



Chihjen Ko, Tsuyoshi Hosoya Regional Representatives for Asia, GBIF Nodes Committee



#### GBIF in Asia

- Empower Global Network
- ▶ Enhance Biodiversity Information Infrastructure
- Fill Data Gaps
- Improve Data Quality
- Deliver Relevant Data



#### Indonesia

- Number of types in the InaBIF 2018 portal:
- 1) Number of Flora species: 41.892
- 2) Number of Fauna species: 11.026
- 3) Number of Mikrobs species: 665
  Total of species number (Flora, Fauna & Mikrobs): 53.583.
- InaBIF has become part of the CHM Indonesia website. The InaBIF portal link is in the Indonesian Biodiversity Database Reference section.
   <a href="https://balaikliringkehati.menlhk.go.id/reference-layanan/reference-database-spesies/">https://balaikliringkehati.menlhk.go.id/reference-layanan/reference-database-spesies/</a>
- Data in InaBIF portal:
- 1. Data Flora: 201.243 records
- 2. Data Fauna: 90.039 records
- 3. Data Mikroba: 2.801 records

Total number of records (Flora, Fauna, Mikroba): 294.083 records.

Migrating data base from museum collections ± 900.000 records → on going



#### Indonesia

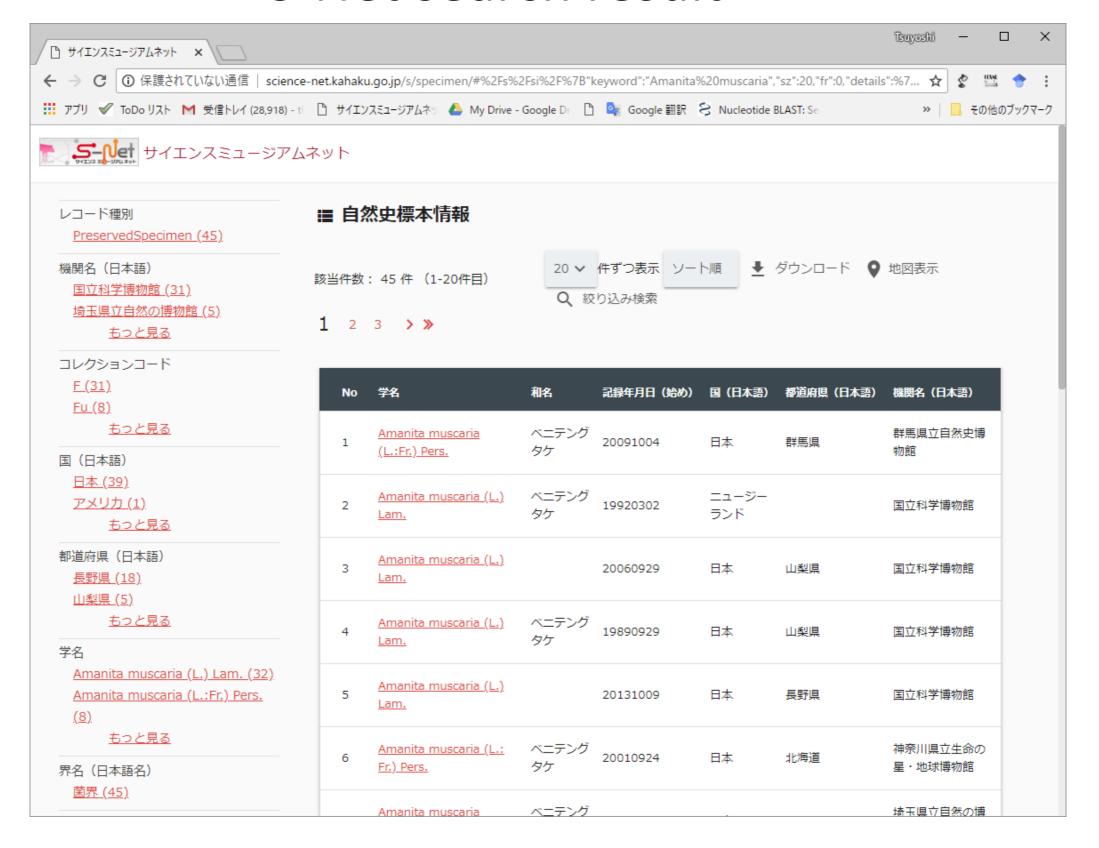
- InaBIF is making an android application to record data during a survey in the field (e-InaBIF).
- InaBIF is in collaboration with 2 GBIF projects on biodiversity databases in Indonesia, namely BIODIVERSKRIPSI (Tambora Muda) and Digitizing and Databasing Sumatran Flora (Herbarium of Andalas University).
- Digitalizing data of protected species by Indonesian regulation (P 20/KLHK/2018) and the information from handbook which entitled is: "Jenis-jenis Hayati yang Dilindungi Perundangundangan Indonesia" and "Mamalia Dilindungi Perundangundangan Indonesia"



### Japan

- Workshops/symposiums are held to raise awareness
- Attempted to include fossil data
- A course for high school for interests
- Renewed Science Museum Net (http://sciencenet.kahaku.go.jp/) system
- Preliminary studies on gap discovery has been carried out for fungi and Lepidoptera specimens

#### S-Net search result



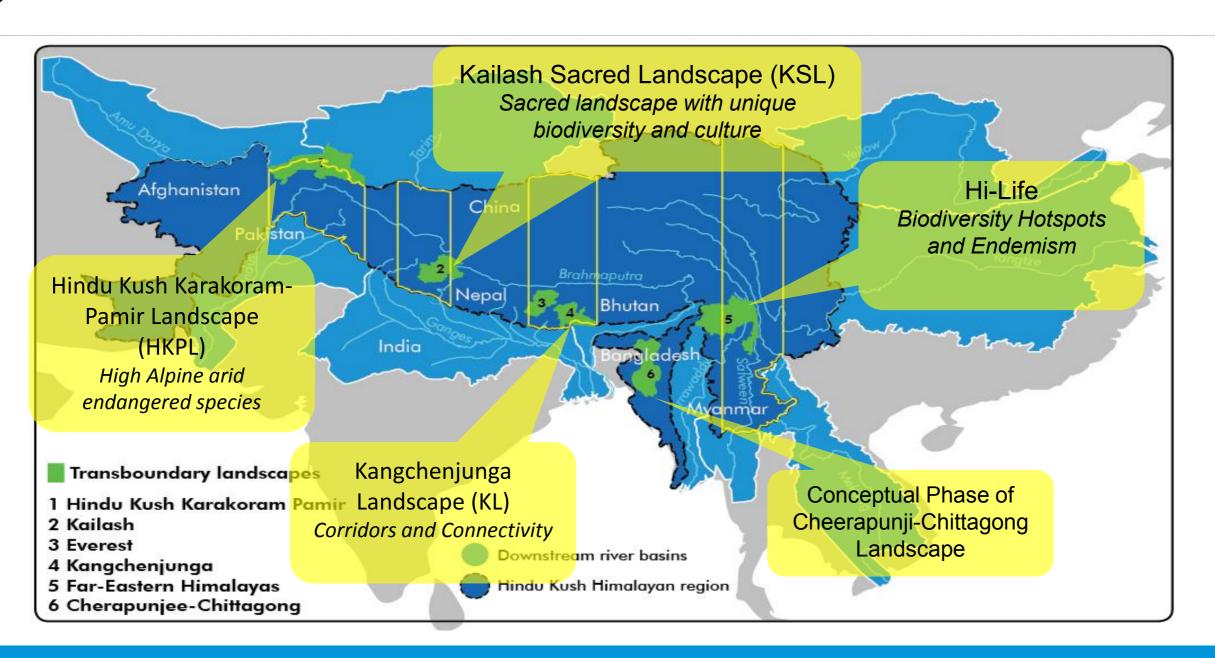


### Republic of Korea

- Regular meetings to engage potential data publishers in Korean Biodiversity Consortium, 2 new in 2019
- Two field investigations done during '18 '19 and data has been incorporated into GBIF.org
- A workshop to share the result of 2018 in May.
- ▶ 32,087 occurrences of T.B. Lee Herbarium of Seoul National Univ. has been uploaded.
- ▶ 1M+ records to come in 2019

#### ICIMOD

### Systematic data collection framework



#### ICIMOD

### Data sharing platform

- 1. Regional database initiative: A full infrastructure as central data repository for different thematic areas
- 2. Provides easy access to the data through a webbased portal.
- 3. Adoption of Darwin Core data and metadata standards for biodiversity data.
- 4. Data sharing policy and operation guidelines

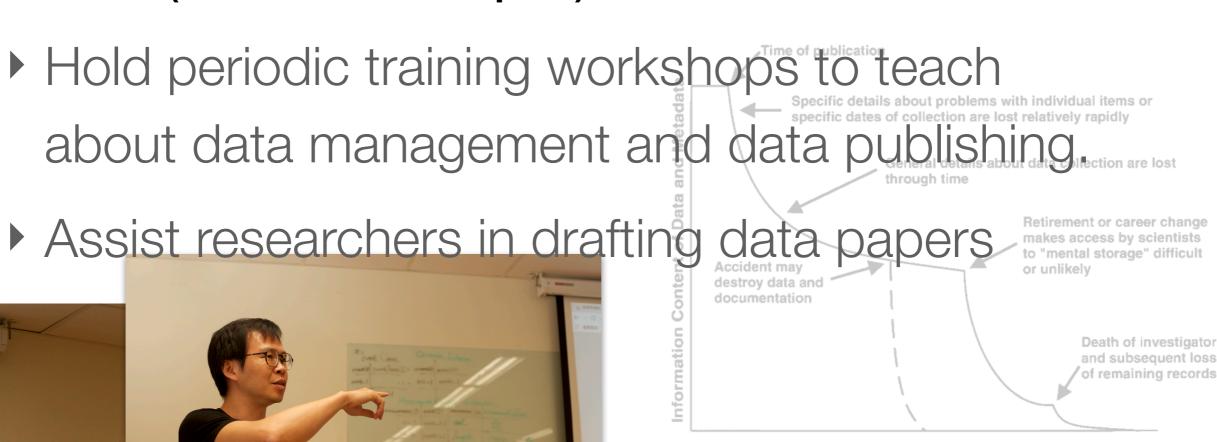






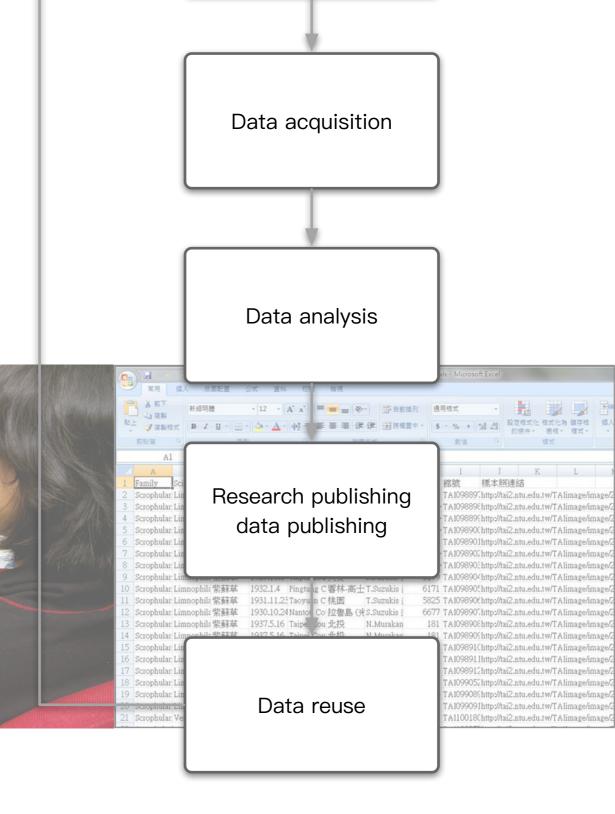


## Taiwan (Chinese Taipei)



Michener et al., 1997

Promoting data
 management practices
 and prepare for data
 submission, to meet
 journal requirements



Project preparation &

data management plan

# Biodiversity Informatics in Asia - Ch#8 Good practices and lessons learned in Asia

▶ Eun-Shik Kim

Nakul Chettri

Christian Bolneo Elloran

Tsuyoshi Hosoya

Mohammad Azmal Hossain Bhuiyan

Hong-Gu Kang

Moniruzzaman Khondker

Chihjen Ko

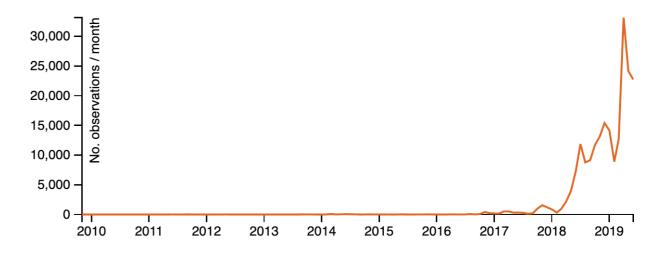
Maofang Luo, Zheping Xu

## Species groups in BIFA '19

- Lepidoptera
- Bats
- Amphibians and Reptiles
- Bryophyte and Lichen
- ▶ Plants

### iNaturalist - citizen science





The top vascular plant identifier in Taiwan is Chia-Lun Hsieh (@galanhsnu), a research assistant of Biodiversity Research Center, Academia Sinica. @galanhsnu is followed by Po-Chung Chen (@pochung). @pochung is an environmental educator and has taught several courses to engage youth in nature. @yuchuan is the top insect identifier. Many of the moth identifications in Taiwan on iNaturalist can be traced to participants in the Taiwan Moth Information Center. This effort to create an online moth database is led by Hsu-Hong Lin, the chief secretary of the The Endemic Species Research Institute of Taiwan.



#### **Moths of Taiwan**

4500+ species, well documented data including checklist, synonyms, references, hostplants and kinds of photos



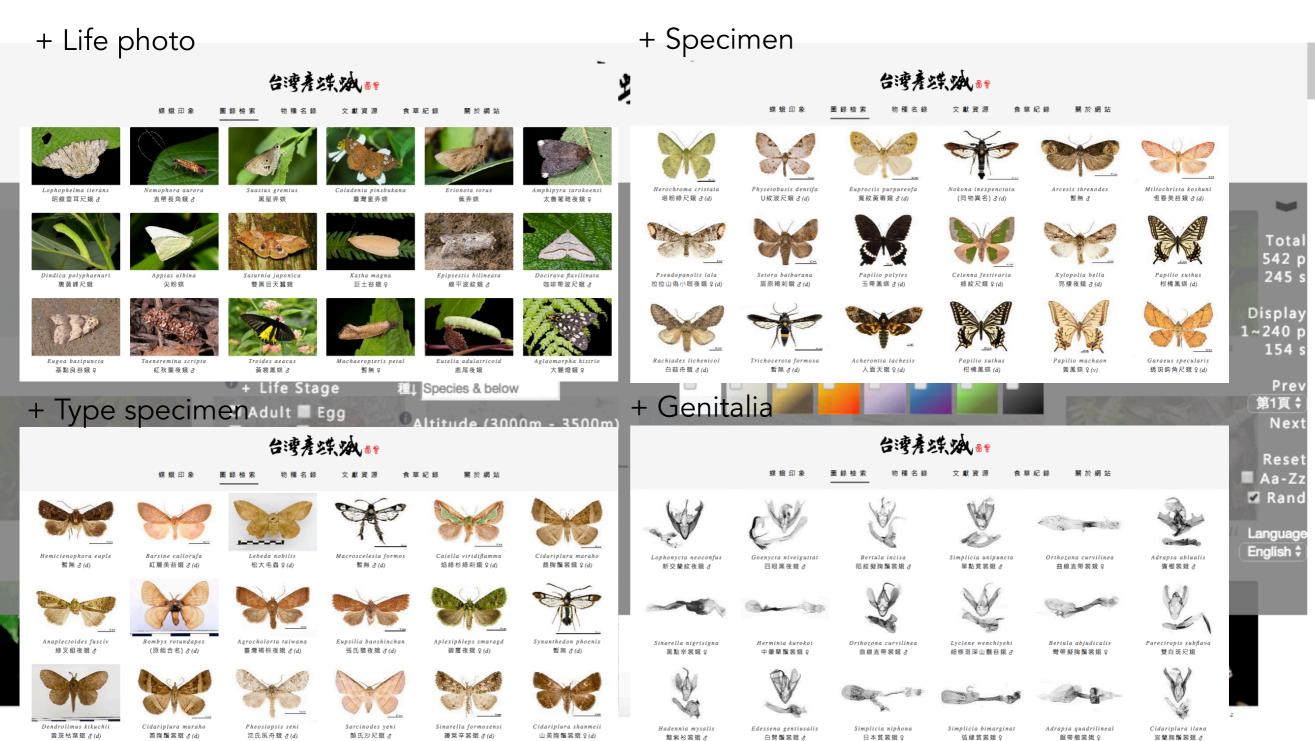
### 250K observation records have been updated in GBIF



### DearLep.tw - A highly interactive platform

Similar to the Chinese pronunciation of Order Lepidoptera: "butterflies & moths"

Order Lepidoptera: butterflies & moths



## 台灣產蝶級



### SUN SUN MOTHS exhibition (Summer, 2019)





## Node Steering Group

Relaying feedback and opinions from the regions for refining strategy and actions in GBIF Nodes Committee.

