The Online Pollen Catalogs Network (RCPol)

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Abstract

Aiming at promoting interaction among researchers and the integration of data from their pollen collections, herbaria and bee collections, RCPol was created in 2013. In order to structure RCPol work, researchers and collaborators have organized information on Palynology and trophic interactions between bees and plants. During the project development, different computing tools were developed and provided on RCPol website (http://rcpol.org.br), including: interactive keys with multiple inputs for species identification (http://chaves.rcpol.org.br); a glossary of palinology related terms (http://chaves.rcpol.org.br/profile/glossary/eco); a plant-bee interactions database (http://chaves.rcpol.org.br/interactions); and a data quality tool (http://chaves.rcpol.org.br/admin/data-quality). Those tools were developed in partnership with researchers and collaborators from Escola Politécnica (USP) and other Brazilian and foreign institutions that act on palynology, floral biology, pollination, plant taxonomy, ecology, and trophic interactions. The interactive keys are organized in four branches: palynoecology, paleopalynology, palynotaxonomy and spores. These information are collaboratively digitized and managed using standardized Google Spreadsheets. All the information are assessed by a data quality assurance tool (based on the conceptual framework of TDWG Biodiversity Data Quality Interest Group Veiga et al. 2017) and curated by palynology experts. In total, it has published 1,774 specimens records, 1,488 species records (automatically generated by merging specimens records with the same scientific name), 656 interactions records, 370 glossary terms records and 15 institutions records, all of them translated from the original language (usually Portuguese or English) to Portuguese,

English and Spanish. During the project's first three years, 106 partners, among researchers and collaborators from 28 institutions from Brazil and abroad, actively participated on the project. An important part of the project's activities involved training researchers and students on palynology, data digitization and on the use of the system. Until now six training courses have reached 192 people.

Keywords

pollen, interaction, database, interactive identification key, data quality

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References

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