

## **Biodiversity Data Integration in Taiwan and Linkages with Global Databases**

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The integration of Taiwan's biodiversity databases began in 2001, the same year that the National Science Council started its Digital Archives Program (later renamed Taiwan e-Learning and Digital Archives Program; TELDAP), the Executive Yuan launched its Biodiversity Action Plan, and Taiwan joined the Global Biodiversity Information Facility (GBIF) as an Associate Participant. In 2002, Academia Sinica began the creation of the “Catalog of Life in Taiwan” database (TaiBNET). TaiBIF, Taiwan’s node of GBIF established in 2004, integrates Taiwan's biodiversity data and shares them with the global community using the data exchange formats and platforms developed by GBIF. TaiBIF also helps various institutions to set up TapirLink in their data servers so that Taiwan's data can be easily integrated domestically and disseminated worldwide.

Both TaiBNET and TaiBIF have broken through the barrier of Intellectual Property Rights and can collect and integrate data accumulated through the years by TELDAP’s various sub-projects. However, raw data, especially those on ecological distribution, generated by different government agencies or non-TELDAP projects are still dispersed due to parochialism. A cross-agency committee was therefore established in Academia Sinica in 2008 to formulate policies on data collection, integration, and mechanisms to increase public availability of data. Any commissioned project will hereafter include these policy requirements in the contract.

In addition, TaiBNET, TaiBIF, and the Fish Database of Taiwan can collaborate and exchange data with global databases or projects such as Species2000, BOL, EOL, FishBase, OBIS, and WoRMS. All the English contents of FishBase, 100 of the World’s Worst Invasive Alien Species, and Global Invasive Species Database established by ISSG of IUCN are translated into traditional and simplified Chinese characters. Starting in 2010, cross-strait databases on catalog of life, museum collections (initially plant and fish), and biodiversity scientific terms will be integrated and shared. Furthermore, a database will be created providing species names and

scientific terms in traditional Chinese, simplified Chinese, and English in order to serve all the Chinese people in the world.

Keywords: Biodiversity informatics; GBIF; TaiBNET; TaiBIF; database