

Incorporating a Field Data Log into the Peanut Risk Tool Developed at North Carolina State University

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An Excel based peanut risk tool was developed at North Carolina State University and released in 2019. Funding has been provided by USDA-CAR, North Carolina Peanut Growers Association (NCPGA) and USAID Feed the Future Peanut Innovation. Development included input from research and extension specialists at North Carolina State University, Clemson University and Virginia Tech and Cooperative Extension agents (www.peanut.ces.edu). The risk tool assists peanut growers in selecting production and pest management practices to minimize potential risk of yield loss. Risks from several common diseases, insects and weeds found in peanut production systems are evaluated. The risk tool also provides cost guidance associated with the selected management practices. To further assist growers, the ability to generate field data logs has been incorporated into the risk tool. The logs allow growers to record field practices, growing conditions, crop development, yield components and pest notes so they can compare fields as well as track information across years. A log is generated by simply clicking on a button on the risk worksheet of the risk tool after selecting field production and pest management practices and evaluating potential risk. The user enters a name for the log which is then generated as a worksheet in an Excel workbook named Peanut_Logs.xlsx. The logs workbook contains all logs and is stored in the same directory as the risk tool workbook. The log worksheet automatically includes all practices selected in the risk tool combined with the empty log template worksheet found in the risk tool workbook. The log template is currently based on the production practices survey published in the annual North Carolina Peanut Information publication. Additional data cells have been added for recording peanut development dates, rainfall/irrigation dates and amounts, and grading information. The user has full control of the logs they generate and can record only the data they want as well as add additional information if needed. Additionally, the logs give growers a new option for recording field level management data. Based on farmer surveys during 2020 Cooperative Extension peanut production meetings in North Carolina, South Carolina, and Virginia, most growers do not use an electronic platform to store production and pest management data. In the survey (n = 276), approximately 66% of growers used paper copies for information collection with only 18% storing information in spreadsheets. Twenty-three percent used Worker Protection Standard (WPS) related documents. Four percent of growers indicated that their consultant maintained records while 8% relied solely on memory.