Studi keragaman genetik alstonia scholaris (l.) R.br. Berdasarkan marka random amplified polymorphic dna: [Study on genetic diversity of alstonia scholaris (l.) R.br. Using random amplified polymorphic dna (rapd) markers]

Yuyu Suryasari Poerba, author

Abstrak

Alstonia scholaris (L.) R.Br. is a popular timber and medicinal tree species in Indonesia.The species is valued for its quality light wood timber and for its medicinal properties. Information on its existing genetic potential is currently lacking. The present study was carried out to optimize PCR and to screen primers among accessions collected from different part of region in Indonesia using random amplified polymorphic DNA (RAPD) markers in order to suggest appropriate primer and PCR conditions used in A.scholaris. Results showed that 26 primers generated 575 scorable bands of which 524 (92 %) were polymorphic.Â Fourteen highly polymorphic primers (100% polymorphic) are recorded from 48 primer used, i.e.OPA-2, OPA-03, OPA-05, OPA-06, OPA-10,OPA-12, OPA-15, OPA-18, OPA-19, OPC-03, OPC-10, OPC-12, OPC-17, and OPN-14. Based on the RAPD markers, a dendrogram was constructed using the UPGMA method.The range of genetic distance was from 0.18-0.45.The molecular dara grouped the genotypes into three main clusters.