BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 3: e35191
doi: 10.3897/biss.3.35191

OPEN ACCESS

Conference Abstract

The e-Flora of South Africa – restructuring data to comply with Darwin Core standards for inclusion into the World Flora Online

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Received: 05 Apr 2019 | Published: 17 Sep 2019

Citation: Ranwashe F, Le Roux M (2019) The e-Flora of South Africa – restructuring data to comply with Darwin Core standards for inclusion into the World Flora Online. Biodiversity Information Science and Standards 3: e35191. https://doi.org/10.3897/biss.3.35191

Abstract

The e-Flora of South Africa project was initiated in 2013 by the South African National Biodiversity Institute (SANBI) in support of the Global Strategy for Plant Conservation (GSPC, 2011-2020). South Africa's flora consists of ca. 21,000 taxa of which more than half are endemic. South Africa will contribute a national Flora towards Target 1 of the GSPC ("To create an online flora of all known plants by 2020"). South Africa's contribution is ca. 6% of the world's flora of which ca. 3% are endemic and therefore unique. South Africa's electronic Flora is comprised of previously published descriptions.

South Africa's e-Flora data forms part of the Botanical Dataset of Southern Africa (BODATSA) that is currently managed through the Botanical Research And Herbarium Management System (BRAHMS). To date, South Africa's e-Flora data (http://ipt.sanbi.org.za/iptsanbi/resource?r=flora_descriptions) represents 19,539 indigenous taxa, 79,139 descriptions of distribution, morphological, habitat and diagnostic data, and 27,799 bibliographic records. The e-Flora data was recently published online using the Integrated Publishing Toolkit and henceforth harvested by the World Flora Online (WFO) into the portal.

A series of challenges were encountered while manipulating descriptive data from BRAHMS to be ingested by the WFO portal; from taxonomic issues to data quality issues not excluding compliance to data standards.

To contribute to the WFO portal, the taxa in BODATSA has to match with the taxa in the WFO taxonomic backbone. Once there is a match, a unique WFO taxon identifier is assigned to the taxa in BODATSA. This process presented various challenges because the WFO taxonomic backbone and the taxonomic classification system that is used by South Africa (South African National Plant Checklist) does not fully correlate. The schema used to store taxonomic data also does not agree between BRAHMS and WFO and had to be addressed.

To enable consistency for future, a detailed guideline document was created providing all the steps and actions that should be taken when publishing an e-Flora, managed in BRAHMS, to the WFO portal. The presentation will focus on matching taxonomic classifications between BRAHMS and WFO; dealing with character encoding issues and manipulating data to meet Darwin Core standards.

Keywords

Flora; Darwin Core; e-Flora; Biodiversity Informatics; Data standards; World Flora Online; WFO

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Conflicts of interest

None