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Genetic diversity and DNA Barcode based identification of *Hoya* (Apocynaceae:Asclepiadoideae) in different transformation systems in Jambi

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Hoya species diversity in Jambi can be utilized by the local people as a new economic source, i.e. promoting it as ornamental plant which can be exported overseas. This potential source is in addition to research and development for future biomedicines. The information on *hoya* species and genetic diversity in Jambi is still very limited. The degree of impact of habitat changes to the species and genetic diversity of *Hoya* in Jambi is lacking and is urgently needed to be determined in order to formulate the appropriate conservation strategy and sustainable utilization of the species. The species diversity have been assessed by field surveys at four different transformation systems i.e. forest, jungle rubber, rubber plantation and oil palm plantation in the three locations in Jambi, i.e. in Bukit Dua Belas, Bukit Harapan and Bukit Sari. We collected 58 total specimens from about 9 species of *Hoya* and 2 species of *Dischidia* which were mainly found in the forests. There was only one individual sample of *Dischidia cf imbricata* which was found in a jungle rubber in Bukit Sari. There were species differences between locations, while only a single species, *Hoya cf revolute*, was found in all locations. Most of samples were found in sterile, so identification was not clear yet. Only single species was found in fertile and easily identified as *Hoya rintzii*. We are investigating the genetic diversity using microsatellite markers as well as developing DNA barcode based identification using *rbcl* and *matK* markers.