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First report of Cassava Bacterial Blight caused by *Xanthomonas axonopodis* pv. *manihotis* in Burkina Faso.

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Xanthomonas axonopodis pv. *manihotis* is the causal agent of Cassava Bacterial Blight (CBB) which is a major disease of cassava in tropical and subtropical areas. CBB is a foliar and vascular disease characterized by angular leaf lesions, blight, wilting, stem exudates and stem cankers. Since cassava is propagated clonally from stem cuttings, CBB plays a major role in limiting productivity with losses between 12-100% affecting both yield and planting material. In August of 2011 and October of 2012, CBB symptoms were observed on ten-months-old field cassava grown in Bonfeba and in Takeledougou, Burkina-Faso (Cascades region). Symptoms consisted of angular water-soaked leaf lesions, wilt and visible exudates on the stem. White *Xanthomonas*-like colonies were isolated from leaf tissues on LPGA medium (yeast 5 g, peptone 5 g, glucose 5 g, bacto agar 15 g, distilled water 1,000 ml). A PCR assay developed for the identification of *X.axonopodis* pv. *manihotis* (1) was used to determine the identity of *Xanthomonas*-like strains. *X.axonopodis* pv. *manihotis* strain CFBP7661 was used as a positive control. The expected DNA fragment (898bp) was obtained from all the strains. No fragment was observed for negative controls (distilled water as the template). Three *X. axonopodis* pv. *manihotis* strains were further analyzed by sequence analysis using the *gyrB* and *rpoD* housekeeping genes. When comparing *rpoD* and *gyrB* sequences, strains were 99 to 100% identical to sixty five different strains of *X. axonopodis* pv. *manihotis*. Pathogenicity tests were performed on greenhouse-grown 4-week-old cassava plants cv. MCOL 1522. Cultures were grown overnight in LPGA medium and adjusted in sterile water to 1×10^8 CFU/ml and inoculated into cassava leaves and stems as previously described (2). Control plants were inoculated with sterile water. *X.axonopodis* pv. *manihotis* strain CFBP7661 was used as a positive control. After 7 days of incubation in the greenhouse at $28 \pm 1^\circ\text{C}$ with a 12h photoperiod, inoculated leaves developed water-soaked lesions. Wilted leaves and stem exudates were visible at 30 days after stem inoculation. Symptoms were identical to those seen in the field. Control plants remained symptomless. Koch's postulates were fulfilled after re-isolation of *Xanthomonas*-like white strains from leaf symptoms on inoculated cassava and confirmation as *X. axonopodis* pv. *manihotis* by PCR assay as described above. Three strains (CFBP7945, CFBP7946, CFBP7947) were deposited in the French Collection for Plant-associated Bacteria (CIRM-CFBP). Information on Xam strains as well as *gyrB* and *rpoD* sequences are available through CIRM-CFBP http://www6.inra.fr/cirm_eng/CFBP-Plant-Associated-Bacteria. To our knowledge, this is the first report of CBB in Burkina Faso. Since cassava is becoming a crop of importance for human consumption in Burkina-Faso, CBB may limit productivity. Further surveys will be necessary to evaluate the geographic distribution and prevalence of CBB in Burkina-Faso and neighboring countries.
