

Experiences Developing Peanut Production Risk Tools Using Microsoft Excel **G. BUOL***, and D.L. JORDAN, North Carolina State University, Raleigh, NC 27695.

Microsoft (MS) Excel was used to create peanut production risk management tools for North Carolina (USA), Ghana, Malawi, Argentina, and India. These tools were aimed at improving the delivery of recommended production and pest management practices to farmers for pre-season planning to minimize potential yield loss from multiple pests. The risk tools also provide a log feature, allowing farmers to record and save production information that can be reviewed and used in future decisions. Editing features built into the base risk tool, allow for the various production practices and pests of each country to be incorporated into each risk tool. The development of the risk tools has been beneficial in bringing researchers from multiple disciplines together to identify knowledge gaps and identify future research efforts. Microsoft Excel with its built-in Visual Basic for Applications (VBA) programming language and MS Excel's general use by scientist and practitioners has proven to be a good platform for developing and distributing the peanut risk tools. However, the MS Excel based risk tools do have some limitations. The two primary limitations are the requirement to have MS Excel and the ability to expand the risk tools for in-season decisions when crop conditions and pest populations are dynamically changing. In the future, concepts from the current risk tools, especially evaluating multiple pests and interactions, should be useful in the development of in-season decision aids to assist farmers in making timely recommended management practices to mitigate risk of pest yield loss and to ensure good crop development.