Screening for resistance to leaf spot *(Nothopassalora personata and Passalora arachidicola)*.

J.M. CASON*, Texas A&M AgriLife Research, Texas A&M University System, Stephenville, TX 76401; W.J. GRICHAR, Texas A&M AgriLife Research, Texas A&M University System, Yoakum, TX 77995; M.D. BUROW, Texas A&M AgriLife Research, Texas A&M University System, Lubbock, TX, 79403 and Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, 79409; C. MONCLOVA-SANTANA, Texas A&M AgriLife Research, Texas A&M University System, Lubbock, TX, 79403 and Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, 79409, W. RAVELOMBOLA, E. KIMURA, Texas A&M AgriLife Research, Texas A&M University System, Vernon, TX 76384; C.E. SIMPSON, Texas A&M AgriLife Research, Texas A&M University System, Stephenville, TX 76401.

Leaf spot is one of the most common diseases in the peanut belt and represents one of the most costly to control. Genetic resistance represents the most cost-effective method of control. Infection is produced by 2 casual agents, *Nothopassalora personata* (previously known as *Cercosporidium personatum*) which causes late leaf spot and *Passalora arachidicola* (previously known as *Cercospora arachidicola*) which causes early leaf spot. As the name implies early leaf spot is typically seen early in the season and late leaf spot occurring later. However, either disease can occur at anytime during the season with characteristic dark-brown (ELS) to black (LLS) lesions first appearing at the bottom of the plant and progressing upward. Early leaf spot can be confirmed by spores on the upper leaf surface and late leafspot by spores on the lower leaf surface. The Texas A&M AgriLife Research peanut program has been developing breeding lines and screening for leaf spot resistance for over 30 years at a screening nursery at the former Texas A&M AgriLife Research and Extension Center in Yoakum, Texas as well as off station testing locations. The advanced line test represents the programs most developed lines that are tested around the state at up to 9 locations. For disease evaluations we conduct late season ratings prior to harvest to estimate disease. Plots are rated at the end of the season for overall leaf spot infection on a 0-10 scale, where 0 is no disease and 10 is all plants dead. At the Yoakum, Tx site in 2020 and 2021 plots were planted in 1 row, 3.1 m replicated plots with 3 replications. The 2020 growing season was extremely dry while the 2021 season was wet. Overall, disease incidence was average in both years. Statistical differences were found in both years although the coefficient of variation was high in both years, which is common in screening nurseries. Statistically significant differences were found in this set of ratings and will be presented.