

Crop Insurance

2020 Master Marketer

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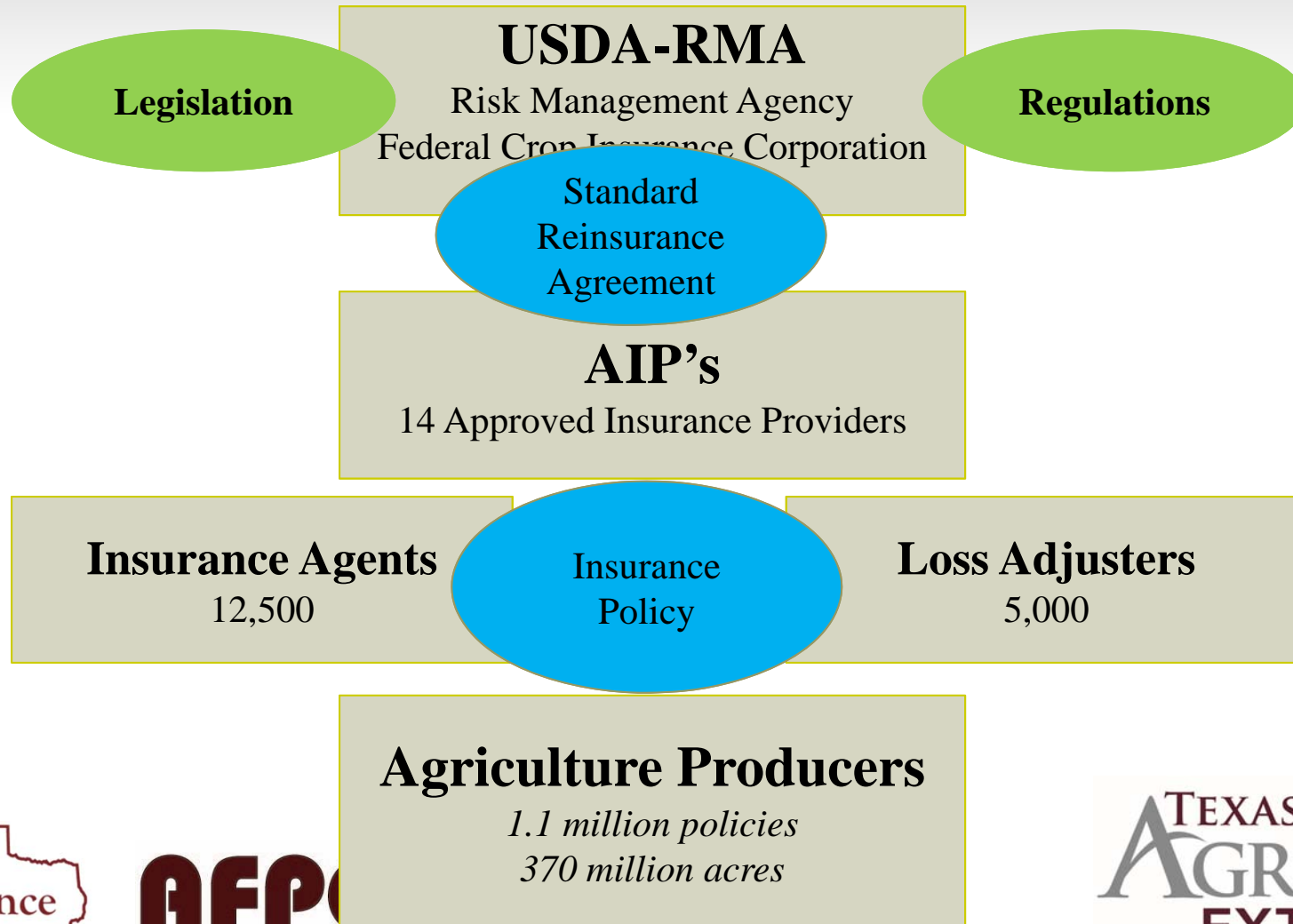
Texas A&M AgriLife Extension Service



Outline

- ❑ Crop Insurance System
- ❑ Insurance concepts
- ❑ Crop Insurance Overview
- ❑ Performance & Popular products
- ❑ Product Choices
 - ❑ Coverage level
 - ❑ Unit Structure
 - ❑ Approved yield adjustments
 - ❑ Supplemental Coverage (SCO / STAX)
- ❑ Other Considerations

Federal Crop Insurance Delivery System



Insurance / Risk Concepts



Insurance / Risk Concepts

- What is a \$1 on RED worth?
- Half Red & Half Black, pays \$2 or \$0
- Feels like an even bet...
- But what are the chances
 - Chance of red = $18/38 = 47.37\%$
 - Chance of black = $18/38 = 47.37\%$
 - Chance of green = $2/38 = 5.26\%$
- Expected value of a bet on RED:
 - $\$2(47.37\%) + \$0(52.63\%) = \$0.95$



Insurance / Risk Concepts

- House burns down?
 - Chance of fire = 0.5%
 - Chance nothing happens = 99.5%
- Expected Value of Fire loss
 - $\$250,000(0.5\%) + \$0(99.5\%) = \$1,250$
- Insurance Premiums & Indemnities
 - Actuarially fair premium = Expected Indemnity = \$1,250
 - Expense & Profit Loading
(Premium will include cost of the insurance company's business)
 - Risk Aversion
(Homeowner willing to pay more than EV to avoid disaster)
 - You might have to pay \$1,750 for something worth \$1,250



Crop Insurance Overview

- AIP's & agents earn money in the form of Administrative and Operating (A&O) payments through the SRA, based on volume of business, value of liability sold, etc. **Not by loading premiums**
- Actuarial Goal:
 - $\text{Total Premium} = \text{Expected Indemnity}$
 - $\text{Loss Ratio} = \text{Actual Indemnity} / \text{Total Premium} = 1.0$
- Underwriting gain (loss)
 - $\text{Gain(loss)} = \text{Total Premium} - \text{Actual Indemnity Payout}$
 - Underwriting gains & losses are shared by AIP's and USDA

Crop Insurance Overview

- Actuarial Goal
 - $\text{Loss Ratio} = \text{Indemnity} / \text{Total Premium} = 1.0$
- Average Subsidy is 62% of Total Premium
- For a \$20 total premium
 - USDA pays 62% (\$12.40)
 - Farmer pays 38% (\$7.60)
 - $\text{Expected Indemnity} / \text{Farmer premium} = \$20 / \$7.60$
 - \$2.63 Expected Indemnity per \$1 farmer premium
 - Or
 - \$1 Expected Indemnity will cost you \$0.38 premium

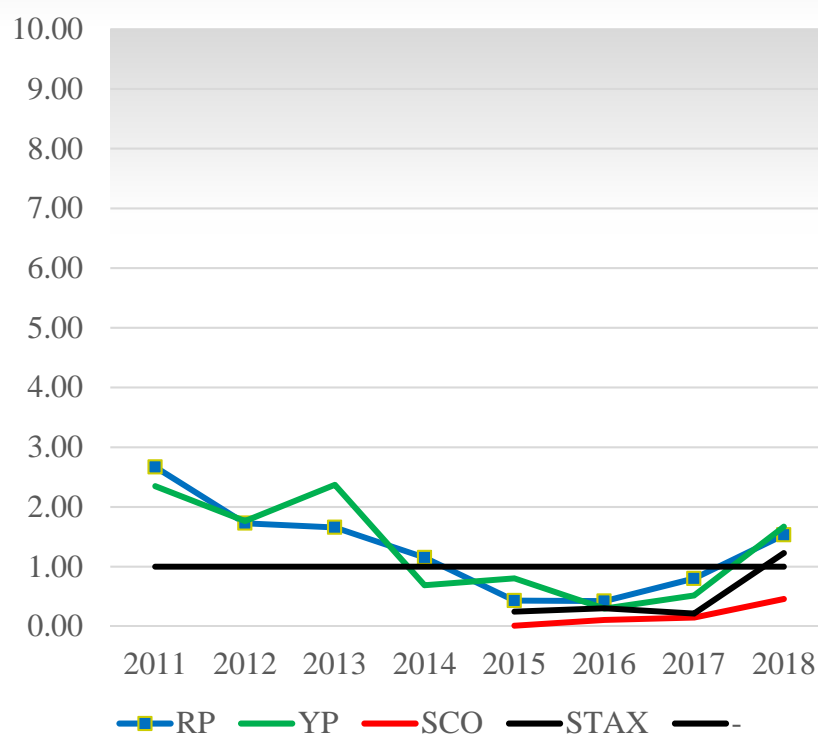
Crop Insurance Overview

- Coverage Level
 - Effectively a Deductible Selection
 - Producers selects a 70% coverage level, then the producer must suffer at least a 30% loss before crop insurance will pay an indemnity.
- Types of Policies:
 - Yield Only Policies = only yield declines are covered
 - Revenue Policies = yield and/or price declines are covered
 - Whole Farm Revenue Protection = covers entire farm, not just one commodity
 - Individual vs. Area or county coverage
 - Supplemental Coverage Policies

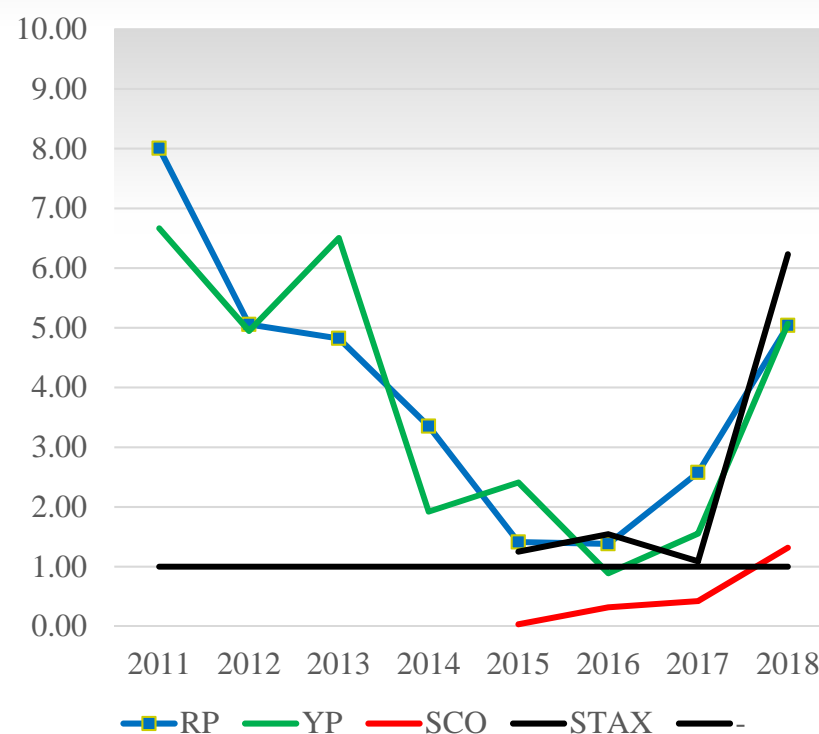
Crop Insurance History

Loss Ratio – Texas Cotton

Indemnity / Total Premium



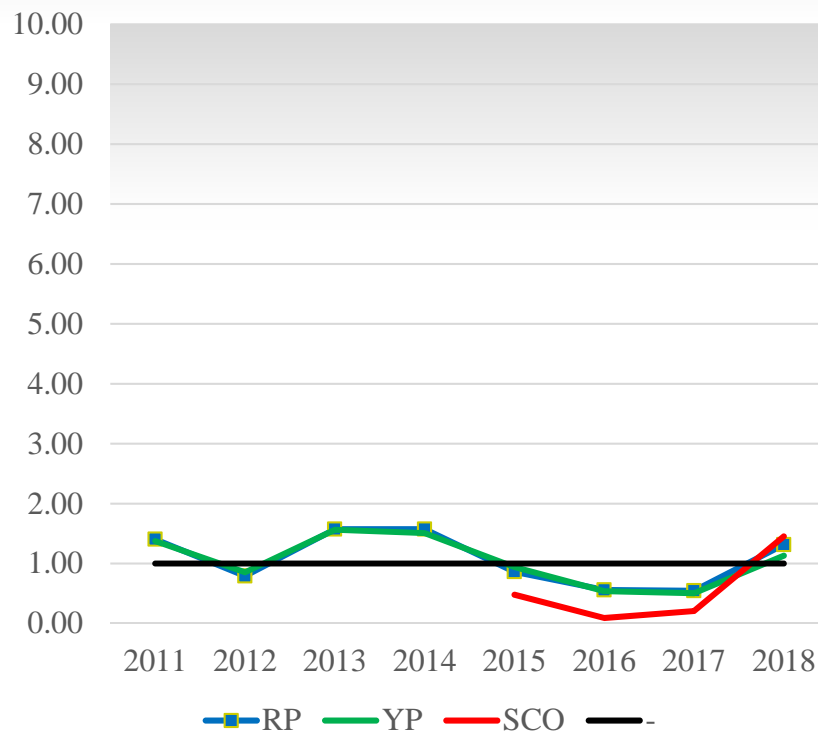
Indemnities / Producer Premiums



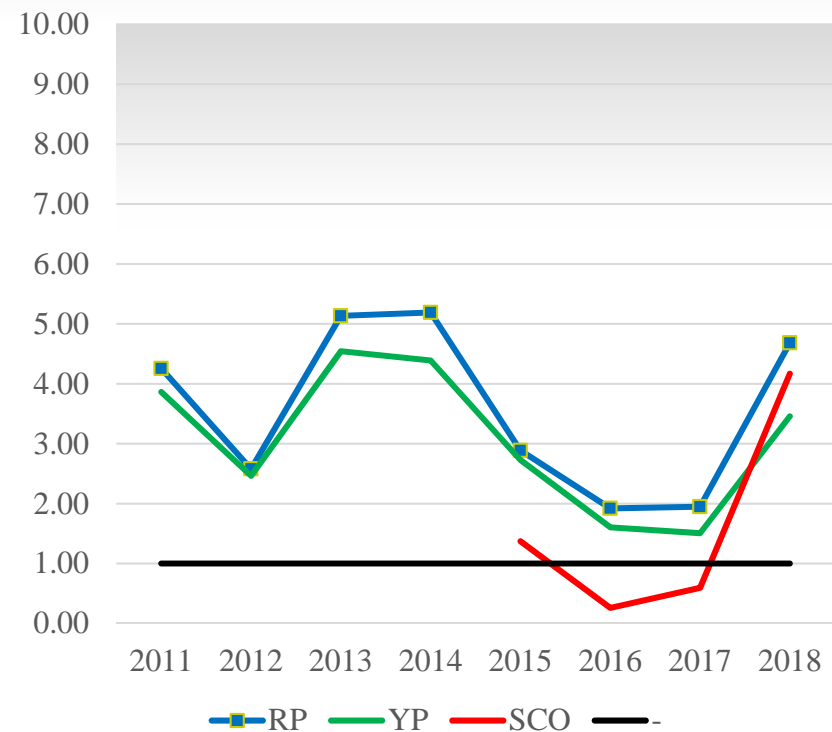
Crop Insurance History

Loss Ratio - Texas Wheat

Indemnity / Total Premium

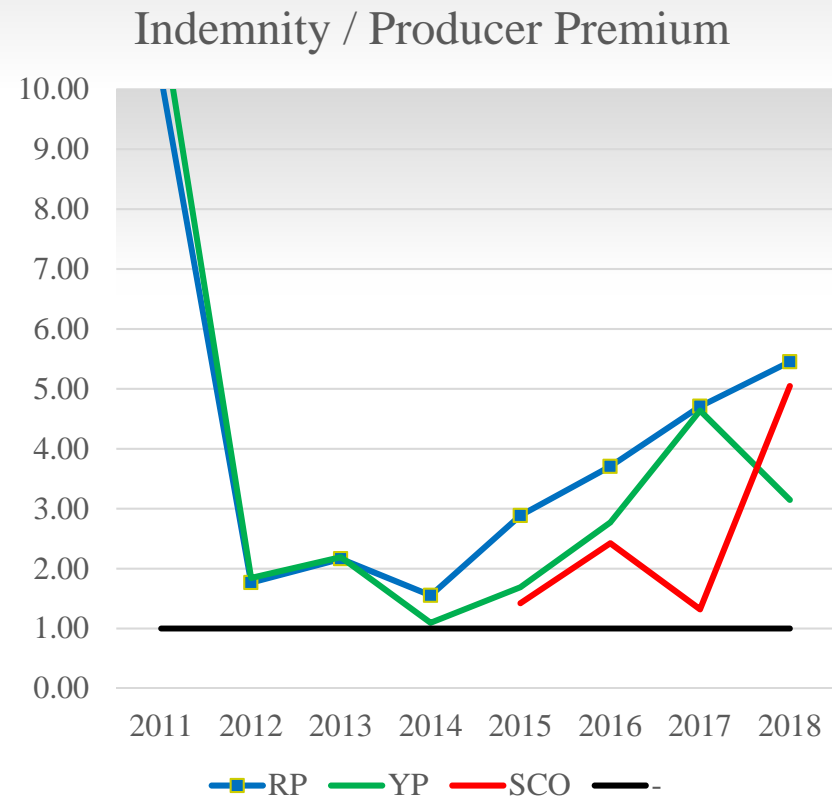
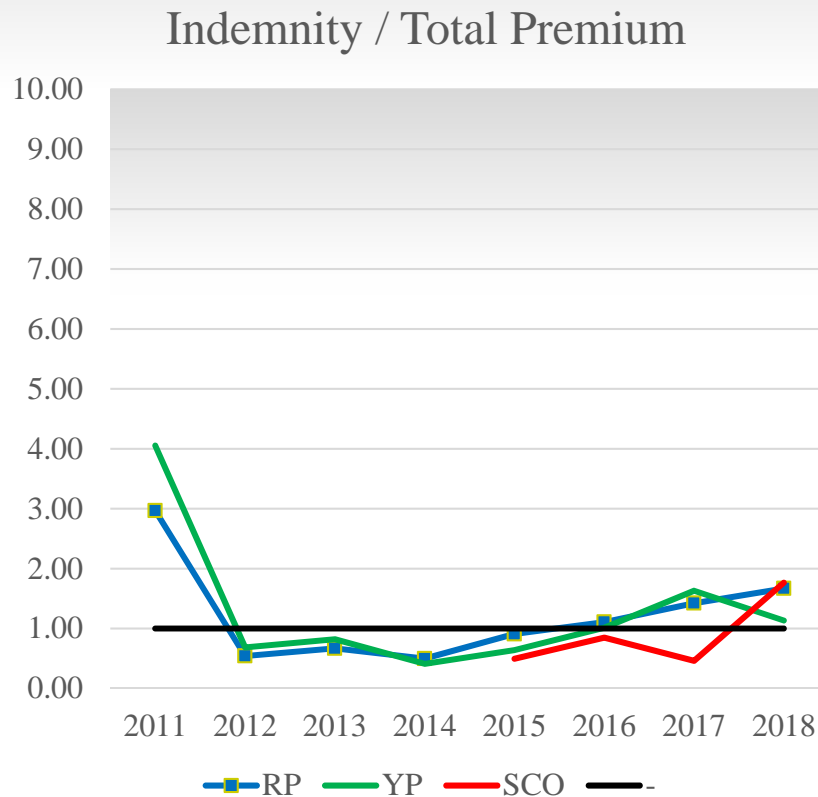


Indemnity / Producer Premium



Crop Insurance History

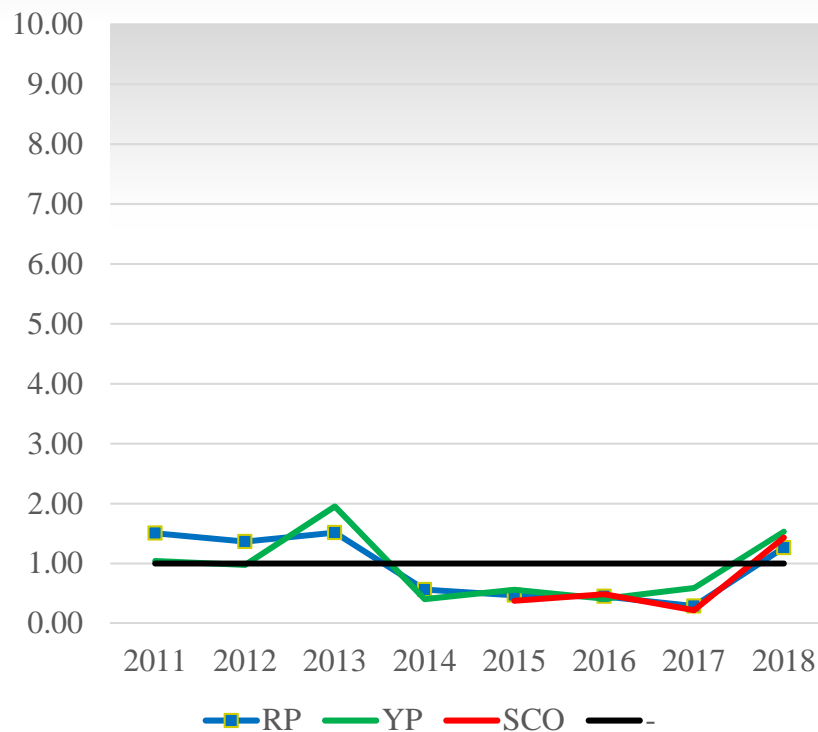
Loss Ratio – Texas Corn



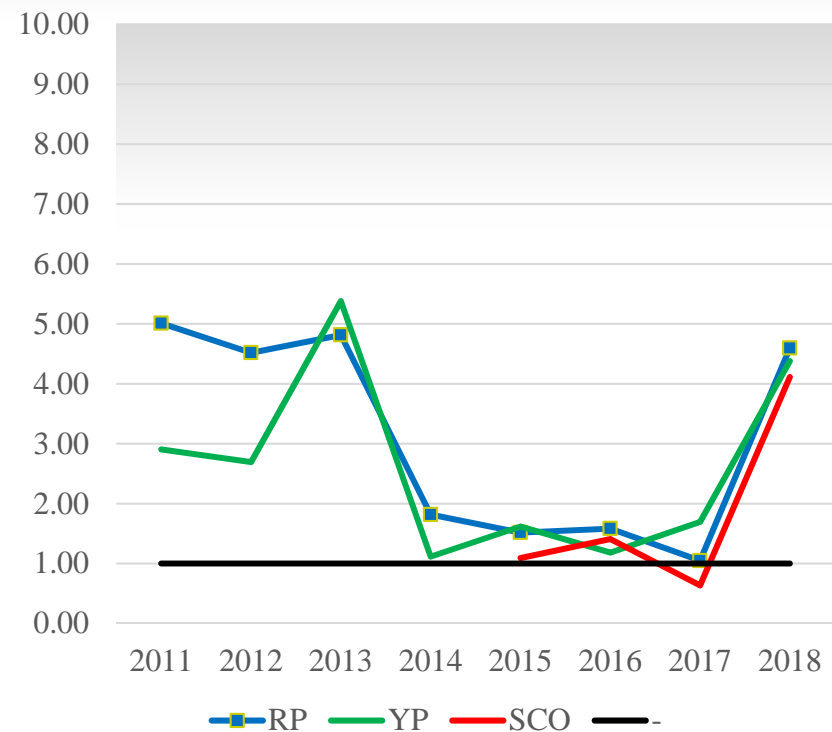
Crop Insurance History

Loss Ratio - Texas Grain Sorghum

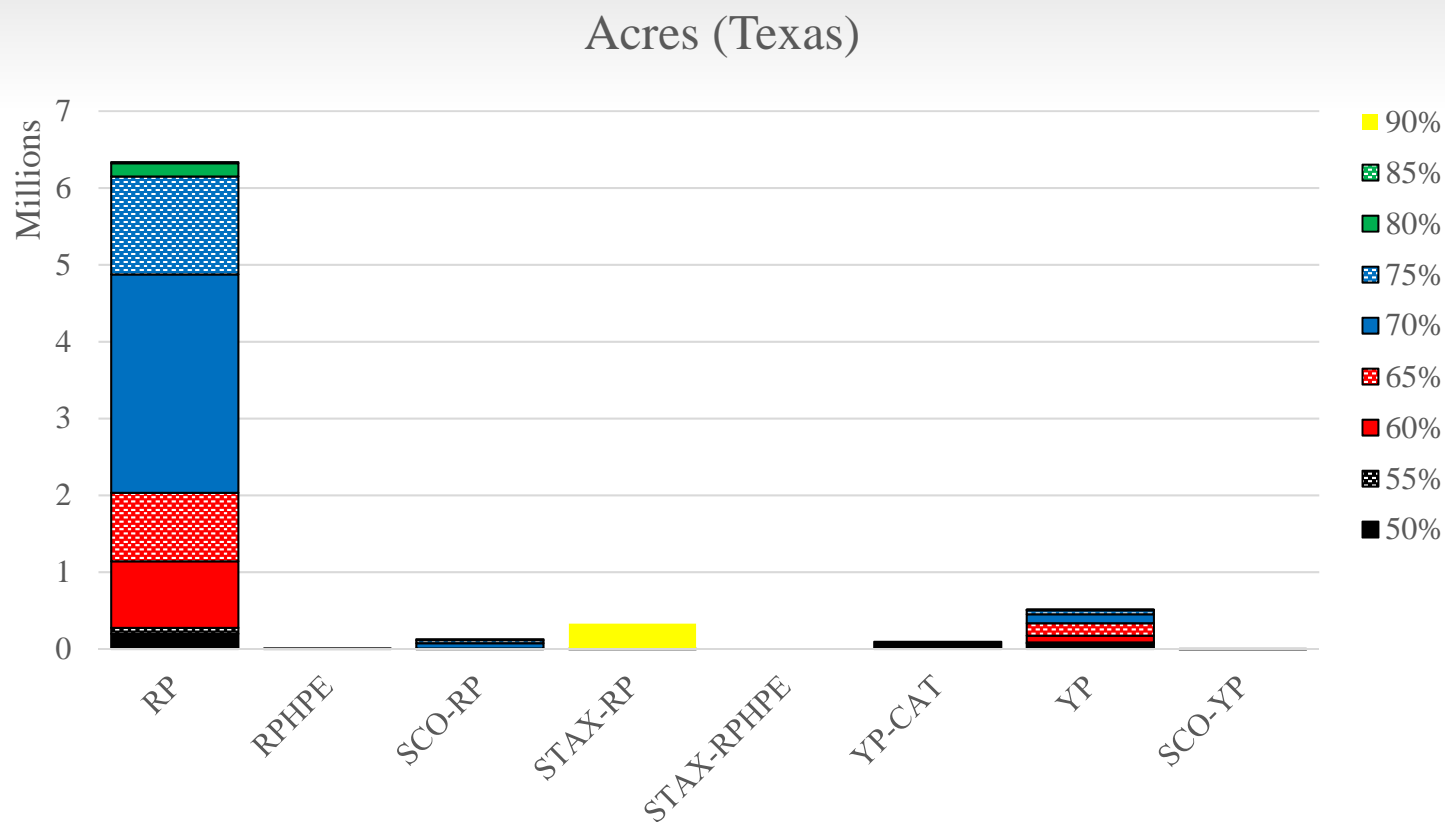
Indemnity / Total Premium



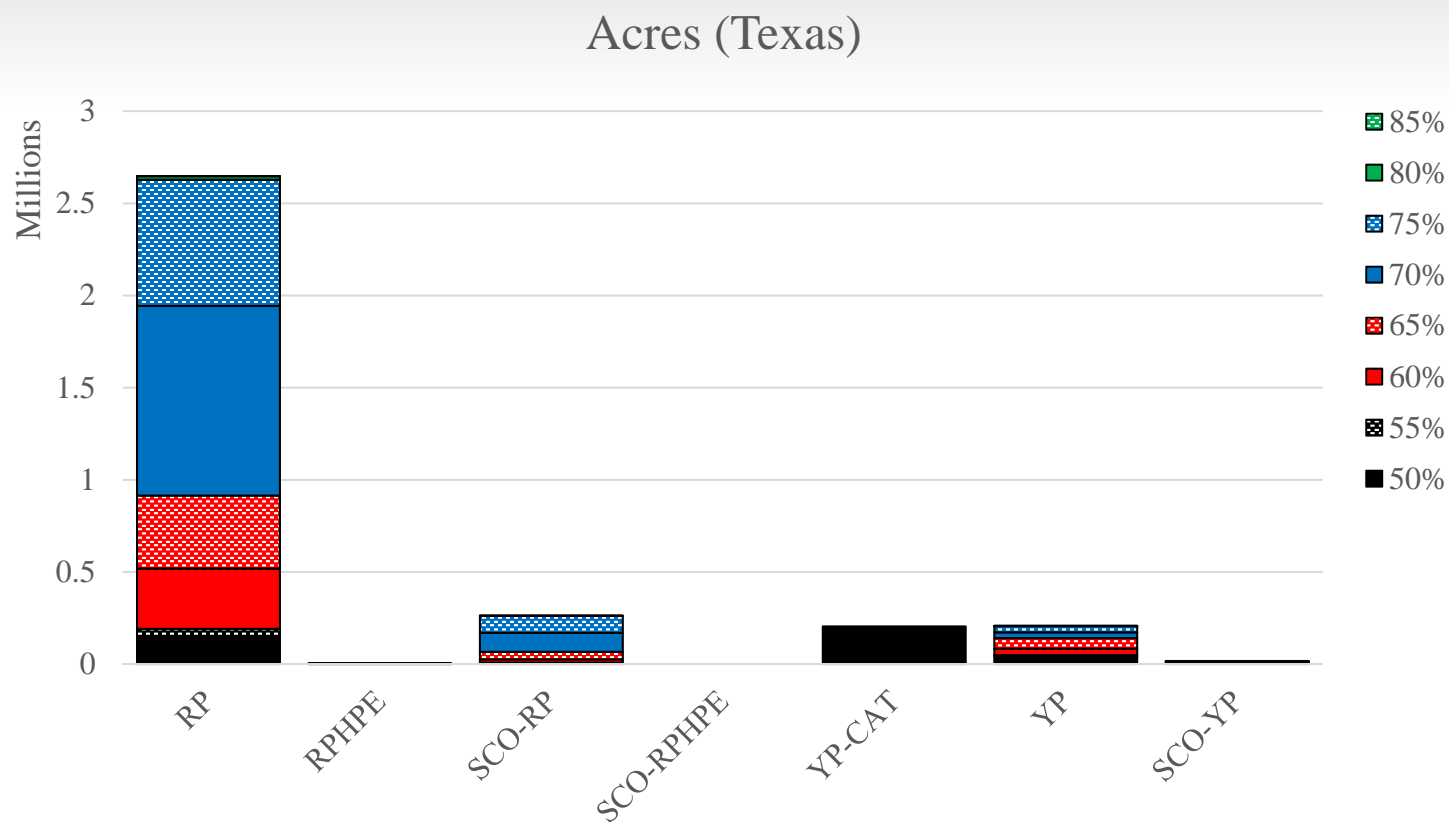
Indemnity / Producer Premium



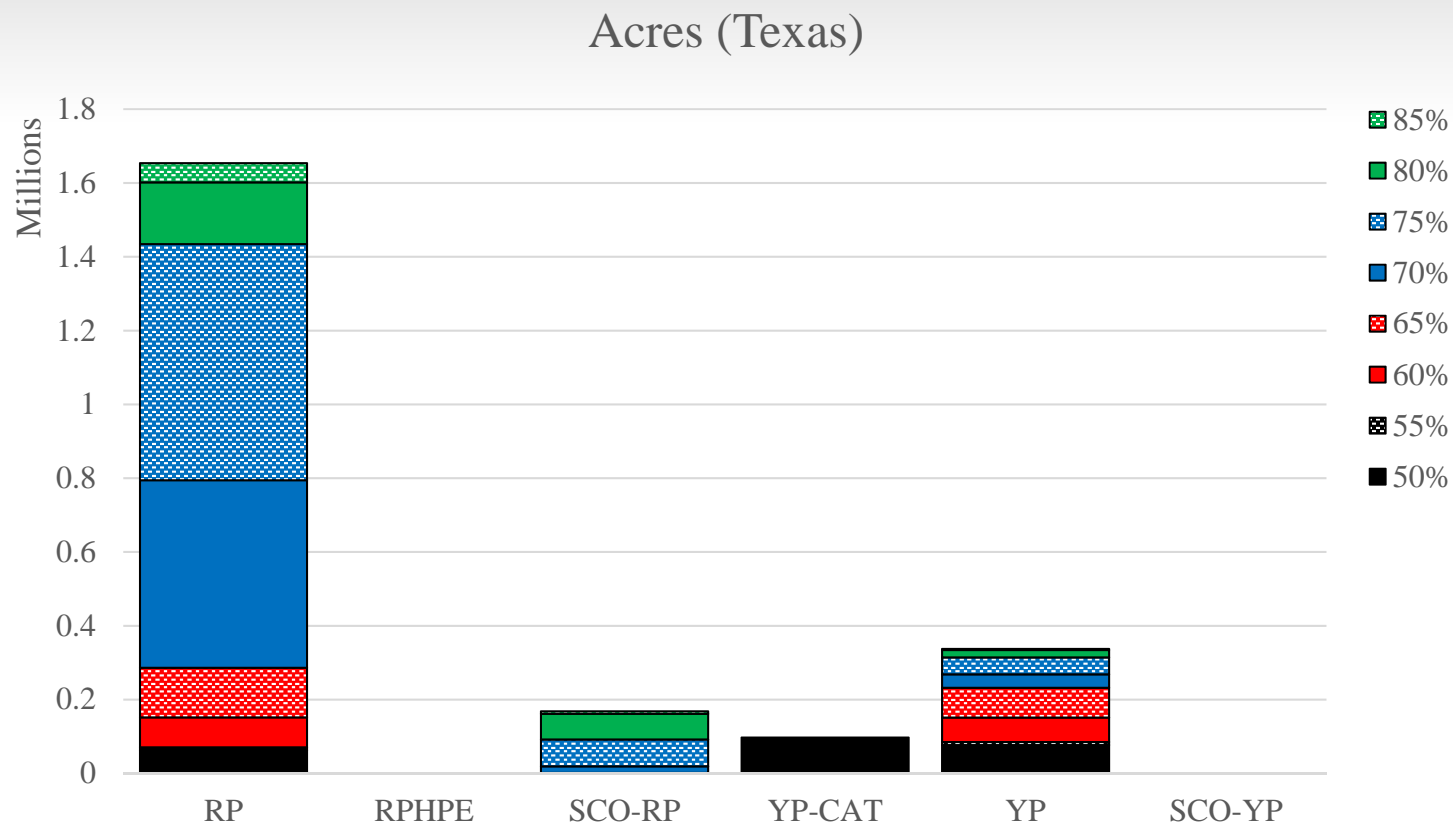
Crop Insurance Products Used 2019 Cotton



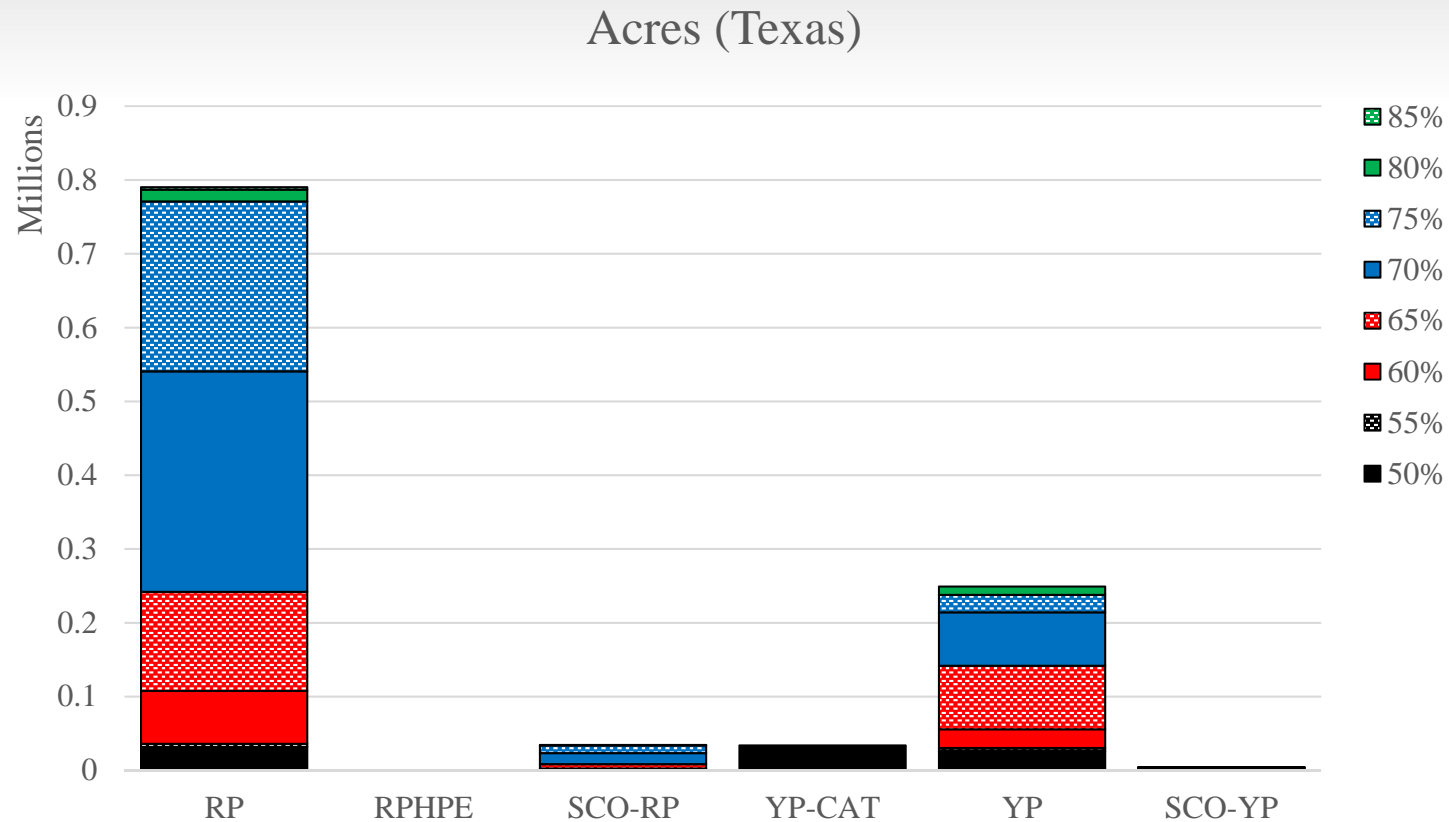
Crop Insurance Products Used 2019 Wheat



Crop Insurance Products Used 2019 Corn



Crop Insurance Products Used 2019 Grain Sorghum



Coverage Level Choices,

Cost of production, Marketing plans, Marginal increases

County	Hidalgo	Insurance Product		RP					
Commodity	Cotton	APH Yield / Rate Yield		650					
Practice	Non-Irrigated	Announced Price		\$0.71					
RP Coverage (Optional unit)		50%	55%	60%	65%	70%	75%	80%	85%
Guarantee Revenue		\$231	\$254	\$277	\$300	\$323	\$346	\$369	\$392
Total Premium		80	92	105	120	136	158	191	229
Subsidy		0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium		26	33	38	49	56	71	99	142
Marginal Increases									
Guarantee Revenue			23	23	23	23	23	23	23
Total Premium			12	13	15	16	22	33	38
Producer Premium			7	5	11	7	15	28	43



Premium Subsidy Levels

Coverage Level		0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85
Subsidy Factors	Enterprise Unit	0.80	0.80	0.80	0.80	0.80	0.77	0.68	0.53
	Basic Unit	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
	Optional Unit	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38

Optional/Basic/Enterprise Unit

County	Hidalgo	Insurance Product			RP			
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Subsidy	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium	26	33	38	49	56	71	99	142
RP Coverage (Basic unit)	50%	55%	60%	65%	70%	75%	80%	85%
Total Premium	57	66	77	90	105	127	157	192
Subsidy	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium	19	24	28	37	43	57	82	119
RP Coverage (Enterprise unit)	50%	55%	60%	65%	70%	75%	80%	85%
Total Premium	57	66	77	90	105	125	149	177
Subsidy	0.80	0.80	0.80	0.80	0.80	0.77	0.68	0.53
Producer Premium	11	13	15	18	21	29	48	83



Tools to Customize Insurance

- ❑ **Yield Adjustment (YA)**

For APH yield calculation purposes, producers may elect to substitute 60% of the applicable T-Yield for actual yields when their actual yields are less than 60% of the T-Yield.

- ❑ **APH Yield Exclusion (YE)**

Producers are eligible when the county yield is at least 50% below the average of previous 10 consecutive crop years.

Producers in any county contiguous to a county with crop years eligible for exclusion may also exclude yields for those same crop years.

- ❑ **Trend Adjustment (TA)**

For APH yield calculations, producers may elect to add a trend factor to actual yields, to reflect trending improvements in crop varieties, practices, etc.

- ❑ **Can you achieve the same protection with lower coverage levels ?**



Yield Exclusion

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Producer Premium	26	33	38	49	56	71	99	142	
YE increases APH to 700	50%	55%	60%	65%	70%	75%	80%	85%	
Guarantee Revenue	\$249	\$273	\$298	\$323	\$348	\$373	\$398	\$422	
Total Premium	89	103	119	136	159	198	234	261	
Subsidy	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38	
Producer Premium	29	37	43	56	65	89	122	162	



Yield Exclusion

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Supplemental Products

STAX / SCO

- **Stacked Insurance Protection Plan (STAX)**
 - Only cotton (not in combination with Seedcotton ARC/PLC)
 - Companion or stand alone, **Area** based coverage
 - Starts at 90%, max range of 20%
 - 80% premium subsidy
- **Supplemental Crop Insurance (SCO)**
 - Any crop (not available in combination with ARC)
 - **Area** based coverage, as companion to underlying policy
 - Starts at 86%, range down to where underlying policy starts
 - 65% premium subsidy



SCO

County	Hidalgo	Insurance Product		RP				
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← SCO covers 60%-86% →
65% Premium Subsidy



Whole Farm Revenue Protection

- ❑ Covers all commodities on the farm under **one insurance policy**.
- ❑ Select Coverage level base on:
 - Expected revenue determined by your farm plan, or
 - Historic revenue adjusted for growth at the selected coverage level.
- ❑ Covers up to \$8.5 million of revenue from all commodities produced on the farm/ranch (Excluding timber, forest, forest products, and animals for sport, show or pets)

Whole Farm Revenue Protection

- Well-suited for:
 - Highly diverse farms
 - Farms with specialty commodities
 - Farms selling to direct markets, specialty markets, regional or local markets, and farm-identity preserved markets

Whole Farm Revenue Protection

WFRP Subsidy: Percentage of Total Premium Paid by Government								
Coverage Level	50%	55%	60%	65%	70%	75%	80%	85%
Basic Subsidy-Qualifying Commodity Count: 1	67%	64%	64%	59%	59%	55%	N/A	N/A
Whole-Farm Subsidy- Qualifying Commodity Count: 2	80%	80%	80%	80%	80%	80%	N/A	N/A
Whole-Farm Subsidy- Qualifying Commodity Count: 3 or more	80%	80%	80%	80%	80%	80%	71%	56%

Beginning Farmers & Ranchers

Qualifications

- Must **not** have actively operated and managed a farm or ranch anywhere, with an insurable interest in any crop or livestock for more than 5 crop years

Benefits

- **Exemption from administrative fee** for catastrophic (CAT) and additional coverage (buy up) level policies;
- **Additional 10 percentage points of premium subsidy** for additional coverage policies (buy-up) that have premium subsidy;
- Use of the production history of farming operations where beginning farmers and ranchers were previously involved in the decision making or physical activities; and
- An **increase in the substituted yield for yield adjustment**, which allows a replacement of a low yield due to an insured cause of loss, from 60 to 80 percent of the applicable transitional yield (T-Yield) for the crop in the county.



In the case of a Loss

- Contact your crop insurance agent
- You have **72 hours** from your initial discovery to file a notice of loss
- **Do not destroy** the crop and/or replant until you talk to your agent and discuss options
- DOCUMENT, You must provide verifiable documentation that you have planted a crop
 - Seed tickets
 - Fertilizer receipts
 - Precision farming records

Noninsured Crop Disaster Assistance Program (NAP)

- Available Through USDA – FSA
- Basic NAP
 - CAT level coverage (50% Yield -- 55% Price)
 - \$250/crop fee (\$750 max/county and \$1875 max/person)
- Buy-up Options
 - 50/100 -- 55/100 -- 60/100 -- 65/100
- NAP Buy-up Premiums
 - \$250 fee + (5.25% of guaranteed value) * acres



Questions / Discussion

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