Molecular analysis of Broussonetia papyrifera (L.) Vent. (Magnoliophyta: Urticales) from the Pacific, based on ribosomal sequences of nuclear DNA Seelenfreund, D.

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Broussonetia papyrifera (L.) Vent. (Magnoliophyta: Urticales), or paper mulberry, is a species of Asian origin dispersed by humans throughout the Pacific. Our aim is to evaluate the genetic variability of this plant in order to determine its potential as a commensal species for studying the mobility and/or migratory movements of the people that carried it. For this study, we analysed the non-coding transcribed spacer sequences (ITS) of ribosomal nuclear DNA found in samples of B. papyrifera collected in Remote Oceania and Taiwan. Our results show three genotypes: the Pacific samples form a distinct and homogenous subgroup, while the Taiwanese accessions present two genotypes. We discuss the relevance of these results in the context of the dispersal of B. papyrifera in the Pacific and its association with Austronesian migration history. © 2011 The Royal Society of New Zealand.