<b>\$364</b>	<b>\$568</b>
<b>Protection/ A</b>	<b>\$2,820</b>	<b>\$3,102</b>	<b>\$3,384</b>	<b>\$3,666</b>	<b>\$3,948</b>	<b>\$4,230</b>	<b>\$4,512</b>	<b>\$4,794</b>
<b>Cost/ \$1,000 of protection</b>	<b>\$18.44</b>	<b>\$21.92</b>	<b>\$25.12</b>	<b>\$33.28</b>	<b>\$41.29</b>	<b>\$56.26</b>	<b>\$80.67</b>	<b>\$118.48</b>
<b>Cash flow guaranteed</b>	<b>\$2,768</b>	<b>\$3,034</b>	<b>\$3,299</b>	<b>\$3,544</b>	<b>\$3,785</b>	<b>\$3,992</b>	<b>\$4,148</b>	<b>\$4,226</b>

# ***Crop insurance calculations:***

***If actual yield is less than the yield guarantee:***

**Indemnity payment = (yield guarantee - actual production) • price election**

***If actual yield is equal to or greater than the yield guarantee:***

**Indemnity payment = 0**

# Loss example, Niagara

## Grapes:

Approved yield per acre: 6 tons

Coverage level selected: 75%

Acre yield guarantee:  $6 \text{ tons} \times 75\% = 4.5 \text{ tons}$

Price election: \$260/ton

Protection:  $4.5 \text{ tons} \times \$260 =$   
\$1,170/A

Actual yield: 2.0 tons/A

Indemnity per acre:  $2.5 \text{ tons} \times \$260 =$   
\$650/A

Estimated premium: \$59/A



# Whole Farm Revenue Protection

## Adjusted Gross Revenue-Lite (AGR-Lite)

Provides protection against loss of revenue from natural and named causes of loss and market fluctuations

Approved for Producers in **34 States**

*ENROLLMENT DEADLINE:*

3/15 new applications

1/31 for renewals/coverage changes

# AGR-Lite

- Insures the revenue of the entire farm rather than individual crops by guaranteeing a percentage of average gross farm revenue.
- All farm raised crops, animals, and animal products are eligible for coverage.
  - Note: Covers commodities produced only; not value added activities.
- Uses information from a producer's Schedule F tax forms to calculate the policy revenue guarantee.

# AGR-Lite

- **STAND-ALONE POLICY:** covering the whole farming operation  
or
- **UMBRELLA TYPE POLICY:** selected crops can also be protected by Multiple Peril crop policies (except AGR) and Group Risk policies.

*Note: Loss payments from other insurance count towards AGR-Lite revenue guarantee.*

# Recent AGR-Lite Improvements

- Fits larger farms (up to \$2 million gross income)
- Broader list of insured causes of loss
- More producers are eligible for higher amounts of protection
- March 15 enrollment deadline for new applications (renewals deadline remains January 31)
- Usually costs much less than other crop insurance plans

# Adjusted Gross Revenue (AGR)

- Insures the revenue of the entire farm rather than an individual crop by guaranteeing a percentage of average gross farm revenue, including up to 35% livestock revenue.
- Uses information from a producer's Schedule F tax forms to calculate the policy revenue guarantee. Maximum liability is \$6.5 million.
- Available in 14 counties: Berks, Carbon, Crawford, Columbia, Erie, Fayette, Lackawanna, Lancaster, Lehigh, Monroe, Northampton, Schuylkill, Westmoreland, and York.

# Where AGR/AGR-Lite makes sense

- Otherwise uninsurable commodities are covered
- Organic production is protected at your prices
- Direct marketed production is protected at your prices
- Umbrella over selected individual crop coverage
- Protects bottom line for operation from severe economic loss
- Individual protection based on your yield, quality and price history
- When individual crop insurance plans cost too much

# AGR-Lite Gross Income Protection Example

5 year avg. revenue = **\$300,000** from adjusted 1040F  
information

75% coverage level = **\$225,000** protection/loss trigger

Revenue produced = **\$100,000**

Revenue loss = **\$125,000**

90% payment = **\$112,500** loss payment

Cash flow guaranteed = \$212,500 less insurance cost

- Coverage levels available: 65, 75, and 80% of approved AGR revenue at 75% or 90% payment rates
- Costs around \$1-\$3 per \$100 of protection depending on coverage level and payment rate selected

# Sales closing/change dates

**JANUARY 31–AGR & existing AGR-L policies**

**MARCH 15-- spring seeded crops, new AGR policies**

**MAY 31– nursery crops**

**JULY 31– fall forage seeding**

**SEPTEMBER 30-- fall seeded crops, forage  
production, rainfall index policies**

**NOVEMBER 20-- fruit crops**

**NOVEMBER 30– GRP forage production**

**MONTHLY– LGM Dairy & Swine**

**For more information, visit the  
Penn State Crop Insurance Education Web Site:  
<http://extension.psu.edu/crop-insurance>**



# Noninsured Crop Disaster Assistance Program (NAP)

- Eligible Crops: Agricultural commodities for which the CAT level of crop insurance is not available, including controlled environment crops (mushrooms and floriculture), specialty crops (maple syrup and honey), and value loss crops (aquaculture, Christmas trees, ginseng, ornamentals, and turfgrass)

## NAP Program (cont.)

- NAP assistance is available if a natural disaster causes expected production to be less than 50% or prevented more than 35% of crop acreage from being planted planting
- NAP payments are paid based on a farmers crop acreage, approved yield, and net production at 55% of the average market price established by the FSA state committee

## NAP Program (cont.)

- Must apply to FSA for coverage by state closing date and pay applicable service fee **(\$250/crop/county)** Note: Limited-resource farmers can request waiver of fees
- Coverage begins 30 days after application or the date the crop is planted

# ***Pennsylvania Crop Insurance Education Program***



**PENNSYLVANIA CROP INSURANCE EDUCATION & PARTICIPATION PROGRAM:  
A PARTNERSHIP OF THE USDA RISK MANAGEMENT AGENCY, THE PENNSYLVANIA  
DEPARTMENT OF AGRICULTURE, AND THE PENNSYLVANIA STATE UNIVERSITY**

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