

吴东辉 教授委员会聘期工作公示

一、主要研究方向或领域

土壤生态学

二、主要学术兼职

吉林省动物学会副理事长，生态学报编委，生物多样性编委，生态学杂志编委，应用与环境生物学报编委，湿地科学编委，Soil Ecology Letters 编委。

三、聘期内推动学科建设成效

1、建设了一支 3-5 人的土壤生态学术团队；团队内成员管平婷博士晋升为副教授，并荣获学校优秀博士后出站及吉林省 2022 年度青年托举工程称号。

2、请国内外本领域著名学者如加拿大萨斯卡切温大学的 Sina Adl 教授、俄罗斯科学院的 Alexei Tiunov 教授、Andrey Zastev 教授和法国国家科研中心的 Louis Deharveng 教授以及捷克科学院的陈鼎文博士和比利时鲁汶大学的左娟博士等外方科学家和梁文举教授（国家自然科学基金重点项目负责人，国家基金委资深会评专家）、田春杰研究员（中科院战略先导专项首席科学家）、贾仲君（国家万人计划，中科院黑土专项总工程师）等国内知名学者访问本实验室，为研究生举办各类讲座 20 余场；

3、2019 年 10 月和 2021 年 9 月受中国生物多样性委员会邀请，与河南大学傅声雷教授（2009 年度国家自然科学基金杰青获得者）共同召集第三次生物多样性监测会议土壤生物多样性专题（浙江）和第四次生物多样性监测会议土壤生物多样性专题（广东）。

四、人才培养情况

指导博士生 7 人、硕士生（含留学生）12 人，博士后 3 人，其中师资博士后管平婷博士出站后晋升为副教授，并荣获学校优秀博士后出站及吉林省 2022 年度青年托举工程称号。

五、聘期内取得的主要科研和教学成果

1. 学术论文

1) Bing Zhang, Liang Chang, Zhen Ni, Xin Sun, **Donghui Wu***. Directional

migration of three, Desoria, species (Collembola: Isotomidae) on the snow surface in late winter. *European Journal of Soil Biology*, 2017, 81:64-68. (中科院大类分区二区, IF=2.846)

2) Xin Sun, Feng Zhang, Yinhuan Ding, Thomas W. Davies, Yu Li, **Donghui Wu***. Delimiting species of Protaphorura (Collembola: Onychiuridae): integrative evidence based on morphology, DNA sequences and geography. *Scientific Reports*, 2017, 7(1):8261-8270. (中科院大类分区三区, IF=4.379)

3) Lihong Song, Hongkai Li, Kehong Wang, Xiumin Yan, **Donghui Wu***. Seasonal dynamics in the community structure and trophic structure of testate amoebae inhabiting the Sanjiang peatlands, Northeast China. *European Journal of Protistology*, 2018, 63:51-61. (中科院大类分区三区, IF=3.020)

4) Xinyu Zhu, Liang Chang*, Jiujiu Li, Jie Liu, Lichao Feng, **Donghui Wu***. Interactions between earthworms and mesofauna affect CO₂ and N₂O emissions from soils under long-term conservation tillage. *Geoderma*, 2018, 332: 153-160. (中科院大类分区一区, IF=6.114, TOP 期刊)

5) Yongjing Dou, Liang Chang, Bing Zhang, **Donghui Wu***. Effect of Soybean Cultivation on Soil Collembola Community in Marshland of Sanjiang Plain, China. *Russian Journal of Ecology*, 2018, 49(6): 570-576. (中科院大类分区四区, IF=0.684)

6) Jie Liu, Meixiang Gao*, Jinwen Liu, Yuxi Guo, Dong Liu, Xinyu Zhu, **Donghui Wu***. Spatial distribution patterns of soil mite communities and their relationships with edaphic factors in a 30-year tillage cornfield in northeast China. *PLoS ONE*, 2018, 13(6): e0199093. (中科院大类分区三区, IF=2.74)

7) Lichao Feng, Liang Chang, Shaoqing Zhang, Xinyu Zhu, Sina Adl*, **Donghui Wu***. What is the Carcass-Usage Mode of the Collembola? A Case Study of *Entomobrya proxima* in the Laboratory. *Insects*, 2019, 10(3):67-76. (中科院大类分区三区, IF=2.069)

8) Liang Chang, Baifeng Wang, Xiumin Yan, Linna Ma, Gadi V.P. Reddy, **Donghui Wu***. Warming limits daytime but not nighttime activity of epigeic microarthropods in Songnen grasslands. *Applied Soil Ecology*, 2019, 141: 79-83. (中

科院大类分区二区, IF=3.183)

9) Jie Liu, Meixiang Gao, Yanlong Ma, Xin Sun, Xinyu Zhu, Sina Adl, **Donghui Wu***. Spatial and environmental factors are minor structuring forces in a soil Collembola metacommunity in a maize agroecosystem. *Pedobiologia - Journal of Soil Ecology*, 2019, 76:150572. (中科院大类分区三区, IF=2.040)

10) Xinyu Zhu, Yunchuan Hu, Wei Wang, **Donghui Wu***. Earthworms promote the accumulation of maize root-derived carbon in a black soil of Northeast China, especially in soil from long-term no-till. *Geoderma*, 2019, 340:124-132. (中科院大类分区一区, IF=6.114, TOP 期刊)

11) Yongjing Dou, Bing Zhang, Xin Sun, Liang Chang and **Donghui Wu***. Marshland restoration benefits Collembola recruitment: a long-term chronosequence study in Sanjiang mire marshland, China. *PeerJ*, 2019, 7:e7198. (中科院大类分区三区, IF=2.284)

12) Yuxi Guo, Meixiang Gao, Jie Liu, Andrey S. Zaitsev, **Donghui Wu***. Disentangling the drivers of ground-dwelling macro-arthropod metacommunity structure at two different spatial scales. *Soil Biology and Biochemistry*, 2019, 130:55-62. (中科院大类分区一区, IF=7.609, TOP 期刊)

13) Cao Hao, Tingwen Chen, Yunga Wu, Liang Chang, **Donghui Wu***. Snow microhabitats provide food resources for winter-active Collembola. *Soil Biology and Biochemistry*, 2020, 143: 107-116. (中科院大类分区一区, IF=7.609, TOP 期刊)

14) Pingting Guan, Jingjing Yang, Yurong Yang, Wei Wang, Peng Zhang, Jingjing Yang, Yurong Yang, Wei Wang, Peng Zhang, **Donghui Wu***. Land conversion from cropland to grassland alleviates climate warming effects on nutrient limitation: Evidence from soil enzymatic activity and stoichiometry. *Global Ecology and Conservation*, doi.org/10.1016/j.gecco.2020.e01328. (中科院大类分区三区, IF=3.380)

15) Zhen Ni, Xiumin Yan, Liang Chan⁴, Xin Su⁵, **Donghui Wu***, Bing Zhang*. Habitat preferences rather than morphological traits affect the recovery process of Collembola (Arthropoda, Hexapoda) on a bare saline-alkaline land. *PeerJ*, 2020,

8:e9519 DOI 10.7717/peerj.9519. (中科院大类分区三区, IF=2.284)

16) Ping Wang, Muhammad Hasnain, James Cahill, **Donghui Wu***. The multi-response of root foraging strategy to a neighbor, soil heterogeneity and earthworm. *Applied Soil Ecology*, 2020, doi.org/10.1016/j.apsoil.2020.103684. (中科院大类分区二区, IF=3.183)

17) Shaoqing Zhang, Xin Sun, **Donghui Wu***. A new species of the genus *Leeonychiurus* Sun & Arbea, 2014 (Collembola, Onychiurinae, Onychiurini) from China, with a checklist of Chinese Onychiurini. *Zootaxa*, 2020, 4743 (1): 137–143. (中科院大类分区四区, IF=0.620)

18) Biao Gao, **Donghui Wu***. The Effects of Returning Farmlands to Forests or Pastures on Soil Animal Diversity and its Regional Differentiation Characteristics in China: a Meta-Analysis. *Applied Ecology and Environmental Research*, 2020, 18 (5): 6335-6353. (中科院大类分区四区, IF=0.711)

19) Pingting Guan, Mohammad Mahamood, Yurong Yang, **Donghui Wu***. Land conversion regulates the effects of long-term climate warming on soil micro-food web communities. *Agriculture, Ecosystems and Environment*, 2021, 314:107426. (中科院大类分区一区, IF=5.567, TOP 期刊)

20) Xuewen Chen, Aizhen Liang, Donghui Wu*, Neil B. McLaughlin, Shuxia Jia, Shixiu Zhang, Yan Zhang, Dandan Huang. Tillage-induced effects on organic carbon in earthworm casts through changes in their physical and structural stability parameters. *Ecological Indicators*, doi.org/10.1016/j.ecolind.2021.107521. (中科院大类分区二区, IF=4.958)

21) Wei Wang, Xinyu Zhu, Liang Chang, Yufeng Zhang, Shaoqing Zhang, **Donghui Wu***. How do earthworms affect the soil organic carbon fractions and CO₂ emissions after incorporation of different maize straw-derived materials. *Journal of Soils and Sediments*, 2021, doi.org/10.1007/s11368-021-03006-w. (中科院大类分区二区, IF=3.308)

22) Liang Chang, Xin Sun*, Baifeng Wang, Meixiang Gao, Lei Chen, Aizhen Liang, **Donghui Wu***. Green more than brown food resources drive the effect of simulated climate change on Collembola: A soil transplantation experiment in

Northeast China. *Geoderma*, 2021, doi.org/10.1016/j. *Geoderma*.2021.115008. (中科院大类分区一区, IF=6.114, TOP 期刊)

23) Lihong Song, Liang Chang, Shaoqing Zhang, Yongjing Dou, **Donghui Wu***. Warming threatens the microbial communities in middle-high latitude peatland: Evidence from testate amoebae. *Soil Biology and Biochemistry*, 2021, doi.org/10.1016/j.soilbio.2020.108105. (中科院大类分区一区, IF=7.609, TOP 期刊)

2. 科(教)研项目

东北中高纬冷湿森林诺登爱胜蚓种群地理格局、制约机制及其对全球变暖的敏感性, 国家自然科学基金委员会, 56 万元, 2021-2024, 负责人.