Fungal Diseases of Groundnut in Southern Ghana.

E. MOSES*, J.K. TWUMASI, M. OWUSU-AKYAW, Plant Health Division, Crops Research Institute, P.O. Box 3785, Kumasi, Ghana; and R.L. BRANDENBURG, North Carolina State University, Raleigh, NC, USA.

Groundnut is an important food crop in Ghana. The seed is pressed for oil and the roasted nut is used in soups and other meal preparations. It is an important cash crop for several rural poor farmers and contributes to food security in many farming communities in Ghana. Yields of groundnut in Ghana are below the reported yields from major producing countries. Late leaf spot (Phaeoisariopsis personata) and rust (Puccinia arachidis) were identified in farms in Ashanti and Brong-Ahafo regions of Ghana to be causing severe yield losses in 1998. Surveys were conducted in 1999 and 2001 in four regions in southern Ghana (Ashanti, Brong-Ahafo, Eastern and Volta) to document the incidence of fungal diseases and the need to develop control measures. Late leaf spot and rust were the major fungal diseases identified in the two surveys. Incidence of late leaf spot was present in the four regions in 1999 and 2001. The severity of late leaf spot ranged between 2.0 and 5.0 on a modified 1.0 to 5.0 scale in 1999. Incidence of rust in 1999 ranged between 72 and 83% with the highest incidence recorded in the Volta region. Incidence of rust in 2001 ranged between 30 and 75% in the four regions. The severity of rust was below 3.0 on a 1.0 to 5.0 scale. Farmers in the four regions cultivated largely two genotypes of groundnuts ('Konkoma' and 'China'), which are susceptible to late leaf spot. Poor pod filling is a common feature in plants with severe incidence of late leaf spot. Improved varieties with resistance to diseases are not available to farmers. Knowledge on groundnut diseases in southern Ghana was found to be inadequate among farmers. Currently, most of the farmers surveyed do very little for control of peanut diseases. Actions needed to improve disease control include screening genotypes for disease resistance, implementation of disease management practices, and training farmers to recognize diseases.