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## **Plant-soil interactions determine ecosystem aboveground and belowground processes in primary dune ecosystems**

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## List of Publications

### Publications in peer-reviewed Journals (English):

**Gao CG\***, van Bodegom PM, Bezemer TM, Veldhuis MP, Mancinelli R, Soudzilovskaia NA. Soil biota adversely affects the resistance and recovery of plant communities subjected to drought. *Ecosystems*, 2022, 25(5). <https://doi.org/10.1007/s10021-022-00785-2>.

Qiao XG, ... , **Gao CG**. Assessing the collapse risk of *Stipa bungeana* grassland in China based on its distribution changes. *Journal of Arid land*, 2020, 12(2):303-317.

Zhao HW, ... , **Gao CG**. *Stipa* Steppes in Scantily Explored Regions of the Tibetan Plateau: Classification, Community Characteristics and Climatic Distribution Patterns. *Journal of Plant Ecology*, 2017, 11(4): 585-594.

### Under review/ in revision:

**Gao CG\***, Bezemer TM, van Bodegom PM, Kohout P, Mancinelli R, van der Hagen H, Soudzilovskaia NA. Shifts in soil community influence the establishment of arbuscular mycorrhizal fungi.

**Gao CG\***, Bezemer TM, van Bodegom PM, Cornelissen HC, van Logtestijn R, Liu XY, Mancinelli R, van der Hagen H, Zhou M, Soudzilovskaia NA. Plant community responses to alternation in soil conditions are decoupled for above- and belowground traits.

**Gao CG\***, Bezemer TM, van Bodegom PM, Baldrian P, Kohout P, Mancinelli R, van der Hagen H, Soudzilovskaia NA. Soil microbes are passengers in the community development of early successional dune ecosystems

Liu XY, He D, Vrieling K, Lommen STE, **Gao CG**, Bezemer TM. Plant-soil feedback effects in the field: Testing Janzen-Connell effects in natural grasslands.

### Publications in peer-reviewed Journals (Chinese):

Lu SZ,..., **Gao CG**, et al. Basic characteristics of *Stipa sareptana* var. *krylovii* communities in China. *Chinese Journal of Plant Ecology*, 2020, 44(10): 1087-1094.

**Gao CG**, Guo K, Qiao XG, et al. Methods of observing typical steppe plant communities: Applications cases of two typical formations. *Biodiversity Science*, 2018 26(3):266-273.

**Gao CG**, Qiao XG, Wang Z, et al. Distribution, community characteristics and classification of *Thymus mongolicus* steppe in China. *Chinese Journal of Plant Ecology*, 2018,42(9):971-976.

Qiao XG, ... , **Gao CG**. Distribution, community characteristics and classification of *Stipa tianschanica* var. *klemenzi* steppe in China. *Chinese Journal of Plant Ecology*, 2017, 41(2):231-237.

Xiao J, **Gao CG**, Wang N, et al. A measuring method for seed shape of common wheat

(*Tritium aestivum*) Based on SmartGrain software. *Journal of Triticeae Crops*, 2014, 34(11):1572-1576.

**Conference Abstract:**

**Gao CG**, Bezemer TM, van Bodegom PM, Cornelissen HC, van Logtestijn R, Liu XY, Mancinelli R, van der Hagen H, Zhou M, Soudzilovskaia NA. Plant community responses to alternation in soil conditions are decoupled for above- and belowground traits. Ecology of soil microorganisms 2022: microbes as important drivers of soil processes, Prague, Czech Republic (Oral presentation)

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## Curriculum Vitae



Chenguang Gao was born in Luoyang, China in May 1994. He grew up in the Yi-Luo River area which is one of the origins of Chinese culture. He obtained his bachelor degree from the College of Agronomy of Northwest A&F University in 2015. There he has developed a strong interest in the science of ecology through excursions and fieldwork in the Qinling area. After graduation, he started his ecology study at the Institute of Botany, of the Chinese Academy of Sciences, specializing in vegetation ecology. He joined a project on “the distribution, community characteristics, and vegetation classification of Chinese grassland” in northwest China. Chenguang completed his MSc thesis entitled “Community characteristics of semi-shrub and dwarf semi-shrub in Loess Plateau” under the supervision of Prof. Ke Guo. In September 2018, he received a scholarship fund from the China Scholarship Council for his PhD study at the Institute of Environmental Sciences, Leiden University, the Netherlands. His work focuses on plant-soil interactions and their influences on the aboveground and belowground ecological processes supervised by Prof. Nadia Soudzilovskaia and Prof. Peter van Bodegom. After completing his PhD, Chenguang will start a postdoc at CML to study the role of soil biodiversity in agroecosystems.

