Building on the Functionalities of GBIF-COL ChecklistBank

Olaf Bánki^{‡,§}, Donald Hobern^I, Markus Döring^{¶,§}

‡ Naturalis Biodiversity Center, Leiden, Netherlands § Catalogue of Life / Species 2000, Weesp, Netherlands | Catalogue of Life / Species 2000, Canberra, Australia

¶ Global Biodiversity Information Facility, Copenhagen, Denmark

Corresponding author: Olaf Bánki (olaf.banki@sp2000.org)

Abstract

<u>ChecklistBank</u>, co-developed by Catalogue of Life (COL) and the Global Biodiversity Information Facility (<u>GBIF</u>), provides a suite of functionalities for building taxonomic data solutions. In addition to serving as a publishing platform and open data repository for taxonomic and nomenclatural data, ChecklistBank includes tools for managing the assembly of new species lists from other datasets published to the platform. The ChecklistBank API provides access to all data sources, including the <u>COL Checklist</u>, all mediated through ChecklistBank. It also allows for (bulk) matching of names, and provides an overview of the name usage identifiers used by COL and the identifiers for the same taxon originating from other data sources.

The ChecklistBank infrastructure is still in development, but is starting to allow for various kinds of usages and services, including quality assurance and quality control. Examples will be presented of possible functionalities and services that could be added to ChecklistBank in future, including:

- An option to push a ChecklistBank dataset to <u>Github</u> and then automate reimport from the same source (with appropriate validation). A Github representation, based upon the Catalogue of Life Data Package (<u>CoIDP</u>) data model, could serve as a general resource against which developers can build new lightweight editing or batch update tools, including merge tools to bring in new names from ChecklistBank datasets, with Github providing versioning support and triggers for synchronisation with Github
- An option to establish similar bidirectional editing models with other environments such as <u>TaxonWorks</u> or <u>Aphia</u>,
- Notifications for checklist curators when previously unseen names and combinations for their group appear in new or updated ChecklistBank datasets

• Enhancements to the data model and user interface to support better quality/ completeness indicators (traffic lights).

Keywords

Catalogue of Life, taxonomy, name matching, species list, API, taxonomic editing, quality assurance, quality control

Presenting author

Markus Döring

Presented at

TDWG 2023

Conflicts of interest

The authors have declared that no competing interests exist.