

Tianyu Cui

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Email: cui_tianyu@stu.pku.edu.cn

Phone: (+86) 18210116713

Education **Peking University** Beijing, China
B.Sc. in Biological Science 2020 – 2024 (expected)

Research Interests Plant diversity, phylogeny, speciation, trait evolution, evo-devo.
Interested taxa: *Gentiana* (Gentianaceae), *Meconopsis* (Papaveraceae), *Primula* (Primulaceae), *Viola* (Violaceae), *Oxalis* (Oxalidaceae), Iridaceae.

Research Experience **UNDERGRADUATE RESEARCH** April 2022 – June 2023
Capitulum floret heteromorphism in *Chrysanthemum*
Supervisor: Professor Guangyuan Rao ([Laboratory of Plant Systematics and Evolution](#), Peking University).
- Analyzed expression of *CLAP3*(*APETALA3*) in *Chrysanthemum lavandulifolium* floral organs.
- Constructed transgenic lines using RNAi to knock-down the expression of *CLAP3* to reveal its potential function.

SUMMER PROJECT June 2023 – Sept. 2023
Identification of genes controlling adaptive traits that distinguish *Antirrhinum* species
Supervisor: Professor Enrico Coen (John Innes Centre).
- Bioinformatic analysis on pool-seq data of *A. pseudomajus* and *A. molle* crosses.
- Population genotyping (KASP) to identify genomic regions that contain the genes controlling growth habits (hairiness, internode length) in *Antirrhinum*.

Grants Summer Studentship, £3150, Genetics Society, UK. 2023

Talks **Identification of genes controlling adaptive traits that distinguish species**
Genetics Society Summer Studentship Workshop, Milner Centre for Evolution, University of Bath. 6 Sept. 2023
The 10th Symposium for Undergraduate Honors Program in Biology, Peking University (THE BEST ORAL PRESENTER). 8 Oct. 2023

Posters Cole, Cui 2023 (CC-BY), Chinese version of: COLE (2023) PAPAVERACEAE Phylogeny Poster (PapaPP). Available on [ResearchGate](#).

Teaching Experience **Teaching Assistant** Peking University
Undergraduate & graduate course: *Plant Diversity and Evolution* (Spring 2023)

Instructors: Professor Hongya Gu, Professor Guangyuan Rao
- Taught flowering plant morphology and taxonomy (APG IV).
- Organized class discussion and fieldwork in campus.

Science Outreach

PKU GreenLife

Peking University

An academic student organization dedicated to long-term campus biodiversity monitoring and conservation efforts.

Co-director 2021 – 2022

Core member 2021 – Present

- Serving as a docent in plant phenology and species identification.
- Revising “Catalogue of Life in Peking University” (in angiosperms and Lepidoptera).
- Operating the public account and writing articles to introduce campus species.

Joseph Hooker Correspondence Project

Royal Botanic Gardens, Kew

Online volunteer

Nov. 2021 – Jan. 2022

- Participated in digitization of the personal and scientific correspondence of the 19th century botanist and explorer Joseph Hooker.

Fieldworks / Species Diversity Expeditions

“Rainy Zone of West China”, Sichuan

May 2023

Northwestern Yunnan

July 2022

Wanglang National Nature Reserve, Sichuan

July 2021

Skills

Programming Language & IT Skills

Python, R, \LaTeX , Linux

Illustration & Image Processing

Proficient in digital illustration and water-colouring.

Software: Adobe Photoshop, Illustrator, Lightroom, PaintTool SAI.

Species Identification

Extensive experience in identifying flowering plants, butterflies and birds in the Palaeartic Region, especially alpine species in North China and Himalaya-Hengduan Region.

Other Interests

My blog for nature writing, wildlife photography and species identification: WeChat Official Account “Echeveria’s Garden”. Selected articles: [2022 NW Yunnan – Some *Corydalis* Species in Shangri-La](#). [An Overview of Genus *Viola* in Beijing](#).

My iNaturalist account: [tianyu_cui](#).

My birding records: 253 species (Oct. 2023), [my eBird](#).