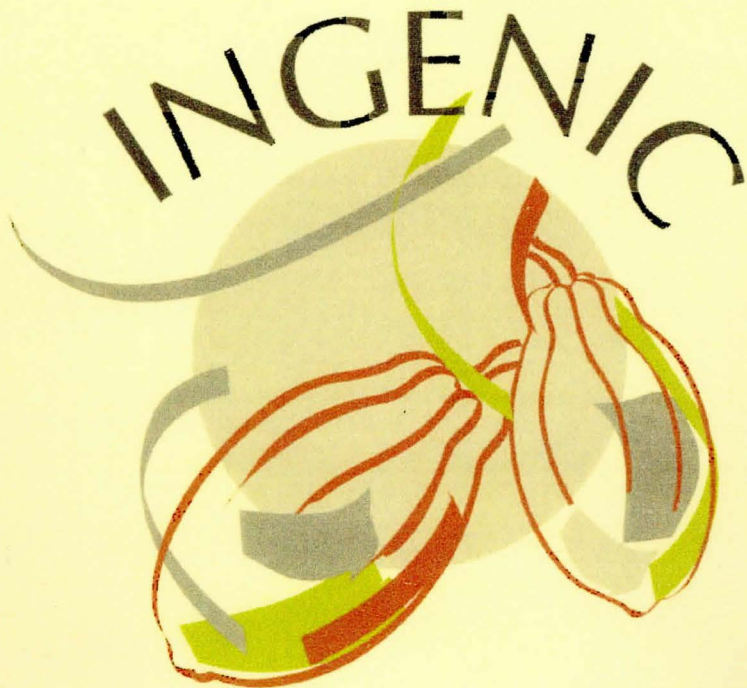


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→ ABSTRACTS ←



QTL related to yield components and vigor traits identified in cacao progenies and perspectives for MAS

D. Clément*, A.M. Risterruci*, D. Fargas*, M. Flament*, N'Goran** and C.Lanaud*

* Cirad, BP 5035, 34032 Montpellier Cedex, France

** CNRA, 01 BP 1740 Abidjan 01, Côte d'Ivoire

Theobroma cacao is mainly cultivated by small farmers and production is concentrated in Africa. The sustainability of the productivity of the culture passes partially by the capacity of the breeding programs to accumulate in new varieties favorable alleles for the main agronomic traits. The spectacular development of the molecular marker research allows today to have more direct access to the genotype. During the last ten years, studies were carried out to map QTL for agronomic traits on several plant species. In cacao, ten progenies were mapped and several QTL detected especially for the resistance to *Phytophthora* spc and yield components. The comparison of the different maps is possible through specific markers (RFLP and microsatellites) mapped on the reference map of cacao, containing 473 markers. The purpose of this article is to analyze results on QTL detection of yield and vigor traits and co-location these QTL identified on the available genetic maps. Methodological approaches to QTL's detection are also presented. The further research perspectives on mapping of yield and vigor traits and possible use of molecular markers in selection of these traits in cacao are discussed.