Xiao Huang

+86 18634711611, xh_eco@outlook.com

ResearchGate | ORCID

EDUCATION

- **2022 – present** Wuhan, China
  Ph.D. candidate in Macroecology, Wuhan Botanical Garden, Chinese Academy of Sciences
- **2020 – 2021** London, UK
  Research Master in Ecology, Evolution & Conservation, Imperial College London
- **2016 – 2020** Guangzhou, China
  Bachelor in Ecology, Sun Yat-Sen University

RESEARCH EXPERIENCE

- **Jun 2022 – present Latitudinal patterns of seed defences and nutrition**
  Supervisor: Pro. Si-Chong Chen, Pro. Jens-Christian Svenning

By intensively collecting seeds of plants from more than 30 natural forest communities (18.68°~52.36°N), we aim to reveal the geographic patterns of seed defences and nutrition and how these seed traits are influenced by various biotic and abiotic factors.

- **Aug 2022 – Mar 2024 Global biogeography of trait-matching in plant-frugivore networks**
  Supervisor: Pro. Si-Chong Chen

By compiling a global dataset of 354 avian frugivory networks, consisting of 22,199 interactions between 1,247 bird species and 2,126 plant species, we provide the first global assessment of trait matching, a reflection of interaction strength, across latitude and insularity.

- **May 2021 – Jun 2022 When utilization and invasion meet across the global spectrum of plant form and function**
  Supervisor: Dr. Samuel Pironon, Dr. Philippa Ryan, Pro. Si-Chong Chen

By assessing the distribution of 24,110 utilised and/or invasive plant species across the global spectrum of plant form and function, we found that utilised species are generally related to large-sized species while invasive species tend to be small. Additionally, utilisation has greatly expanded the distribution of invasive species in functional space.

- **Nov 2020 – Mar 2021 Global Impact of Land Use Change on Functional Diversity within Invertivorous Birds**
  Supervisor: Pro. Joseph Tobias

Based on the PREDTICS database, we assess the influence of land use change on the functional diversity of invertivorous birds.

- **Nov 2018 – May 2019 Using light-level geolocations to monitor incubation behaviour of a cavity-nesting bird**
  Supervisor: Pro. Yang Liu

Description of a new method to infer incubation behaviours from light variation data.

AWARDS & ACADEMIC ACTIVITIES

- **Dec 2024**

Plasticine models may not reflect real biotic interactions: biases of human-centred experimental designs. 2rd Place Award for student at the 5th International Symposium on Plant-Animal Interactions under Global Change, Henan, China.

- **Mar 2024**

The global spectrum of utilized and invasive plants. 3rd Place Award for oral presentation at the 2nd Optics Valley Conference for Young Researchers, Wuhan, China.

- **Sep 2022 – Sep 2023**

Excellent Student Award at the Chinese Academy of Sciences.

- **Oct 2023**

Global biogeography of trait matching in avian seed dispersal networks. Oral presentation at the 22nd China Ecology Conference, Beijing, China.

- **May 2023**

Summer courses "Research Methods in Ecology" at East China Normal University, Shanghai, China.

- **Jun 2023 – present**

Reviewer for *Oikos* and *Integrative Zoology.*

- **Sep 2017 – Sep 2018**

3rd Class of Excellent Student Award at Sun-Yat Sen University

SKILLS

- **Academic English**. IELTS: 7 (Speaking: 6, Writing: 6, Reading: 8, Listening: 7).
- **R statistics.** Have applied network-based analysis methods to measure trait matching in interaction networks, and linear-mixed effects models to explore the relationship between trait matching and various ecological factors. Experienced in using *missForest* or *BHPMF* package to impute trait data for a large number of species. Capable of using *metafor* package to conduct meta-analysis.
- **Bird watching and taxonomy identification.**
- **Seed morphological and chemical traits measurement.**
- **Photography of plant specimens.** Have taken photos of fruits and seeds of more than 300 species for documentation and research purposes

PUBLICATIONS

- **Huang, X.**, Dalsgaard, B & Chen, S.-C. Weaker plant-frugivore trait matching towards the tropics and on islands. *Ecology Letters* 28: e70061. https://doi.org/10.1111/ele.70061
- Chen, S.-C., Antonelli, A., **Huang, X.**, Wei, N., Dai, C.,& Wang,Q.-F. (2025). Large seeds as a defensive strategy against partial granivory in the Fagaceae. *Journal of Ecology* 00, 1-10. https://doi.org/10.1111/1365-2745.14480
- **Huang, X.**, Zhao, Y. & Liu, Y. Using light-level geolocations to monitor incubation behavior of a cavity-nesting bird *Apus apus pekinensis*. *Avian Research* 12, 9 (2021). https://doi.org/10.1186/s40657-021-00245-w