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### Construction Of A Genetic Linkage Map Of The Banana Fungal Pathogen, *Mycosphaerella fijiensis*, Causal Agent Of Black Sigatoka Disease

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The haploid, hemibiotrophic ascomycete fungus *Mycosphaerella fijiensis* (Morelet) is the causal agent of black Sigatoka, the most economically important disease of banana (*Musa* spp.). A genetic linkage map of *M. fijiensis* was constructed from a cross between isolates CIRAD86 (from Cameroon) and CIRAD139A (from Colombia). Sixty one of the progeny were analyzed using molecular markers and the Mating Type (MAT) locus. The genetic linkage map consists of 298 AFLP and 16 SSR markers with twenty three linkage groups, containing 5 or more markers, covering 1879 cM. Markers are separated on average by around 5.9 cM. The MAT locus was shown to segregate in a 1:1 ratio but could not be successfully mapped. The relation between physical size and genetic distance was approximately 40.9 kb/cM. The estimated total haploid genome size was calculated using the genetic mapping data, to be 4303.5 cM. This is the first genetic linkage map reported for this important foliar pathogen of banana