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Phylogeny of *Kalopanax pictus* and related varieties based on RAPD markers

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Genus *Kalopanax* (Araliaceae) is a long-lived woody species mostly distributed throughout East Asia. *K. pictus* has been regarded as medically and ecologically important species in Korea. Random amplified polymorphic DNA (RAPD) was used to investigate the genetic variation and phylogenetic analysis of four species. A high level of genetic variation was found in *Kalopanax pictus*. Fifteen primers revealed 118 loci, of which 68 were polymorphic (57.6%). *K. pictus* had the highest expected diversity (0.085), thornless castor cultivar "Cheongsong" (*K. pictus* variety) the lowest (0.030). An indirect estimate of the number of migrants per generation (*Nm* = 0.159) indicated that gene flow was not extensive among four Korean taxa of genus *Kalopanax*. It is suggested that the isolation of geographical distance and reproductive isolation among four species. In phylogenetic analysis, *K. pictus* and *K. pictus* var. *magnificus* formed a short cluster, whereas thornless castor cultivar occupied different positions in the tree.