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The use of resistant varieties is the most sustainable approach to managing yam anthracnose across all the yam producing countries in the tropics. The efficiency of deploying resistant varieties will however depend on a good understanding of interaction between yam genotypes and different strains of anthracnose pathogen. Differential interaction was evaluated in the resistance of 17 Dioscorea alata genotypes to 10 isolates of Colletotrichum gloeosporioides the causal agent of yam anthracnose using tissue culture-derived whole-plant assay under controlled environment. Resistance was generally quantitative, and could be isolate specific or non-specific. Isolate-specific resistance appears to be mostly partial, characterized by reduced rate of disease development despite infection. However, incompatible isolate-specific reactions resulting in no disease development were obtained in 14 of the 170 G × I combinations. These indicate the possibility of qualitative resistance that could fit the classical definition of gene-for-gene model in yam anthracnose. The implications of these results for resistance breeding and cultivar selection for stable and durable sources of yam anthracnose resistance will be discussed.
‘to harness research innovations to unleash the potential of yam’

PROGRAM AND BOOK OF ABSTRACTS