

International cooperation is crucial to integrate Taiwan's biodiversity Data

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The integration of Taiwan's biodiversity databases started in 2001, the same year that National Science Council launched National Digital Archives Program (later changed to Taiwan e-Learning and Digital Archives Program, TELDAP), the Executive Yuan began Biodiversity Promotion Plan, and Taiwan joined GBIF as an Associate Participant. Taiwan, hereafter, embarked on the journey of integrating biodiversity data. In 2002, Academia Sinica started to create the database of "Catalog of Life in Taiwan" (TaiBNET = TaiCOL). In 2004, TaiBIF, Taiwan's node of GBIF, was set up to integrate Taiwan's biodiversity data. In addition to continuing the work on TaiCOL, TaiBIF constructed Taiwan Encyclopedia of Life (TaiEOL) and DNA barcoding in Taiwan (TaiBOL). These databases are linked to the corresponding international databases of COL, GBIF, EOL, and BOL. The data are exchanged and shared through GBIF; through international collaboration projects such as OBIS, GEO-BON, WoRMS, GenBank, IUCN-ISSG, and WDS; through Global Species Databases of various organisms (GSD); or through individual country's database portal.

By grasping the opportunities of international cooperation and adopting the mainstream of information technology over the past twelve years, TaiBIF not only has successfully integrated domestic cross-agency and cross-taxa biodiversity information, it has also effectively linked to the world biodiversity community—a model for database integration both in Taiwan and abroad. The main reasons for TaiBIF's success are: (1) the national policy of Biodiversity Promotion Plan, (2) the aforementioned support of National Science Council and Council of Agriculture, (3) the active participation in many international organizations and collaborative projects, (4) the educational training and promotion of the integration and publishing tools, including DiGIR, TAPIR, and IPT, (5) the policies of sharing resources, technology, and research results, and (6) the active promotion of top-down approach regarding information policy. Taiwan has very rich biodiversity and enjoys working together with international partners on conservation and sustainable use of biodiversity. The experience Taiwan has in successfully building biodiversity databases and collaborating with international counterparts can be shared with colleagues who are engaged in database integration.