Department of Life Science

Biodiversity and Systematics of Lepidopterous Insects

The research interests of my team focus on biodiversity, systematics, life history, evolution, and conservation of lepidopterous insects. One of the long term projects we have been doing is a study on the diversity of phytophagous insects associated with Taiwan Beech (*Fagus hayatae*), and we just published a paper reporting two new taxa of moths and their significance to the biodiversity conservation of the forests.

Techniques used in study

Phylogenetic Analyses (Bayesian inference and Maximum Likelihood) Dissection of adult genitalia and chaetotaxy of larvae Scanning electron microscope (SEM) Sequencing of DNA barcodes HOSTS - A Database of the World's Lepidopteran Hostplants

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Backbround:

PhD in Entomology, University of California, Berkeley, CA, USA

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Publications

1. <u>Hsu YF,</u> Wang LH, Huang CL, Braby MF, Lin WJ, Lin RJ, Hsu YM. (2021, Feb). Discovery of specialist beech-feeding underwing moths from Taiwan (Lepidoptera: Erebidae: Catocalinae) and its implication to biodiversity conservation of Taiwan Beech Forests. The Annals of the Entomological Society of America 114: doi: 10.1093/aesa/saaa062.

2. <u>Hsu YF</u> (2020, Sep). The identity of Alfred Wallace's mysterious butterfly *taxon Lycaena nisa* solved: *Famegana nisa* comb. nov., a senior synonym of *F. alsulus* (Lepidoptera, Lycaenidae, Polyommatinae). ZooKeys 966: 153–162.

