

# Jinlei Zhu

*PhD in Ecology*

## Personal Details

Date and Place of Birth 21 September 1987 in Luoyang, China  
Home Address Scharnhäuser Str. 46, D-70794 Filderstadt, Germany  
Work Address Institute of Landscape and Plant Ecology, University of Hohenheim,  
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## Education

- 2015 **Dr.Sci.**, *University of Chinese Academy of Sciences, China,*  
Supervisor : Prof. Dr. Zhimin Liu  
Thesis : Wind-tunnel simulations of seed dispersal by wind in *Zygophyllum xanthoxylon* and *Calligonum* species.
- 09/2010 – **Doctoral student/Research assistant**, *State Key Laboratory of Forest and Soil Ecology, Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China.*  
07/2015
- 2010 **Dipl.Envir.Eng.**, *China University of Mining and Technology, Beijing, China,*  
Major : Environmental Engineering  
Thesis : Research on distributed processing of watering and sewage treatment in urban built-up area  
Grade : *top 10%*.
- 09/2006 – **Undergraduate student**, *College of Chemistry and Environmental Engineering,*  
07/2010 *China University of Mining and Technology, Beijing, China.*
- 09/2002 – **High school student**, *Luoyang No. 1 High School, Luoyang, China,*  
06/2006 Grade : *top 3%* .

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## Professional Experience

- 01/2020 to 03/2020 **Visiting scientist**, *Institute of Botany, Czech Academy of Sciences, Průhonice, Czech Republic.*  
Cooperator : Prof. Dr. Zuzana Münzbergová  
Estimating the rate of population spread in the endangered species *Minuartia smejkalii*.
  - Simulate dispersal distance of plants in different growing sites
  - Calculate the context-dependent rate of population spread
  - Clarify the critical factors most threatening *M. smejkalii*
- 02/2016 to present **Postdoctoral researcher/Research associate**, *Institute of Landscape and Plant Ecology, University of Hohenheim, Stuttgart, Germany.*  
Supervisor : Prof. Dr. Frank Schurr  
Effects of seed morphology on seed dispersal by wind : mechanisms, models and estimation.
  - Disentangled the effects of dispersal traits and environmental variables on seed dispersal by wind
  - Programmed and validated a mechanistic model describing how seed morphology and orientation determine secondary seed dispersal by wind
  - Quantified the relationship between different dispersal mechanisms
  - Investigated how wind-driven seed dispersal and population spread respond to water availability and intraspecific density
- 09/2015 to 12/2015 **Intensive German course**, *Tongji University, Shanghai, China.*
- 07/2015 to 08/2015 **International summer school**, *French Associates Institute for Agriculture and Biotechnology of Drylands, Ben-Gurion University of Negev, Be'er Sheva, Israel.*  
Organiser : Prof. Dr. Shimon Rachmilevitch  
Topic : The soil-plant-atmosphere continuum in arid regions – Agricultural management and environmental aspects.
  - Attended seminars, excursions to the research stations
  - Conducted practical projects
  - Learned applications of environmental science and ecological principles in agricultural systems in arid regions

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## Teaching

- Since 2016 **Conservation Biology**, *Institute of Landscape and Plant Ecology, University of Hohenheim.*
  - Teaching conservation biology to MSc students in Landscape Ecology
  - 0.5 hour per semester

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## Scholarships and Awards

- 2015 **Sino-German (CSC-DAAD) Postdoc Scholarship**, *China Scholarship Council (CSC) and DAAD, €39,600.*
- 2014 **Merit Student**, *University of Chinese Academy of Sciences.*
- 2013 **National Scholarship and Award**, *Chinese Ministry of Education, €2,500.*
- 2013 **Outstanding Student Talk Award**, *Seed Ecology IV Committee.*

- 2012 **Excellent Student Cadre**, *University of Chinese Academy of Sciences*.  
2012 **Merit Student**, *University of Chinese Academy of Sciences*.  
2012 **Excellent Graduate Student**, *Institute of Applied Ecology, Chinese Academy of Sciences*.  
2011 **Excellent Student Cadre**, *University of Chinese Academy of Sciences*.  
2011 **Merit Student**, *University of Chinese Academy of Sciences*.

## Expertise & Skills

- Languages **Chinese**, mother tongue.  
**English**, professional. Level C2 of CEFR (Common European Framework of Reference for Languages).  
**German**, intermediate. Level B1 of CEFR.
- Programming **R, C, L<sup>A</sup>T<sub>E</sub>X**.
- Others **Git, Shell, HTML, CSS, ImageJ**.

## Professional Service

- Since 2016 **Peer-reviewer of scientific journals** :  
— Journal of Applied Ecology  
— Seed Science Research  
— Functional Ecology  
— The Science of Nature

## Publication List

### Peer-reviewed publications

6. **Zhu, J.**, Liu, M., Xin, Z., Liu, Z. & Schurr, F.M. (2019) A trade-off between primary and secondary seed dispersal by wind. *Plant Ecology* **220**, 541–552.  
DOI: 10.1007/s11258-019-00934-z
5. Ma, Q., Kuang, W., . . . , **Zhu, J.**, . . . , Kou, Z. & Shou, W. (2017) Spatial pattern of different component carbon in varied grasslands of northern China. *Geoderma* **303**, 27–36.  
DOI: 10.1016/j.geoderma.2017.05.010
4. **Zhu, J.**, Liu, M., Xin, Z., Zhao, Y. & Liu, Z. (2016) Which factors have stronger explanatory power for primary wind dispersal distance of winged diaspores : the case of *Zygophyllum xanthoxylon* (Zygophyllaceae)? *Journal of Plant Ecology* **9**, 346–356.  
DOI: 10.1093/jpe/rtv051
3. Liu, M., **Zhu, J.**, Xin, Z., Zhao, Y., Liu, B., Ma, Y., Li, Z. & Liu, Z. (2015) A portable wind tunnel for studying seed dispersal by wind : test and evaluation. *Chinese Journal of Ecology* **34**, 1770–1778. [in Chinese with English abstract]  
DOI: 10.13292/j.1000-4890.2015.0166
2. Liu, Z., **Zhu, J.** & Deng, X. (2012) Arrival vs. retention of seeds in bare patches in the semi-arid desertified grassland of Inner Mongolia, northeastern China. *Ecological Engineering* **49**, 153–159.  
DOI: 10.1016/j.ecoleng.2012.08.030
1. **Zhu, J.** & Liu, Z. (2012) Major terminologies and concepts in seed dispersal biology. *Chinese Journal of Ecology* **31**, 2397–2403. [in Chinese with English abstract]  
DOI: 10.13292/j.1000-4890.2012.0353

### Papers in preparation

1. **Zhu, J.**, Buchmann, C.M. & Schurr, F.M. Effects of seed morphology and orientation on secondary seed dispersal by wind.

### Books

1. Liu, Z., Liu, B., **Zhu, J.** & Yan, Q. (2013) *Seed Ecology IV Conference Proceedings*. China Meteorological Press.

### Patents

2. Zhou, Q., Liu, M., Xin, Z., **Zhu, J.** & Liu, Z. (2016) A device to quickly fasten multiple objects with flush faces. China Patent ZL 2016 2 0502166.8. Issued October 19, 2016.
1. Liu, M., Liu, Z., **Zhu, J.** & Xin, Z. (2014) A type of portable environmental wind tunnel that can be used on uneven ground in the field. China Patent ZL 2013 2 0895288.4. Issued August 13, 2014.

### Oral presentations at international conferences with proceedings

3. **Zhu, J.** & Schurr, F.M. (2017) Title : “Effects of seed morphology and orientation on secondary seed dispersal by wind”, POPBIO 2017, Halle / Saale, Germany.
2. **Zhu, J.**, Schurr, F.M., Liu, M., Xin, Z. & Liu, Z. (2016) Title : “A trade-off between primary and secondary seed dispersal by wind”, GfÖ 46th Annual Meeting, Marburg, Germany.
1. **Zhu, J.**, Liu, Z. & Deng, X. (2013) Title : “Effects of seed dispersal and microhabitat on seed availability of bare patches of the desertified grassland in northeastern Inner Mongolia, China”, Seed Ecology IV, Shenyang, China. [awarded “Outstanding Student Talk”]