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Conference Abstract

Desktop or remote knowledge base management systems for taxonomic data and identification keys: Xper2 and Xper3

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Abstract

Storing, sharing, managing taxonomic data is crucial for research and systematic outreach. In this context, Xper2 (Ung et al. 2010) and Xper3 (Vignes Lebbe et al. 2015) are two platforms dedicated to taxonomic descriptions and computer-aided identification. These freeware provide a sleek and easy to use interface, and do not require computer skills. Xper2 is available on Windows, MacOS or Linux. Download the software on the website. Xper3 gives users the ability to work simultaneously and remotely on the same knowledge base. Create your own account on the online platform.

The numerous knowledge bases (over one thousand active KB) already created and published with the two platforms prove their relevance and efficiency (See for example Mathieu et al. 2012, Kerner 2012, Corvez and Grand 2014, Martin et al. 2015, Engel et al. 2016, Saïd et al. 2017). Scientists can share their data on phenotypes (structured descriptions, documented with images, videos, and text including bibliography and external links), compare phenotypes, and import or export partial or total content in various standard formats such as SDD (Structured Descriptive Data, a TDWG data standard), CSV (Comma Separated Values, used in Spreadsheet), and NEXUS (used in

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phylogenetic analyses, Maddison et al. 1997) for external analyses. KB can be exchanged between Xper2 and Xper3 via SDD files.

We propose demos of the desktop version (Xper2) and online version (Xper3), illustrated with various contents on fossils, botany, marine species and arthropods. The TDWG 2017 participants are invited to come with their own data (list of taxa, identification keys, character-taxon matrices). They will learn and test how to import existing content into Xper KB, and how to build and publish keys (free access keys and single access keys) automatically.

Keywords

Xper2, Xper3, knowledge base, identification keys, online platform, taxonomy

Presenting author

Régine Vignes-Lebbe

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