

Genetic variability amongst *Fusarium* spp. in the section *Liseola* from *bakanae*-infected rice in Malaysia and Indonesia by RAPD analysis.

ABSTRACT

RAPD was used to assess genetic relatedness amongst 59 strains of *Fusarium* spp. in the section *Liseola* obtained from rice plants showing *bakanae* symptoms from different major granary areas in Malaysia and Indonesia, as well as 14 strains of standard testers from U.S.A. RAPD analysis using 10 nucleotides with 60 – 70% G+C contents primers i.e. OPA-02 (5'-tgc-cga-gct-g-3'), OPA-04 (5'-aat-cgg-gct-g-3'), OPA-09 (5'-ggg-taa-cgc-c-3'), OPA-17 (5'-gac-cgc-ttg-t-3'), OPT-11 (5'-ttc-ccc-gcg-a-3'), OPT-18 (5'-gat-gcc-aga-c-3'), OPU-06 (5'-acc-ttt-gcg-g-3'), OPU-16 (5'-cgt-cgc-tgg-a-3'), OPV-06 (5'-acg-ccc-agg-t-3') and OPV-16 (5'-aca-ccc-cac-a-3') showed variations on DNA profiles between the species, indicating the species were genetically heterogeneous. Dendograms from cluster analysis based on UPGMA showed that the six species of *Fusarium* were clustered separately.

Keyword: RAPD analysis; *Bakanae*; Genetic.