

Abstract

Fungal rots have been reported as a limiting factor to cassava production in the humid forests of Central and West Africa. Starting April 2003 tuber rots were studied for one year as part of a diagnostic survey designed to investigate biophysical and crop management factors limiting cassava production in Pouma district, located halfway between Douala and Yaoundé in Cameroon. This paper reports the extent of root rot occurrence in the study area comprising of 62 farmer-managed trials. Root rot data was recorded at 6, 9, and 12 months after planting (MAP). At each sampling time samples of rotten tissue were collected for isolation and identification of the fungi. At 6 MAP, 41% of the field plots were free from rot symptoms and only little rotting was observed in 55% of the field plots. However, at this early stage of tuber development, more than 50% of root volume was rotted in nearly 2% fields. At 9 MAP rotting incidence and severity had substantially increased as compared to 6 MAP, but still only about 2% of the fields had up to 50% of the root volume rotted. At 12 MAP rot incidence was less than at 9 MAP, but severity had substantially increased with tubers in 11% of the fields having up to 25% of their total volume rotted. Pathogens isolated from rot specimens include *Botryodiplodia theobromae*, *Macrophomina phaseolina*, *Fusarium* sp., *Armillaria* sp., *Aspergillus* sp., *Sclerotium rolfsii* and *Trichoderma* sp. Data obtained indicate that fungal rots could cause substantial loss to cassava production in the Pouma area. However, the loss is less if cassava harvesting is done at 12 months.