Linked Open Data for Taxonomic Databases: The Nordic/Baltic implementation

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Abstract

Starting with Finland and Sweden and a subset of taxonomic groups, the Nordic/Baltic countries are connecting national checklists using Linked Open Data standards (Auer et al. 2007) and agreed vocabularies. We use HTTP Uniform Resource Identifiers as globally unique, persistent identifiers for taxon concepts (Chawuthai et al. 2013). Currently, we provide both human-readable (html) and machine-readable (xml) responses for client requests via a central checklist, TAXONID.ORG, which in itself needs to be managed. However, we hope this can be replaced by Catalogue of Life Plus in a not too distant future. While initially exchanging taxonomic information, our goal is ultimately to share information also on genetics, images and traits as well as conservation status and observations in a standardized way. The work is part of the NeIC DeepDive project which is funded by the Nordic e-Infrastructure Collaboration (neic.no/deepdive). The vision is to establish a regional infrastructure network consisting of Nordic and Baltic data centers and information systems and to provide seamlessly operating regional data services, tools, and virtual laboratories.

Keywords

checklist, identifier, taxon circumscription, matching, linking

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