

- 649-2 **Using BOX and ERIC-PCR to differentiate *Fusarium decemcellulare* isolated from guarana plant**
(Uso de BOX e ERIC-PCR para diferenciação de *Fusarium decemcellulare* isolado de guaranazeiro)

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Resumo

Fusarium decemcellulare is related to several diseases of important economic crops in tropical regions. In guarana plant (*Paullinia cupana* var. *sorbilis*) are present three symptoms: floral hyperplasia, oversprouting of vegetative buds and galls on the stalk. Molecular diversity of isolates from different symptoms and genotypes of guarana plant has not been conducted. This study aimed to evaluate the diversity of *F. decemcellulare* by BOX and ERIC-PCR. For this study, 22 isolates symptoms of four genotypes of guarana plant were used. The diversity analysis was performed by BOX-PCR, using the primer BOX-A1R (5'-CTACGGCAAGGCGACGCTGACG-3'), and ERIC-PCR, using primers ERIC1 (3'-CACTTAGGGGTCCTCGAATGTA-5') and ERIC2 (5'-AAGTAAGTGACTGGGGTGAGCG-3'). The polymorphism data were analyzed by Dice similarity coefficient and clustered by UPGMA method. Were identified 11 haplotypes: 6 from floral hyperplasia, 4 from galls and 1 in oversprouting. In the same plant until 6 haplotypes were observed. The isolates were grouped by plant genotype, except the isolates obtained from oversprouting symptom, separated into a different group, independent of the plant genotype and location site. The results performed with molecular markers together or separately indicate the occurrence of genetic diversity inter- and intra-genotype. The identification of different mating type from this isolates will indicate whether sexual reproduction could be occurring.

Apoio: CNPq, FAPEAM