DNA barcode enabled ecological research on Geometridae in Papua New Guinea

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DNA barcoding of the Geometridae of Papua New Guinea provides a framework for multiple lines of systematic and ecological research, as part of a large-scale study of insect-plant ecology and biogeography in forests in Papua New Guinea by the Binatang Research Centre (Novotny et al. 2010). The foundation of the program has been characterization of the insects reared from woody plants, but we are increasingly combining those data with bioassessments of adults using light traps (Pagi et al. in preparation). DNA barcoding provides a rapid and accurate taxonomic framework, which is also instrumental in analysis of phylogeographic patterns (Craft et al. 2010), identifying caterpillars (Miller...