

## **Contrasts of Peanut Risk Management Tools for Peanuts in Argentina, Ghana, India, Malawi, and North Carolina**

**G. BUOL\***, D.L. JORDAN, R.L. BRANDENBURG, B.B. SHEW, and G.G. WILKERSON, North Carolina State University, Raleigh, NC 27695; M. ABULULAI and J. NBOYINE, Council for Scientific and Industrial Research-Savanna Agricultural Research Institute, Tamale, Ghana; R. AKROMAH, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; M.B. MOCHIAH, Council for Scientific and Industrial Research-Crops Research Institute, Kumasi, Ghana; W. MHANGO, Crop and Soil Sciences Department, Lilongwe University of Agriculture and Natural Resources, Lilongwe, Malawi; J. CHINTU, Chitedze Agricultural Research Service, Lilongwe, Malawi; S. MORICHETTI, Aceitera General Deheza, General Deheza, Argentina; K. JODON, Division of Plant Improvement and Pest Management, India Council of Agricultural Research-Central Arid Zone Research Institute, Junagadh, Gujarat, India; G. MACDONALD, University of Florida, Gainesville, FL 32611; and D. HOISINGTON and J. RHOADS, Feed the Future Innovation Lab for Peanut, University of Georgia, Athens, GA 30602.

Effectively managing risk is important for success in establishing and maintaining sustainable farming systems. Part of managing risk is knowing how farming practices affect a wide range of pests. A risk tool for North Carolina peanut production (<https://peanut.ces.ncsu.edu/peanut-risk-tool-and-field-log/>) was developed using Microsoft Excel software. Individual risk indices were developed for over 10 peanut pests commonly found in North Carolina. The risk tool allows practitioners to simultaneously observe the aggregate risk of all practices related to these pests. The main goal of the tool is to assist farmers and their advisors in identifying practices to minimize pest risk. Cost of each practice is included in the risk tool to demonstrate the financial impact that can be observed when practices are adjusted to reduce risk. Similar tools have been developed for Ghana and Malawi production systems. A risk tool is currently under development for India and plans are to develop a risk tool for Argentina. The North Carolina, India, and the planned Argentina risk tools evaluate multiple pest risk indices with a range of tools or practices impacting each pest. In contrast, the Ghana and Malawi risk tools evaluate risk indices for yield and aflatoxin. These risk tools can be downloaded at <https://cropmanagement.cals.ncsu.edu/risk-tools/default.html>. The tools have also been beneficial in formal classroom instruction and in conversations among collaborative teams of researchers and extension faculty and staff in modifying production recommendations. These interactions have helped researchers identify knowledge gaps on particular pests or pest complexes. Finally, the risk tools are designed to be living tools that can be modified to incorporate new pests or new practices affecting existing pest indices.