

Insuring the Crop Using Actual Production History Has Paid Off to Florida Citrus Growers So Far; Will It Continue to Be Beneficial in the Future?¹

Ariel Singerman²

In past years, I have argued that insuring the crop under the Actual Production History (APH) policy was likely going to be beneficial for most Florida citrus growers because the policy offers coverage against yield losses based on their farm's historical yield records. In an article published last year (Singerman 2025) that used data for crop years 2022 and 2023, I showed that, on average, orange growers in Florida were not only more likely to receive an indemnity when obtaining coverage under the APH policy relative to the Dollar Amount policy but also, on average, received a higher level of indemnity payment when doing so. Moving forward, the question for Florida citrus growers becomes whether APH will continue to be advantageous. As I will explain throughout the rest of this article, the answer is, "It depends."

To illustrate under what conditions APH will continue to be advantageous for Florida citrus growers to insure their crops, I use Polk County yield records for Valencia oranges as an example because I do not have any farm-level yield records available. Thus, I use the county's average yield to estimate Polk County APH yield in 2024/25, which is estimated at 158 boxes per acre. The Federal Crop Insurance Corporation (FCIC) established the price for Valencia oranges for 2025 to be \$12.29 per box. The average yield in Polk County will most likely be below the guarantee resulting from the coverage level chosen and the APH yield of 158 boxes per acre. The indemnity, for example, for 50%, 60%, 70%, and 80% coverage will be positive if yield will turn out to be less than the corresponding guarantee of 79 boxes per acre, 95 boxes per acre, 111 boxes per acre, and 126 boxes per acre, respectively. Figure 1 shows the estimated APH net payoff (that is, indemnity minus premium) by coverage for levels of yield that range from 60 boxes per acre to 130 boxes per acre. Figure 1 illustrates that the net payoff at each coverage level will be positive if yield is, at least, slightly lower than the computed guarantee so as to cover the cost of the insurance premium. For example, under 50%, 60%, 70%, and 80% coverage, if yield is 70 boxes per acre, the payoff per acre will be \$107, \$296, \$473, and \$612, respectively. Figure 1 also shows that the net payoff from

APH will be negative and, at most, equal to the premium if yield in 2025 turns out to be higher than the corresponding guarantee under each coverage level.

For future seasons, it is important to remember that the Risk Management Agency (RMA)'s APH standards include a procedure for testing high variability in yields to determine whether any adjustments to the APH database are warranted, either due to alternate bearing or downward trend patterns. There are two conditions for conducting a test for a downward trend on the grower's APH database. In a database containing records for 10 years, for example, the conditions are that (1) in at least four out of the 10 previous seasons, the yield was below 75% of the APH yield, and (2) at least one of those seasons was among the last three seasons. When those conditions are met, the downward trend test is conducted. However, the downward trend adjustment is only implemented if the average yield for the last three seasons is less than 75% of that of the APH database. Should that be the case, the APH yield will be reduced by 20%. Importantly, given the catastrophic weather events affecting citrus production in Florida during 2022/23 (Hurricane Ian), the RMA instructed insurance companies to exclude that crop year from high variability test calculations.

As Florida citrus yield continues to be negatively impacted by the combination of HLB and weather shocks, it is important to keep in mind another requirement for acreage to be insurable under APH: a block that is at least eight years old will need to have produced at least 100 boxes per acre in at least one of the three previous seasons. Should a grower have a block that does not meet such a requirement, a request could be submitted to the RMA regional office to be able to insure it. However, the determined yield in that case may not exceed 80% of average yield for the entire APH database.

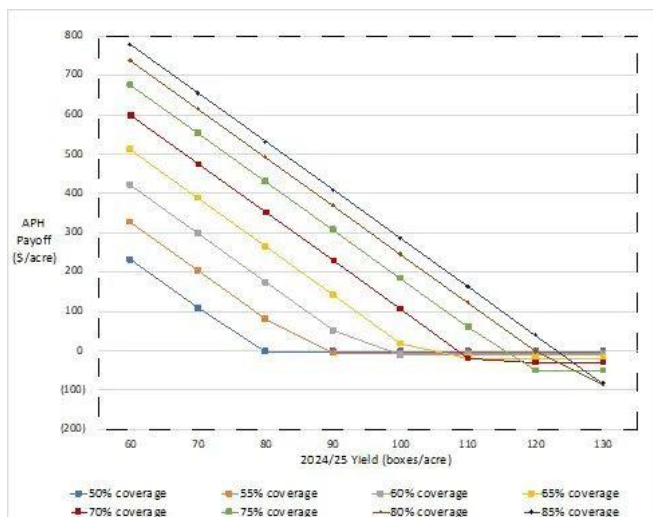


Figure 1. Example of estimated net payoff from APH in 2024/25 by coverage for levels of yield that range from 60 boxes per acre to 130 boxes per acre using Polk County Valencia orange yields as an example. Credit: Ariel Singerman, UF/IFAS.

To obtain an estimate of the APH net payoffs in Polk County in 2026, I need to estimate the county's 2025/26 APH yield, which turns out to be 145 boxes per acre. The FCIC established the price for Valencia oranges for 2026 to be \$13.07 per box. In addition, the premium rates for 2026 are already available, so I can combine the previous information to estimate the indemnity payments. The indemnity, for example, for 50%, 60%, 70%, and 80% coverage will be positive if yield in 2026 will turn out to be less than the corresponding guarantee of 72 boxes per acre, 87 boxes per acre, 101 boxes per acre, and 116 boxes per acre, respectively. Figure 2 shows the estimated net payoff from APH in 2025/26 by coverage for different levels of yield in Polk County that range from 60 boxes per acre to 130 boxes per acre. Thus, for example, if yield turns out to be 70 boxes per acre, the net payoff per acre will be \$21, \$209, \$368, and \$493 under 50%, 60%, 70%, and 80% coverage, respectively. The calculations for my example met the requirement for having 100 boxes per acre in at least one out of the three previous seasons and did not meet the conditions for conducting a test for a downward trend on the APH database. Therefore, the APH yield is not reduced by 20%, but individual growers may want to make the calculations for their own groves so as to choose the optimal level of coverage.

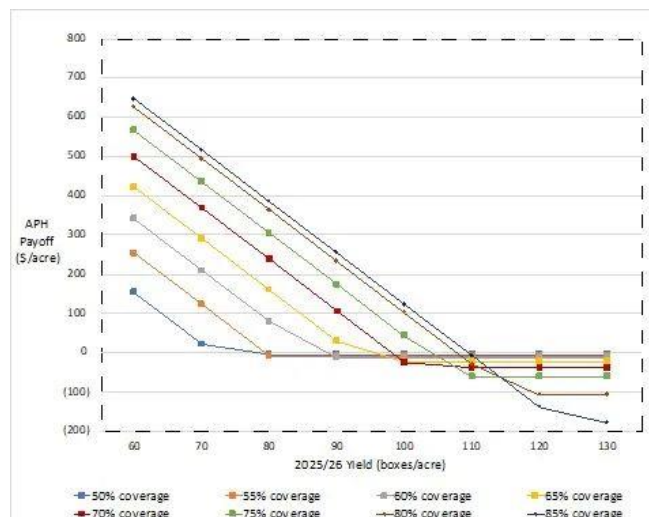


Figure 2. Example of estimated net payoff from APH in 2025/26 by coverage for levels of yield that range from 60 boxes per acre to 130 boxes per acre using Polk County Valencia orange yields as an example. Credit: Ariel Singerman, UF/IFAS.

Summary

Obtaining coverage under the Actual Production History (APH) policy has been, on average, economically beneficial for most Florida citrus growers so far. This is because the policy offers coverage against yield losses based on farm yield records for previous seasons, making the guarantees higher than what they would otherwise be if the downward trend in yield caused by HLB were considered. In 2024/25, most growers will likely continue to obtain a positive payoff from having insured their crop under APH coverage. That may also be the case in 2025/26 if yield that season is below the grower's guarantee and the grower's APH database does not trigger the reduction either due to the downward trend test or the requirement to produce at least 100 boxes per acre in one of the three most recent seasons. It is important to note, however, that the net payoffs from APH are decreasing over time because the premium rates are increasing and the APH yield is decreasing. In 2026/27, it is possible that the RMA requirement for producing 100 boxes per acre in one of the three most recent seasons to obtain APH coverage will not be met in many blocks. This will cause the grower's APH yield to be reduced by 20%, making potential APH payoffs, if any, significantly smaller. I show such an outcome in a longer version of this article, which is available at [UF/IFAS Citrus Research and Education Center's website](#). Taking these considerations into account, individual growers may want to make their own calculations so they can choose the optimal level of coverage for their groves.

Reference

Singerman, A. 2025. "2025–2026 Florida Citrus Production Guide: Crop Insurance Policies Available to Citrus

¹ This document is FE1176, a publication of the Department of Food and Resource Economics, UF/IFAS Extension. Original publication date July 2026. Visit the Ask IFAS website at <https://ask.ifas.ufl.edu> for the currently supported version of this publication. © 2026 UF/IFAS. This publication is licensed under [CC BY-NC-ND 4.0](#).

² Ariel Singerman, former associate professor, Department of Food and Resource Economics, UF/IFAS Citrus Research and Education Center, Lake Alfred, FL; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information, and other services only to individuals and institutions that operate in compliance with applicable federal and state non-discrimination laws and policies. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, Dean for UF/IFAS Extension.