

FARM ECONOMICS Facts & Opinions

Department of Agricultural and Consumer Economics • College of Agriculture, Consumer and Environmental Sciences University of Illinois at Urbana-Champaign

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2002 CROP INSURANCE DECISIONS

Multi-peril products available for insuring crops in Illinois during 2002 have not changed from 2001. Moreover, subsidy levels have not changed, causing 2002 premiums to be roughly similar to 2001 premiums. Hence, the criteria for choosing between crop insurance products have not changed between 2002 and 2001. Choices or multi-peril insurance products can be divided into four categories.

- 1. Revenue insurances with guarantee increase provisions,
- 2. Revenue insurances without guarantee increase provisions,
- 3. Yield products, and
- 4. County products.

Each categories is covered in the following sections.

Revenue insurances with guarantee increase provisions

Products in this category include Crop Revenue Coverage (CRC) and Revenue Assurance with a harvest price option (RA-HP). These products have a provision that allow their revenue guarantee to increase if futures prices at harvest are above futures prices in February. This guarantee increase provision provides protection for farmers against years in which prices rise and yields fall. These products are good choices for farmers who aggressively hedge crops prior to harvest. (e.g., Hedge more than 25 percent of expected production using futures, options, or hedge-to-arrive contracts. Options do not count in the total.)

There are several differences between CRC and RA-HP:

- 1. For corn, CRC changed the period in which harvest prices are determined from November to October. CRC uses the average of settlement prices of the December Chicago Board of Trade contract during the month of October to determine its harvest price for corn. RA-HP averages the settlement prices of the December contract during the month of November. Over time, the difference in contract months is not likely to make large differences in crop insurance payments. Between 1972 and 2000, harvest prices using October's settlement prices average \$2.50, \$.01 per bu. higher than the average settlement prices using November. In any given year, the differences can be large. For example, large differences occurred in 1976 when the October price was \$.22 above the November price and in 1993 when the October price was \$.25 below the November prices. Before the fact, however, there is little way to predict whether the October or November price will be higher.
- 2. CRC has price limits governing how much the revenue guarantee can increase if the harvest price is above the base price (\$1.50 for corn, \$3.00 for soybeans). RA does not have these limits. Between 1972 and 2000, however, the price limits have not been exceeded.



These differences do not suggest a clear preference for one product over another. Getting premium quotes for both products and choosing the product with the lowest premium seems warranted. For similar coverage levels and units, premiums can vary between \$2 and \$3 per acre in some Illinois counties.

Make sure the proper option is selected when getting quotes for or making purchase of RA . RA has both a harvest and base price option. The harvest price option allows the guarantee to increase while the base price option does not. Harvest price quotes will be higher than base price quotes.

Revenue insurances without guarantee increase provisions

Products falling into this category include Revenue Assurance that uses only the base price in its calculation of its guarantee (RA-BP) and Income Protection (IP). These products will cost less than revenue products with guarantee increases. Insuring corn with a 150 bu. Actual Production History (APH) yield in Ogle corn using basic units with RA-BP will cost \$13.34 per acre (see the *IFARM* Premium Calculator for additional quotes (http://www.farmdoc.uiuc.edu/cropins/). CRC, a product with a guarantee increase, costs \$18.93, \$5.93 more per acre than RA-BP. RA-BP and IP will have similar risk reductions to CRC and RA-HP when pre-harvest hedging is not used (see the *IFARM* Insurance Evaluator for risk reductions associated with alternative products (http://www.farmdoc.uiuc.edu/cropins/).

Because risk reductions are similar and premium costs are lower, revenue products without guarantee increases are recommended for farmers who do not hedge aggressively. (e.g., Non-aggressive hedging is defined as hedging less than 25 percent of expected production prior to harvest using forward, futures, or hedge-to-arrive contracts. Using put options to hedge does not count toward the 25 percent total.) Hedging aggressively introduces risks when using a revenue product without a guarantee increase. Hence, aggressive hedgers may with to consider some other product. From a risk standpoint, aggressive hedging is not warranted for soybeans this year given that current futures prices are considerably below loan rates. Hence, revenue insurances without guarantee increases may be more appropriate for soybeans because aggressive hedging is not likely.

There are several differences between RA-BP and IP:

- 1. IP only has enterprise units (all of a crop in a county). RA has optional, basic, enterprise, and whole farm units.
- 2. IP coverage levels only go up to 75 percent. From this year forward RA allows coverage levels up to 85 percent.

Choice between the options is likely dictated by allowable units and coverage level choices. Select the product with the lowest premium if enterprise units and coverage level less than or equal to 75 percent are desired.

Yield insurance

Yield insurance, often called Actual Production History (APH) insurance, is the product that has been around the longest. This product is appropriate for livestock producers who are concerned with feed needs in years of low yields. Aggressive hedgers may find yield insurance attractive. Most farmer will find the revenue or county products more attractive.



County insurances

County insurances include:

- 1. Group Risk Plan (GRP) an insurance that makes payments when county yield falls below a yield guarantee.
- 2. Group Risk Income Plan (GRIP) a revenue insurance that makes payments when county revenue falls below a revenue guarantee.

Over time, GRP and GRIP pay out more than a farmer will pay in premiums. This occurs because of Federal subsidies and because the administrative costs associated with county products are lower than for "farm" products. At high coverage levels, county products often make payments (see the *IFARM* Insurance Evaluator for frequency estimates). This is particularly true for GRIP. For example, GRIP was introduced in 1999. At a 90 percent coverage level, GRIP made payments for corn in 83 percent of Illinois counties in 1999 and 43 percent of Illinois counties in 2000. For soybeans, GRIP made payments in 27 percent of Illinois counties in 1999 and 53 percent of counties in 2000 (see http://www.rma.usda.gov/data/).

The weakness of county level products is that payments are based on county yield rather than on a farm's yield. It is possible that a farm could have a poor yield while the county does not. In these cases, a farm could have low revenue and the county product would not make a payment.

Because of this weakness, county products should be used by farmers in financially strong position. County level products also tend to work better for farms whose yields move up and down together with the county yields. Farms, for example, that farm over a wide area of a county likely have yields that closely follow county yields.

In the past, some farms purchase minimal coverage on soybeans because it is more difficult to get soybeans to generate premiums than for corn. A county product, and GRIP in particular, may be an alternative to minimal coverage. Purchasing GRIP at a 90 percent level provides good protection against revenue shortfalls due to price declines. A price decline of 10 percent between the base and harvest, given that yields do not increase, will trigger a GRIP payment. Price declines of 10 percent of more occur often.

When purchasing county products, the highest election level of 90 percent may be the most appropriate. Lowering the coverage level dramatically reduces the chance of receiving indemnity payments. Protection levels can be lowered if premium costs are a concern. It might also be useful to consider hail insurance with county products. Hail is a localized event that may cause a farm to have low yields while the county does not.

Summary

Additional localized information on crop insurance products is available on farmdoc. The *IFARM* Premium Calculator lists premium costs of alternative products by county. The *IFARM* insurance evaluator provided a detailed risk assessment of alternative products by county. This information is useful in weighing the risks and returns associated with alternative crop insurance products.

Issued by: Gary Schnitkey, Department of Agricultural and Consumer Economics

