Qi Yao | Curriculum Vitae

Research interests

- □Species coexistence □Biological invasion □Ecological succession
- □Ecological time series

Education

2022-present East China Normal University

PhD candidate in Ecology, advised by Prof. Shao-peng Li

2019-2022 Lanzhou University

Master in Grassland Ecology, advised by Prof. Yanhao Feng

2015-2019 Lanzhou University

Bachelor of Grass Science, advised by Prof. Huimin Yang

Selected awards & scholarships

- 2023 The Excellent Graduate Student Report Award of the 22th China Conference on Ecology
- 2022 The Excellent Post Award of the 21st China Conference on Ecology
- 2020 Scholarship for Outstanding Graduate Students of Lanzhou University, 1st Scholarship
- 2016 Scholarship for Outstanding Students of Lanzhou University, 3rd Scholarship

Publications

- * denotes equal contribution
 - 3 Temporal dynamics of Grime's CSR strategies in plant communities during 60 years of succession

Zhang YS, Meiners SJ, Meng YN, Yao Q, Guo K, Guo WY, Li SP.

Ecology Letters (2024) [Link]

2 Darwin's naturalization conundrum: an unsolved paradox in invasion ecology Li SP, Fan SY, Meng YN, Zhang WG, Yao Q.

Scientia Sinica Vitae (2023) [Link]

1 Species existence and coexistence under nutrient enrichment in the Park Grass

Yao Q, Feng YH. bioRxiv (2022) [Link]

In preparation

 The role of multidimensional ecological differences on exotic plant success depends on the stage of invasion

Yao Q, Li SP, Chu CJ, Meiners SJ, Feng YH, Li YZ.

 Nitrogen application affects species coexistence by changing traits included competitor-induced plasticity

Wang ZY*, Yao Q*, Feng YH.

Presentations

Conference presentation and poster

- 2024 Ecological Society of America Annual Meeting
- 2023 China Conference of Ecology
- 2022 China Conference of Ecology

Research experience

4 Database Administrator for the Global Vegetation Succession

2024-present

We are creating an extensive database on vegetation successional data of more than 15 sites located across the world, which was compiled based on a great number of published studies utilizing long-term observational data. Besides as a manager of this database, I am planing to use this data reconcile the "no net loss" debate.

3 Database Administrator for the Global Multi-taxa Distribution

2022-2024

We have created a comprehensive global database encompassing distribution, phylogeny, and trait of exotic and native species including four taxa (plant, mammal, bird, fish) across 609 regions. Here I am using this data to test the latitudinal patterns of Darwin's naturalization conundrum for the mammals at the global scale.

2 Research assistant for the Tiantong Succession Study, Zhejiang

2022-present

Tiantong Succession Study is a project designed to investigate the impact of invasive species removal or nutrient addition on the successional trends and native community structure. We established totally 458 plots from 2019 varied with invasive species removal and nutrient addition. Cover and abundance of each species within each plot have been monitored annually since 2020. Personally, my interest for this data is in the potential inverse priority effects of invasive species removal on the community restoration.

1 Coordinator for the Haibei Density Gradient Experiment, Qinghai 2019-2020

Haibei Density Gradient Experiment is a project designed to explore the effects of global change on species coexistence. In June 2019, we established 420 rectangular plots (each plot was divided into 40 subplots) varied with nitrogen addition and selected 20 species. We transplanted each species as focal individuals within a density gradient (0, 2, 4, or 8 individuals) of each competitor whinin each subplot to estimate their niche and fitness differences. My research has been focused on understanding how nitrogen addition influence species coexistence by affecting trait-mediated interactions.

Skills

- √ R, Stan, ArcGIS
- ✓ Microsoft Word, Excel, PowerPoint, Adobe Illustrator
- ✓ Fieldwork (i.e. grassland survey, soil sampling, and plot construction)
- √ Soil chemical analysis