[BIO07]
Identification of molecular markers for disease resistance genes to *Fusarium oxysporum* f. sp. *cubense* in *Musa acuminata* ssp. *malaccensis* for marker assisted selection (MAS)

[1]Fatimah Kayat, [2]Muhammad Asif Javed, [3]Ho Yuk Wah, [1]Rofina Yasmin Othman

[1]Institute of Biological Sciences (Genetics), Faculty of Sciences, University of Malaya.
[2]Department of Biological Sciences, Texas Tech University, Lubbock, 79409-1331,Texas, USA.
[3]Research Division, United Plantation Berhad, Teluk Intan, Perak.
E-mail: fatimahkayat@yahoo.com

Conventional banana breeding is hampered by sterility, triploidy, long generation time and unavailability of FOC testing sites. Wild seeded *Musa acuminata* ssp. *malaccensis* (AA) has been found to be resistant to FOC race 4 hence could be useful for the study of populations for the development of molecular markers and gene cloning. DNA markers have shown tremendous potential for analyzing problems in plant genetic and breeding. Random amplified polymorphic DNA (RAPD) and amplified fragment length polymorphism (AFLP) can readily be used without prior knowledge of the genome. Sequence tagged microsatellite site (STMS) markers provided high specificity, reproducibility and co-dominance making them markers of choice for banana breeding. Results showed that RAPD markers generated a large amount of polymorphism in wild banana seed progenies. STMS markers generated among the wild banana seed progenies showed variation in seven microsatellite loci thus making it useful and sensitive for banana marker assisted selection.