

**The Second Training Course on Key Technologies
of Insect Diversity Pattern Assessment and Intelligent Monitoring
System in the Belt & Road Region
Notification of Enrolment (Round 1)**

1. Introduction

The “One Belt, One Road” is a major international cooperation initiative proposed by China and an important practical platform to promote the building of a community of human destiny. This year marks the 10th anniversary of the “One Belt, One Road” initiative and the depth and breadth of international exchange has reached a new level as the number of countries and regions joining the initiative is increasing. At the same time, maintaining the balance of biodiversity and sustainable development is an important challenge for the countries of the “Belt and Road” Initiative.

Along with the United Nations Sustainable Development Goals (SDGs), protecting, restoring, and promoting the sustainable use of terrestrial ecosystems and curbing biodiversity loss is one of the solutions to the serious challenges facing the world today. At the beginning of the 21st century, under the advocacy of the international Convention on Biological Diversity, with the effective implementation of projects such as the Millennium Ecosystem Assessment, the Global Environment Outlook and the International Biodiversity Programme, the biodiversity monitoring and assessment system has been gradually established and improved, which has played an important role in biodiversity conservation.

Insects are the most successfully evolved group on Earth, with more than one million known extant species, accounting for over 90% of the animal kingdom and 54% of the total number of species in the entire biological world. They are an important component of the Earth's biodiversity, but also one of the most difficult taxa to monitor and assess. In this context, Professor Ming Bai of Institute of Zoology, Chinese Academy of Sciences and Professor Alfried P. Vogler of the Natural History

Museum London U.K. jointly initiated the “SITE-100 International Mega-Science” Initiative, which aims to reveal global insect diversity patterns and formation mechanisms through the construction of more than 100 standard sample sites and standardized analysis processes worldwide.

In order to meet the global challenges of biodiversity conservation and sustainable development, the Institute of Zoology of the Chinese Academy of Sciences successfully held the first training course on key technologies of insect diversity assessment and intelligent monitoring system in the Belt and Road region in October 2023, and achieved remarkable results.

First results review

Participants: 22 foreign participants from 17 countries including Germany, France, Britain, Italy, South Korea, Mongolia, Nepal, South Africa, Kenya, Ecuador, Indonesia (selected from 156 applicants from 96 organizations in 43 countries around the world), 39 Chinese participants and 47 Professors from China, Britain, Germany, France and other countries participated.

Training content: During the 16-day training, 52 theoretical lectures, 11 experimental training, 3 days field practice, and 18 cooperative exchange activities were carried out, with a total of 100 hours of class time;

Gain influence: Reported by 30 authoritative media such as Xinhua News Agency, CCTV Evening News, Guangming Daily, and China Daily, showing the global attention of the "Belt and Road" ecological cooperation.

In this context, the training course will continue the successful experience of the first session, further deepen the international cooperation network, promote the standardization of intelligent monitoring technology for insect diversity, and contribute to global biodiversity conservation actions.

2. Student registration

This course will help to improve the capacity of insect diversity survey and monitoring in the “Belt and Road” countries by teaching basic theoretical knowledge and cutting-edge research techniques in insect diversity and cross-disciplines, train international talents in related fields, build a research network for young scientists.

Young scholars, especially those in the fields of Entomology, Zoology, Ecology and Biodiversity, as well as post-docs and doctoral students, who are interested in conducting research on the assessment and monitoring of insect diversity patterns in

the Belt and Road countries and regions are invited to apply. Twenty free quota of applicants (In principle, one person from each country can be selected, and if necessary, two students from the same country can share a quota) will be offered and participants will be selected based on their nationality and qualifications. The list of the Belt and Road countries could be found from this link (https://eng.yidaiyilu.gov.cn/info/iList.jsp?cat_id=10076&cur_page=1).

3. Training content

The training course will be hosted by Prof. Ming Bai from Institute of Zoology, Chinese Academy of Sciences. The course will be delivered in a trinity of indoor theoretical lectures, software operation, and outdoor field practice training. Well-known scholars from Jena University of Germany, University of Helsinki of Finland, the University of Hong Kong, Nanyang Technological University of Singapore, universities or institutes from mainland China will be invited to deliver the course. The specific training schedule will be released in the second round of notification.

4. Training formats

Training period: 2025.10.10 - 2025.10.28

Training form: offline training

Training language: English

Training venue: Institute of Zoology, Chinese Academy of Sciences (Beijing); China Agricultural University (Beijing), Ningxia University (Yinchuan, Ningxia) Cangzhou Normal University (Cangzhou, Hebei), Henan Institute of Science and Technology (Xinxiang, Henan).

5. Registration

Deadline for registration: 20 June 2025 for international participants and **20 August 2025** for domestic participants. The second round of registration would be opened later depending on the availability of applications.

Enrolment: Submit registration information via the link

<https://belt-road-insect-diversity.casconf.cn>

All registration information should be submitted via online system. If there are other issues,

Conference contact for international participants: Dr. Liu, liun@ioz.ac.cn

Conference contact for domestic participants: Miss Chen, Anputongtong@hotmail.com

Organizer

Institute of Zoology, Chinese Academy of Sciences

Co-organizer

International Academic Exchange Committee of the Chinese Entomological Society

College of Plant Protection, China Agricultural University

Ningxia University

Cangzhou Normal University

Henan Institute of Science and Technology

第二届“一带一路”地区昆虫多样性格局评估与智能监测体系关键技术培训班
报名通知（第一轮）

1. 培训班背景简介

共建“一带一路”是中国推动构建人类命运共同体的重大国际合作倡议，是推动构建人类命运共同体的重要实践平台。十二年来，随着参与国家和地区的持续增加，国际科技合作与生态治理需求不断深化。

伴随联合国可持续发展目标（SDGs）的提出，保护、恢复和促进可持续利用陆地生态系统、遏制生物多样性丧失是解决当今世界面临的严峻挑战的方案之一。21世纪初，在国际《生物多样性公约》的倡导下，随着千年生态系统评估、全球环境展望、国际生物多样性计划等项目的有效实施，生物多样性监测评价指标体系逐步建立和完善，对生物多样性保护发挥了重要作用。

昆虫是地球上进化最为成功的生物群体，已知现生种数超过 100 万，占据动物界的 90% 以上和整个生物界总种数的 54%，是构成地球生物多样性的重要组成部分，但也是最难监测和评估的类群之一。在此背景下，中国科学院动物研究所白明研究员和英国自然历史博物馆 Vogler 教授联合发起了“SITE-100 国际大科学计划”，通过全球构建 100 个以上标准样地和标准化分析流程，揭示全球昆虫多样性格局和形成机制。

本培训班旨在促进“一带一路”地区科技培训与合作，在昆虫多样性格局评估、昆虫智能监测体系等方面形成技术标准体系，构建“一带一路”昆虫多样性格局评估与智能监测体系联盟。通过共同努力以破除单一国家无法解决的生态矛盾，践行人类命运共同体的全球价值观。

为应对生物多样性保护与可持续发展的全球性挑战，中国科学院动物研究所于 2023 年 10 月成功举办首届“一带一路”地区昆虫多样性格局评估与智能监测体系关键技术培训班，取得显著成果。

首届成果回顾

参加学员覆盖：来自德国、法国、英国、意大利、韩国、蒙古、尼泊尔、南非、肯尼亚、厄瓜多尔、印度尼西亚等 17 个国家的 22 位外籍学员（从全球 43

国 96 个单位的 156 名申请者中遴选），以及中国 39 位学员和来自中、英、德、法等国的 47 位专家共同参与；

培训内容：为期 16 天的培训中，开展理论讲座 52 场、实验培训 11 场、野外实践 3 天、合作交流活动 18 场，总学时达 100 小时；

获得影响力：获新华社、央视《晚间新闻》、光明日报、中国日报等 30 家权威媒体报道，展现“一带一路”生态合作的全球关注度。

在此背景下，本届培训班将延续首届成功经验，进一步深化国际合作网络，推动昆虫多样性智能监测技术标准化，助力全球生物多样性保护行动。

2. 学员报名

本培训班通过教授昆虫多样性以及交叉学科的基础理论知识和前沿研究技术，提升“一带一路”国家昆虫多样性调查和监测能力，培养相关领域的国际人才，搭建青年科学家研究网络。

有志于开展“一带一路”国家和地区昆虫多样性格局评估和监测研究的青年学者均可报名，特别是昆虫学、动物学、生态学、生物多样性及相关领域的青年学者、博士后、博士生和从事生态监测与保护的科研机构及企业技术人员。本次培训提供 20 个免费名额（原则上每个国家筛选一个人，如果有需要，可以同一个国家两个学员共享一个名额的额度），优先支持“一带一路”国家学员，依据研究潜力、学术背景及国籍综合遴选。

3. 培训内容

本届培训将由中国科学院动物研究所白明研究员主持，以“理论—技术—实践—协作”为核心，采用理论讲座、野外实践及软件操作三位一体的方式进行授课。目前已经邀请了德国耶拿大学、芬兰赫尔辛基大学、香港大学、新加坡南洋理工大学、中国科学院、中国高校等机构的知名学者讲授课程，具体培训日程将在第二轮通知发布。

4. 培训形式

培训时间：2025.10.10-2025.10.28（共 19 天，含跨区域联动）

培训方式：线下培训

培训语言：英语

培训地点：中国科学院动物研究所（北京）、中国农业大学（北京）、宁夏大学（银川，宁夏）、沧州师范学院（沧州，河北）、河南科技学院（新乡，河南）。国外学员必须全程参加培训，国内学员可以选择分阶段培训，也可以全程参加培训。

5. 报名方式

截止时间：

国际学员：2025 年 6 月 20 日；

国内学员：2025 年 8 月 20 日；

报名链接：<https://belt-road-insect-diversity.casconf.cn>;

所有学员报名信息以上传到报名系统的为准，邮箱不接受报名。如果有报名以外的问题咨询，

国际学员咨询联系：刘宁博士（liun@ioz.ac.cn）。

国内学员咨询联系：陈女士（Anputongtong@hotmail.com）。

主办单位：中国科学院动物研究所

协办单位：中国昆虫学会国际学术交流工作委员会

中国农业大学植物保护学院

宁夏大学

沧州师范学院

河南科技学院