Challenges of Integrating and Curating Nomenclatural and Taxonomic Data in the World Checklist of Vascular Plants

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Abstract

The World Checklist of Vascular Plants (WCVP) is the Royal Botanic Gardens (RBG) Kew's global names and taxonomy output. The underlying data sources, the International Plant Names Index (IPNI), the World Checklist of Selected Plant Families (WCSP), and the World Checklist of Selected Plant Families – in Review (WCSP – In Review) are actively curated by a dedicated editorial team, who manage contributions from a wide range of international partners. WCVP is the intersection between IPNI and WCSP/WCSP-In Review and provides the names and taxonomy backbone for Plants of the World Online (POWO) – the web portal bringing Kew scientific data online. WCSP contains the peer reviewed taxonomic data covering about half of all vascular plant families. The taxonomy presented in WCSP is currently widely used, with most authoritative web resources on plants using the WCSP data either directly or indirectly. WCVP will bring this together with the remaining families currently in the 'In-Review' database. IPNI is a nomenclatural listing of all effectively published taxonomic acts for Plant Names (new species, new combinations, new names at rank of Family down to infraspecific). It is a project that has been continually compiling lists of new plant names since 1895. It provides the basis of many external plant names databases including Tropicos and GBIF and a point of contact for users to ask questions on plant nomenclature, with a public facing access to the

nomenclatural expertise at Kew. The database is actively maintained, edited and added to daily.

This presentation will cover:

- The integration of the resources and how the integrated product will be presented online
- How the integrated product supports outputs like POWO
- Experiences from the data integration process (the matching tools iteratively developed and tested in real world circumstances by dedicated staff)
- The development of programmatic API access and names matching tools
- The drafting of a data paper describing the WCVP (with access to a full download)

Keywords

names, taxonomy, World Checklist of Vascular Plants, IPNI

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