New microsatellite markers for bananas (Musa spp)

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ABSTRACT. Thirty-four microsatellite markers (SSRs) were identified in EST and BAC clones from Musa acuminata burmannicoides var. Calcutta 4 and validated in 22 Musa genotypes from the Banana Germplasm Bank of Embrapa-CNPMF, which includes wild and improved diploids. The number of alleles per locus ranged from 2 to 14. The markers were considered highly informative based on their polymorphism information content values; more than 50% were above 0.5. These SSRs will be useful for banana breeding programs, for studies of genetic diversity, germplasm characterization and selection, development of saturated genetic linkage maps, and marker assisted selection.

Key words: Genetic breeding; Microsatellites; Primer validation; Musa spp