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## 2009 CROP INSURANCE CHANGES SUGGEST CONSIDERING EITHER GRIP OR ENTERPRISE UNITS AND BE FOR CRC AND RA-HP

Most Illinois farmers insure using Crop Revenue Coverage (CRC), Revenue Assurance (RA), or Group Risk Income Plan (GRIP). Of the corn acres insured in 2008, 35% was insured with CRC, 30% with RA, and 18% with GRIP. Of soybean acres insured in 2008, 18% were insured with CRC, 45% with RA, and 12% with GRIP. In 2008, 83% of the corn acres were insured with these three products while 75% of soybean acres were insured with the three products.

One of the three products will be a good choice in 2009. GRIP is a county product that makes payments when county revenue falls below a county guarantee. Over time, GRIP has paid out more in indemnity payments than farmers have paid in premiums. This occurs because all Federal crop insurance products are subsidized. Over time, GRIP should return about \$1.78 for each dollar of farmer-paid premium given that GRIP premiums are set correctly. Historical analyses suggest that indemnities on GRIP have exceeded farmer-paid premiums.

CRC and RA are two farm products that make payments when farm revenue falls below a farm guarantee. Because a farm's yields are used in calculating guarantees and revenues, CRC and RA provide better risk protection than GRIP. Unlike GRIP, however, historical analyses indicate that Illinois farmers have paid more in premiums on CRC and RA than they have received in indemnity payments. Hence, the choice between CRC, RA, and GRIP comes down to a risk-return tradeoff. Because they are based on farm yields, CRC and RA will provide better risk protection than GRIP. But GRIP will tend to have higher indemnity payments relative to farmer paid premiums than CRC or RA.

Changes to insurance policies in 2009 may impact farmer choices. Two changes reduce premiums on CRC and RA: higher subsidy levels have been implemented for enterprise units and the Biotech Endorsement (BE) has been expanded. In addition, subsidy levels have been lowered for GRIP. One other change in 2009 is a simplification of limits of harvest price movements. Each of these changes is discussed in the following sections.

### Enterprise Unit Discounts

Farmers can choose between enterprise, basic, and optional units when insuring crops. A basic unit is all of one crop in one county with the same ownership structure. One basic unit will exist for all owned and cash rent land in a county and one basic unit will exist for farmland for each share-rent landlord. A farmer with owned farmland and share rent agreements with two different tenants has three basic units: one for owned land and one for each share-rent tenant. Optional units divide basic units into smaller units based on township sections. Enterprise units combine all basic units in a county. There will be one enterprise unit for each crop in a county. Because yield variability increases as the number of acres in a unit decreases, insurance payments are easier to generate from an optional unit than for a basic unit than for an enterprise unit. Conversely, insurance premiums are higher for optional units than for basic units than for enterprise units.

The 2008 Farm Bill includes provisions increasing subsidy levels on enterprise units. For example, the subsidy level at a 75% coverage level was 55% in 2008. The subsidy level increases to 77% in 2009 (see Table 1 for subsidy levels at all coverage levels). These higher subsidy levels will exist until the end of the 2008 Farm Bill, unless legislation occurs modifying or extending the higher subsidy levels.

**Table 1. Risk Subsidy Levels on Enterprise Units in 2008 and 2009 by Coverage Level.**

Coverage Level	Year	
	2008	2009
50%	67%	80%
55%	64%	80%
60%	64%	80%
65%	59%	80%
70%	59%	80%
75%	55%	77%
80%	48%	68%
85%	38%	53%

The new higher subsidy levels decrease premiums on enterprise units. Table 2 shows an example of CRC premiums for both basic and optional units in 2008 and 2009. The 2009 premiums are estimated using a \$4.25 base price and price factors that are the same as in 2008. CRC's enterprise unit premiums vary based on insured acres. Quotes in table 2 use 500 insured acres. In 2008, the farmer-paid premium on an enterprise unit was \$14.20. The 2009 estimated premium is \$6.27. The vast majority of the \$7.93 difference between the 2008 premium is due to the higher enterprise subsidy. The remainder is due to a lower base price in 2009 and differences in underlying ratings between 2008 and 2009.

These higher subsidy levels encourage use of enterprise units. Individual moving from basic units to enterprise units can lower premiums. At a 75% coverage level, a basic unit has a premium of \$15.74. Given 500 insured acres, moving to an enterprise unit lowers premiums to \$6.27, a reduction of \$9.47 per acre. Savings from the move from the basic to enterprise unit could fund an increase in the coverage. The enterprise unit premium at an 80% coverage level is \$11.34, \$4.40 per acre less than the premium for a basic unit at the 75% coverage level.

**Table 2. CRC Insurance Premiums for Logan County, Illinois for Basic and Enterprise Units in 2008 and 2009 est.<sup>1</sup>**

Coverage Level	Basic		Enterprise <sup>2</sup>	
	Year		Year	
	2008	2009	2008	2009
	\$ per acre		\$ per acre	
60	6.03	5.2	4.94	2.37
65	9.07	7.83	7.44	3.13
70	12.37	10.66	9.88	4.16
75	18.22	15.74	14.20	6.27
80	27.94	24.18	21.30	11.34
85	43.93	38.18	32.77	21.59

<sup>1</sup> Premiums given a 170 bushel APH yield. Premiums in 2009 estimated using a \$4.25 base price and 2008 price volatilities.

<sup>2</sup> Given 500 acres.

## Biotech Endorsement

Last year, a Biotech Yield Endorsement (BYE) was introduced that allowed farmers to receive premium discounts on corn policies if 75% of an insured unit's acre were planted to Monsanto-based triple stacked hybrids. This year, the endorsement has been expanded and renamed the Biotech Endorsement (BE).

BE is available to farmers in Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Minnesota, Nebraska, Ohio, South Dakota, and Wisconsin. To be eligible for the BE discount, 75% of an insured unit's acres must be planted to combination of hybrids containing the following traits:

1. Monsanto traits marketed as YieldGard® with Roundup Ready® Corn 2, YieldGard® VT Triple®, or YieldGard VT Triple PRO™.
2. Pioneer and Dow Agro Sciences traits marketed as HERCULEX® XTRA Insect Protection or HERCULEX® XTRA Insect Protection with Roundup Ready® Corn 2.
3. Syngenta traits marketed as Agrisure® 3000GR or Agrisure® CB/LL/RW (Except in Missouri and Ohio).

Each company will maintain a website with qualified hybrids. To be eligible for the premium discount, the farmer must:

1. Plant 75% of an insured unit to qualified hybrids. Qualified hybrids must be purchased for 2009 production. Seed purchased for planting the 2008 crop is not eligible for the BE discount.
2. Identify insurable units that meet the BE requirements by the acreage reporting date of July 15<sup>th</sup>. This is the actual date in which farmers have to make the BE decision. If acres planted to qualified hybrids are not reported, the BE discount will not be applied.
3. On the acreage reporting date, a Biotech Endorsement Insured's Certification form must be signed.
4. Copies of all purchase and return seed invoices of qualified hybrids must be attached to the Biotech Endorsement Insured's Certification.

Spot checks will be randomly performed on BE policies. Leaf tissue samples will be taken from a field and tested to make sure that the field contains qualified hybrids. Farmers must be able to identify areas where the insured hybrids are planted so that plant tissue samples will be taken from qualified hybrid areas and not refuge areas. A second test will be performed if the first is failed. Non-compliance of BE provisions results in the crop insurance policy being voided and still requires paying 20% of the premium. In addition, there may be other administrative, civil, or criminal sanctions.

BE discounts vary across counties, products, and coverage levels. Discounts are larger for Actual Production History (APH) yield products than for CRC or RA. For the Logan County CRC policy illustrates in Table 2, the farmer-paid premium for the 75% coverage level and enterprise units is \$5.29 with BE and \$6.27 with the BE discount. At the 75% coverage level, the discount causes a 16% reduction in premium. For Logan County, CRC case, discounts range from 20% at the 60% coverage level down to 11% at the 85% coverage level.

## GRIP Risk Subsidy Level Increases

The 2008 Farm Bill lowered risk subsidy levels on GRIP products. For example, the subsidy level on a 90% coverage level was lowered from 48% in 2008 to 44% in 2009 (see Table 3). Taken alone, this change will increase farmer-paid GRIP premiums. While they will act to increase premiums, the increase in subsidies should not change the basic fact that GRIP policies should pay out to farmers more than farmers pay in premium.

While the subsidy levels will cause premium increases, the actual premiums may decline due to lower base prices and changes in underlying rates. The farmer-paid premium on a GRIP with the harvest revenue option (GRIP-HR) policy with a 90% coverage level and a 100% protection level was \$75.55 in 2008. Current estimates places this premium in 2009 at \$56.51, a reduction of \$19.04 from the 2008 premium. The 2009 is estimated based on a \$4.25 base price and a .28 price volatility. These prices and volatilities are not yet known and different values will influence premiums. In any case, however, premiums on GRIP likely will be lower in 2009 than in 2008.

## Harvest Price Limit Changes

In previous years, there were price limits on the movement of the harvest price for CRC and GRIP policies. For corn, the harvest price could not be more than \$1.50 higher or lower than the base price. For soybeans, the harvest price could not be more than \$3.00 higher or lower than the base price. Price limits impact soybean harvest prices in 2008. The soybean base price was \$13.36 and the lower limit on the harvest prices was \$10.36(\$13.36 base price - \$3.00

movement limit). Harvest prices for soybeans are determined by the average of settlement prices of the November Chicago Board of Trade soybean contract during the month of October. In 2008, these settlement prices averaged \$9.22, which was below the \$10.36 lower limit for CRC and GRIP. Hence, CRC and GRIP used \$10.36 as the harvest price while RA – which did not have a price limit – used \$9.22 as its harvest price. As a result, RA made higher indemnity payment than CRC given the same actual yield, APH yield, and coverage level selection.

**Table 3. GRIP Risk Subsidy Levels and GRIP-HR Premiums for Logan County, Illinois, 2008- 2009 est.**

Coverage Level	Risk Subsidy Levels		Premiums <sup>1</sup>	
	Year		Year	
	2008	2009	2008	2009
70%	64%	59%	11.88	8.93
75%	59%	55%	21.35	15.32
80%	59%	55%	31.77	23.31
85%	55%	49%	49.28	38.03
90%	48%	44%	75.55	56.51

<sup>1</sup> Estimated at a 100% protection level. Premiums in 2009 are estimated based on a \$4.25 base price and a .28 price volatility.

In 2009, the price limits will be the same for CRC, RA, and GRIP. There will be no lower limit. The upper price limit will be 2 times the base price for all crops. If the base price for corn is \$4.00 per bushel, the upper limit will be \$8.00 (2 x \$4.00). Given the doubling factor, harvest prices are not likely to be the upper limit.

Having the same price limits across products simplifies product choice. In 2008, consideration had to be given to the fact that RA did not have price limits while CRC had price limits. RA with the harvest price option is very similar to CRC now that the price limits are the same. The only significant difference between the products is that CRC uses October to determine the harvest price while RA uses November. At insurance sign-up time, it is impossible to predict which month will have the more favorable price. Therefore, the choice between CRC and RA-HP comes down to the one with the lowest premium as there is no difference between the coverage between the two products.

### Summary and Suggestions

Given the above changes, the choice for most farmers will come down to 1) CRC or RA-HP or 2) GRIP. CRC or RA-HP will provide better risk protection than GRIP. However, GRIP has a tendency to pay out in indemnity payments more than farmers pay in premium.

If CRC and RA-HP are selected, use of enterprise units may be warranted. Use of enterprise units will reduce premium costs. Further use of the BE will further reduce premium costs on corn. The resulting savings could be used in increasing coverage level, thereby providing more risk protection. The choice between CRC and RA-HP should be made on the basis on the premium. Select the product with the lower premium as there is no difference in the protection offered by the products if the same insured unit and coverage level are selected.

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