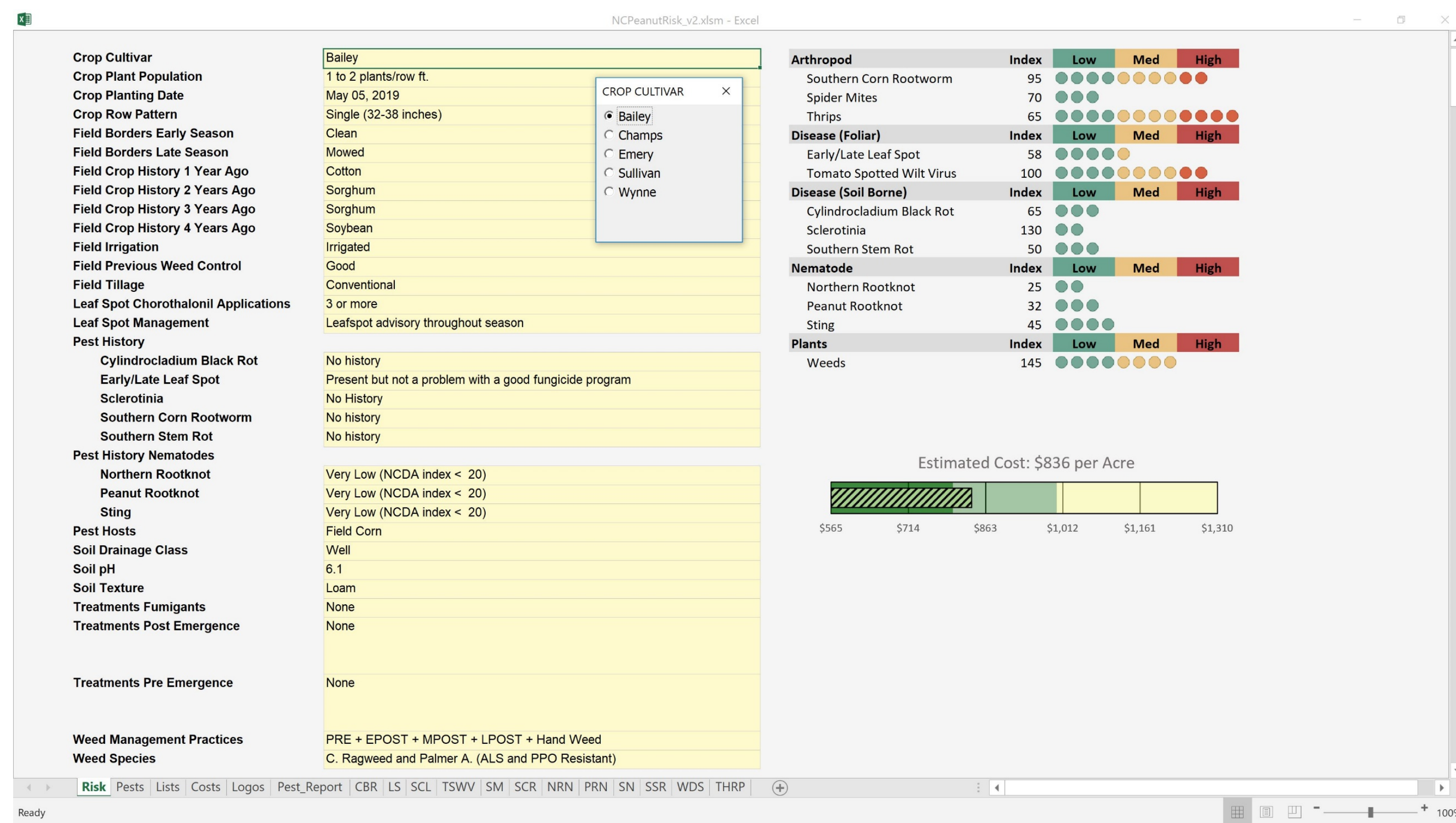


Modification of the Peanut Risk Tool Developed at North Carolina State University

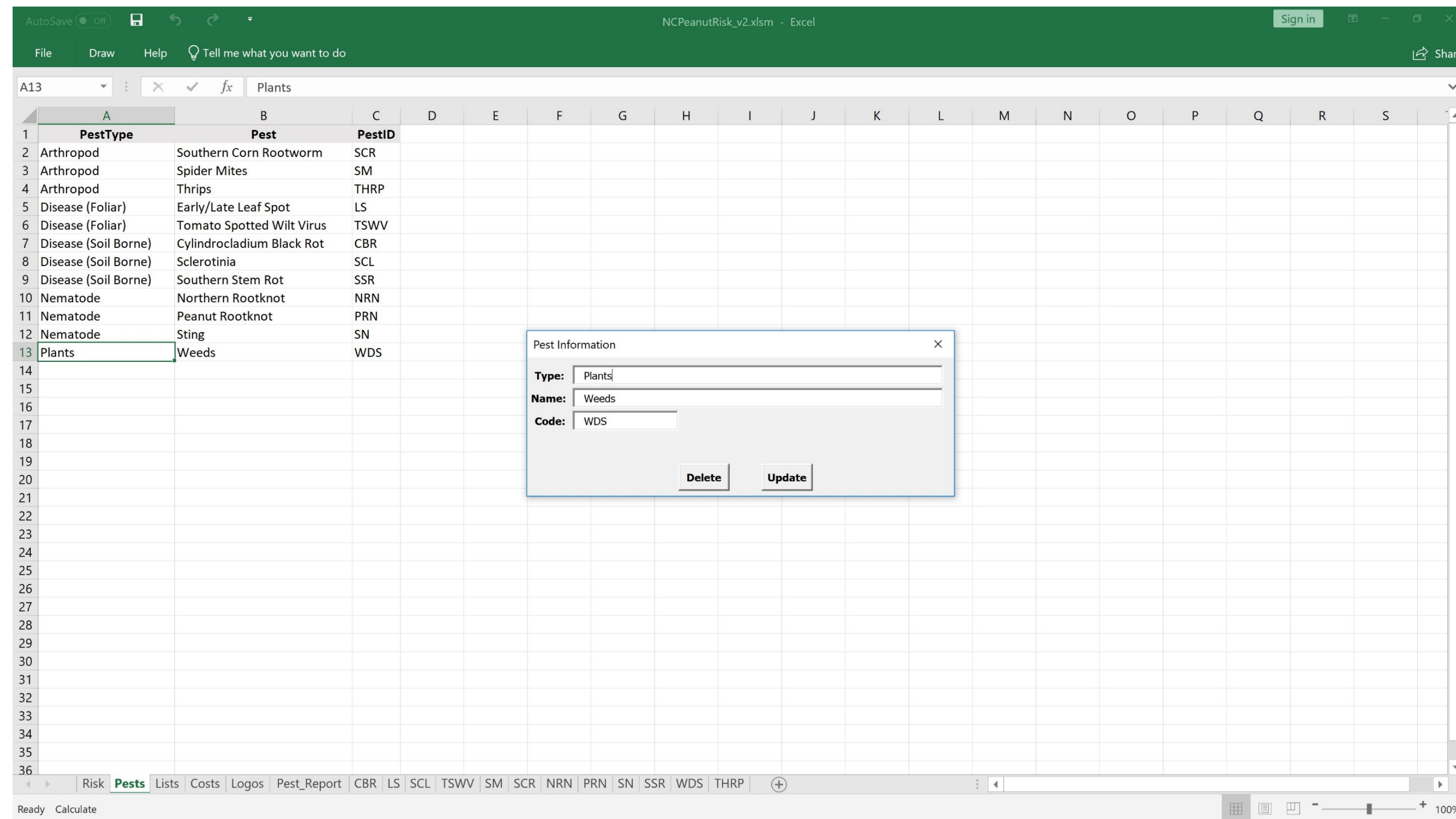
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North Carolina State University, Raleigh, NC

NC Peanut Risk Tool Overview

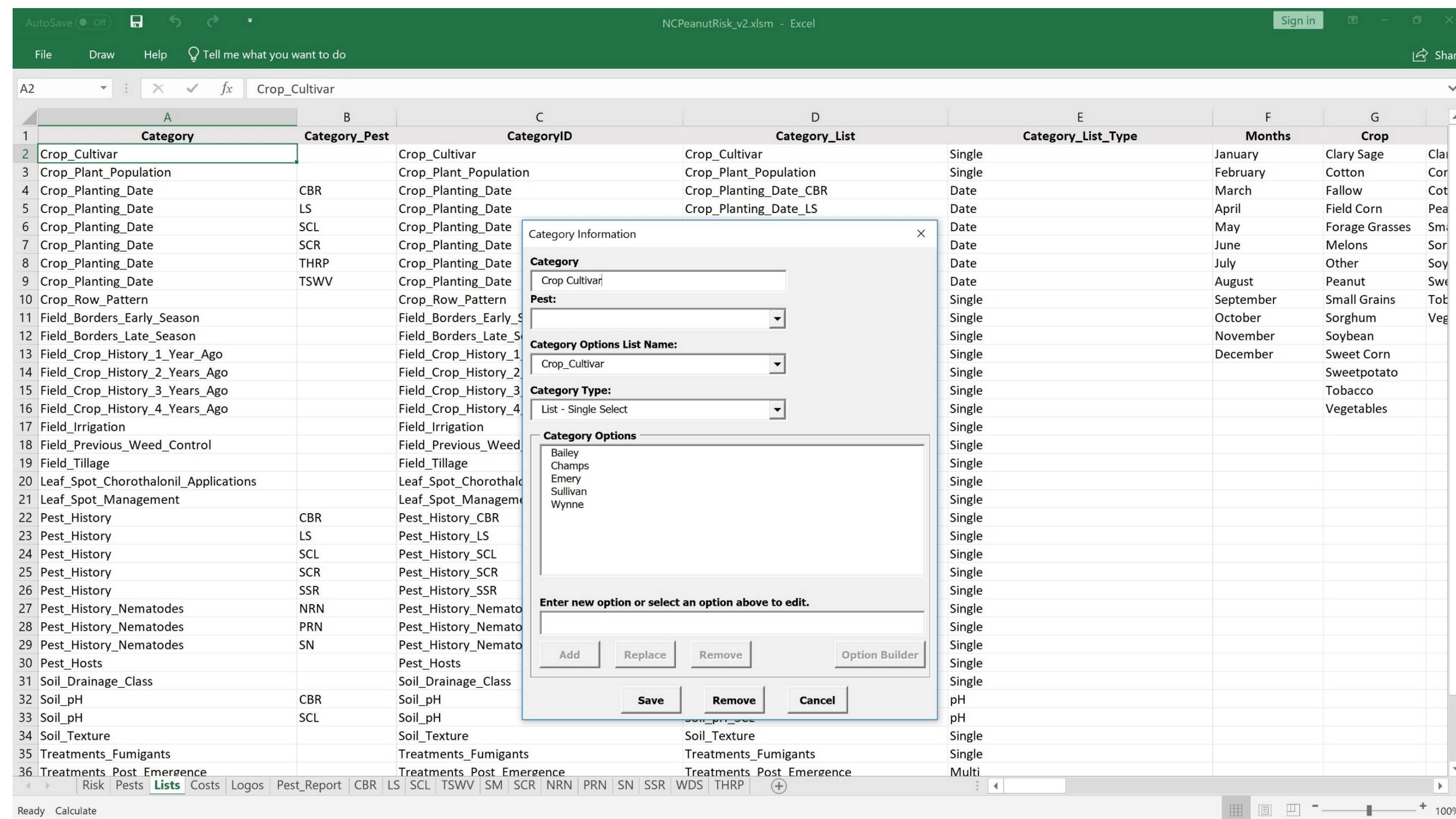
Peanut growers are challenged by numerous biotic and abiotic stresses and the economics required to adequately address the potential negative impact of these stresses on peanut in their production and pest management approaches. In 2005, funding through the USDA-CAR program and the North Carolina Peanut Growers Association (NCPGA) was used to develop a comprehensive risk tool with input from research and extension specialist at North Carolina State University, Clemson University and Virginia Tech and Cooperative Extension agents. More recently, the peanut risk tool has been expanded to include weeds and other pests in Excel Spreadsheet format. This approach is designed to facilitate updates and modifications by Extension Specialists on a more frequent basis without the need for a computer programmer. The updated version of the risk tool was funded in part by USAID Feed the Future Peanut Innovation Lab and the NCPGA. A risk index for each pest was developed and modeled on spotted wilt and southern corn rootworm indices developed previously. Weed management and thrips have been added to the new version of the risk tool. The risk tool allows users to evaluate potential total risk to crop yield when all pests are considered along with recommendations on how practices should be adjusted. As practices are altered to modify risk the change in cost of those decisions is provided. The basic premise and format of the Excel based risk tool is to allow domestic and international institutions and organizations to develop and modify similar risk tools.



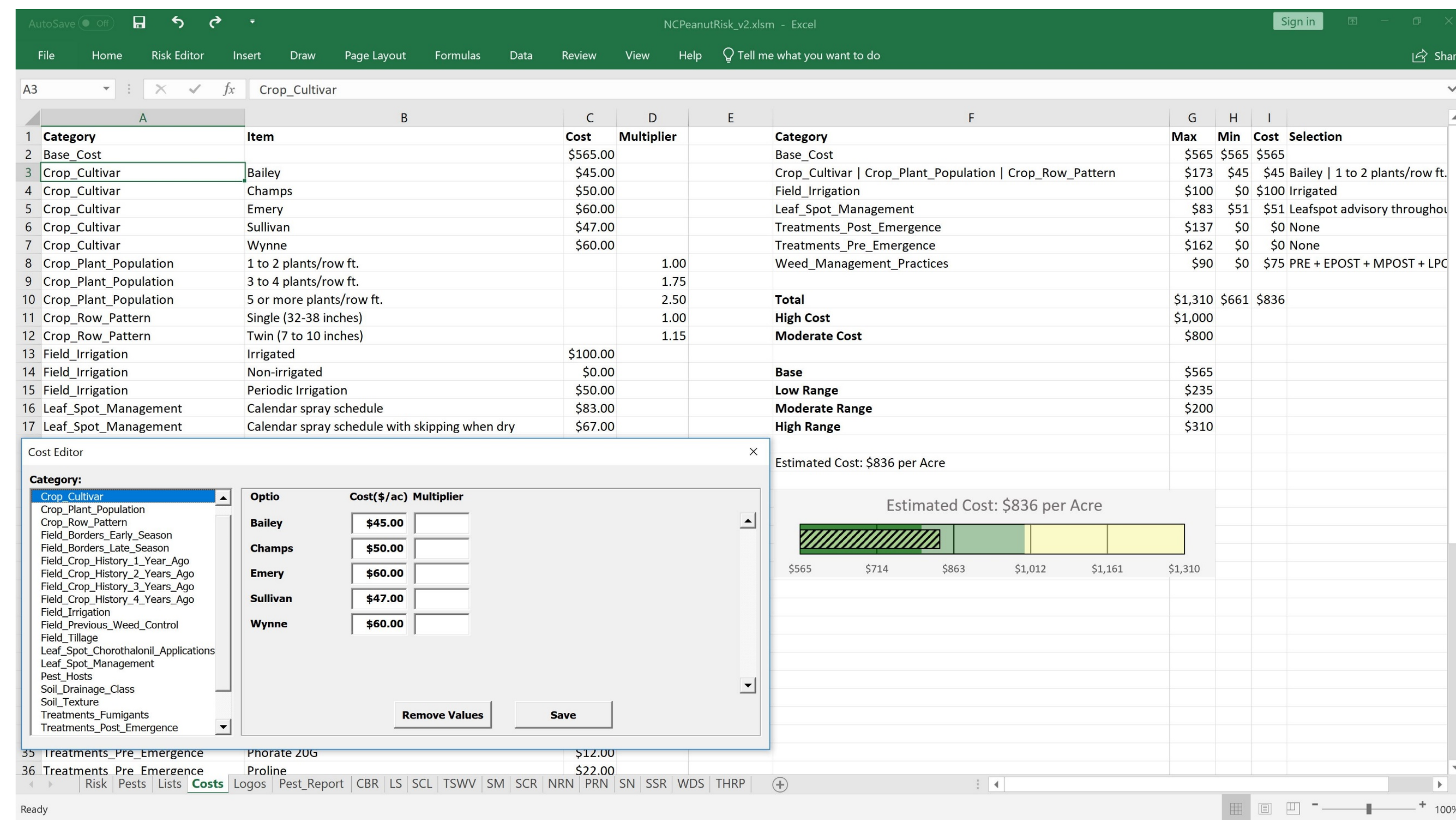
The risk sheet shown above contains the risk tool which allows users to evaluate the risk of pests on yield as management practices are changed. To change manage practices, users click on a yellow highlighted cell and a selection form is displayed with the available options for the category listed to the right. The above screen shows the cultivar selection form.



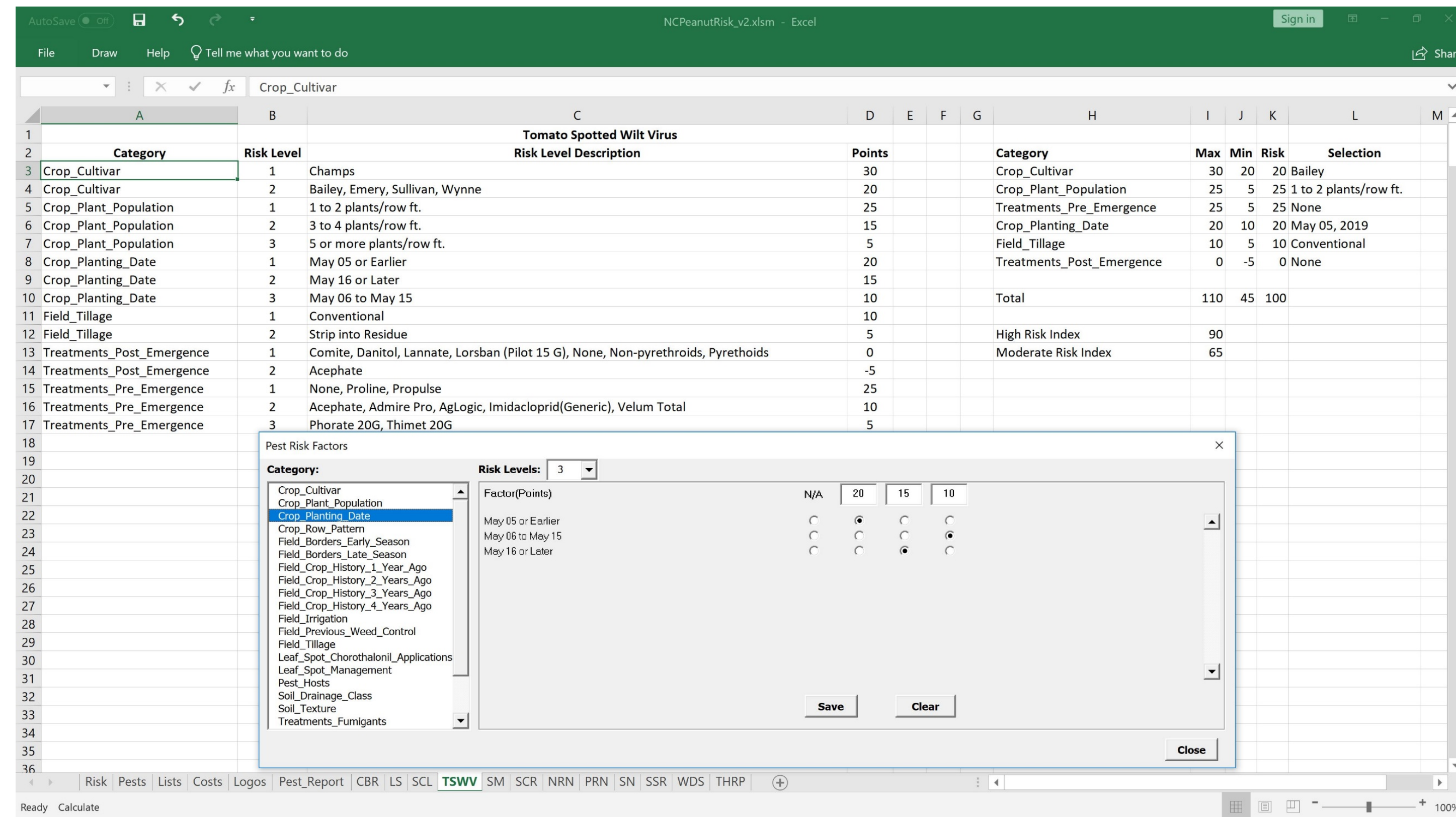
The pest sheet contains pest information and allows risk tool editors to modify the pests which are included in the risk tool. A user form is used to assist editors. As pests are added and removed from the risk tool, corresponding pest sheets are added and removed from the workbook and the risk sheet is automatically updated.



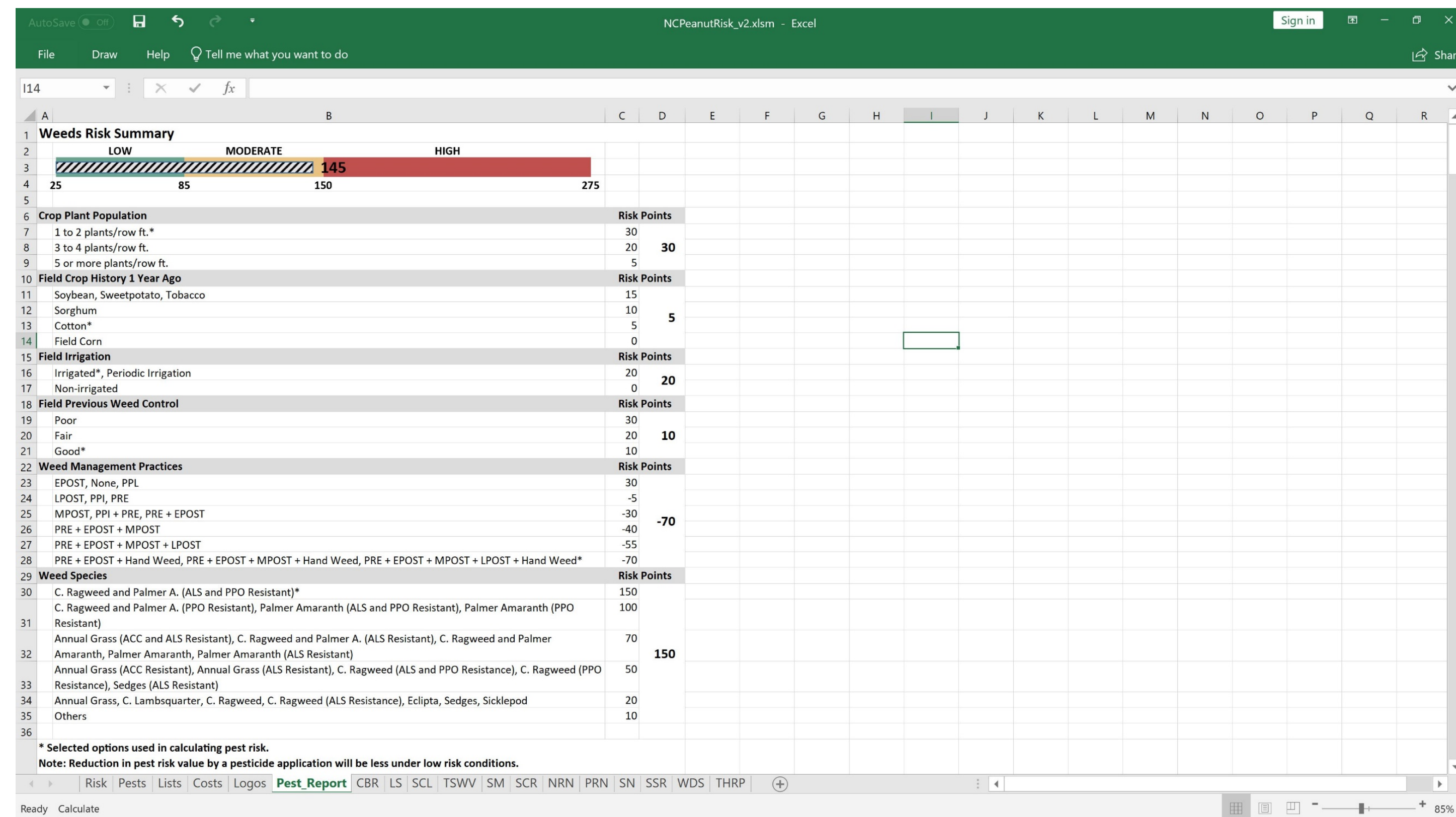
Information on peanut management categories(practices) and options associated with each category are maintained on the lists sheet. Again, a user form is used to assist risk tool editors in developing and maintaining information associated with peanut production practices used within the risk tool.



Cost information for the risk tool is maintained in the costs sheet. From this sheet through an user form, risk tool editors can manage costs associated with peanut production practices. The cost graph from this sheet is duplicated on the risk sheet.



For each pest defined within the risk tool, a corresponding pest sheet is generated. Within a pest sheet, the production practices which influence the pest are identified and risk values are assigned. Similar to other sheets, user forms are utilized to assist editors in managing the information required in the pest sheet. The current NC peanut risk tool includes 12 pests.



The pest report sheet provides a detailed look at the potential risk of a pest based on the production practices selected. The pest shown on this sheet is determined by the last pest clicked within the risk sheet. This sheet is also used to facilitate printing reports from the risk sheet when a pest is clicked.