

Peach Cost and Return Estimate Spreadsheet

Matt Ernst¹ November 2019

Summary

Peaches are a popular summer crop with good longterm profitability potential for Kentucky producers willing to invest in establishing a peach orchard. A multi-year cost and return estimate, used in the past to estimate peach profitability potential in Center for Crop Diversification fact sheets, was adapted in Fall 2019 to make an interactive peach budget spreadsheet tool to estimate profitability.

Spreadsheet Instructions

The spreadsheet was created so that the most common variables could be changed in the worksheet labeled "Variables." Changes in these values will transpose across all years in which those variables apply. To change other values in each production year worksheet, simply input the estimate in the corresponding cell. Formulas for calculating values like interest, total costs and returns are contained in the respective cells. Users may make changes to these formulas if needed to make production assumptions.

Assumptions

These estimates were based on realistic production assumptions for peach production in Kentucky during the 2019 season. Like any horticultural crop, the actual management and production expenses will vary

between individual farms and seasons. Spreadsheet users will need to generate their own estimates for input costs such as fungicides, herbicides, insect control and harvest expenses. Varying produc- DIVERSIFICATION tion practices, differences in orchard



sites, weather and many other production variables can create significant changes in production costs between years.

A planting population of 110 trees per acre (18 feet x 22 feet) is assumed in these budgets. This was a common spacing used in Kentucky peach orchards as of 2019. A cost for tree guards is assigned in the planting year; additional wildlife control costs may be warranted, depending on the production situation.

Irrigation costs were calculated using common trickle irrigation system specifications for orchard establishment. A fixed establishment cost of \$1,800 is assumed

> per acre, depreciated over seven years. A monthly irrigation fee, for consumable materials, repairs and energy, is also assumed.

Fixed machinery costs were calculated



¹Matt Ernst is an independent contractor with the Center for Crop Diversification.

using recommended cultural practices and adapting an Iowa State machinery cost calculator based on engineering standards. In addition, fixed costs include an annual fixed cost for refrigeration. The actual costs of refrigeration/cooling are highly variable because of different types of coolers used from farm to farm.

Herbicide, insecticide and fungicide costs were calculated using recommended on-label rates and 2019 Kentucky input prices. These do not constitute recommendations for application method or products. Naming of pesticide products, or assuming use of particular products to generate these estimates, does not constitute an endorsement by the University of Kentucky or its Cooperative Extension Service. Additional information is available at the following websites/publications:

Peaches Crop Profile, Center for Crop Diversification https://www.uky.edu/ccd/sites/www.uky.edu.ccd/files/peaches.pdf

Cultural Calendar for Commercial Peach Production http://plantpathology.ca.uky.edu/files/ppfs-fr-t-26.pdf

Commercial Peach/Stone Fruit Spray Schedule Worksheet & Sample Spray Guide http://plantpathology.ca.uky.edu/files/ppfs-fr-t-23.pdf

Effectiveness of Fungicides for Management of Stone Fruit Diseases

http://plantpathology.ca.uky.edu/files/ppfs-fr-t-14.pdf

To access the interactive peach budget spreadsheet, go to the Center for Crop Diversification budgets page at https://www.uky.edu/ccd/tools/budgets.

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Reviewed by John Strang, UK Extension Fruit Specialist, and Nicole Gauthier, UK Extension Plant Pathologist Photo courtesy of <u>Pixabay.com</u>

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