Resource Summary Report

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BOLD

RRID:SCR_004278
Type: Tool

Proper Citation

BOLD (RRID:SCR_004278)

Resource Information

URL: http://www.barcodinglife.com/

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Description: DNA barcode data with an online workbench that supports data validation, annotation, and publication for specimen, distributional, and molecular data. The data platform consists of three main modules, a data portal, a database of barcode clusters, and data collection workbench. The Public Data Portal provides access to all public barcode data which consists of data generated using the Workbench module as well as data mined from other sources. The Barcode Index Number (BIN) system assigns a unique identifier to each sequence cluster of COI, providing an interim taxonomic system for species in the animal kingdom. The workbench module integrates secure databases with analytical tools to provide a private collaborative environment for researchers to collect, analyze, and publish barcode data and ancillary DNA sequences. This platform also provides an annotation framework that supports tagging and commenting on records and their components (i.e. taxonomy, images, and sequences), allowing for community-based validation of barcode data. By providing specialized services, it aids in the assembly of records that meet the standards needed to gain BARCODE designation in the global sequence databases. Because of its web-based delivery and flexible data security model, it is also well positioned to support projects that involve broad research alliances. Public data records include record identifiers, taxonomy, specimen details, collection information and sequence data. Data that has been publicly released through BOLD can be retrieved manually through the BOLD public interface or automatically through BOLD web services. BOLD analytical tools are available for any data set that exists in BOLD (including publicly available data). Analytical tools can be accessed through the BOLD Project Console under the headings Sequences Analysis or Specimen Aggregates. Some examples include Taxon ID Tree, Alignment Viewer, Distribution Maps, and Image Library.

Abbreviations: BOLD

Synonyms: BOLD Systems, Barcode of Life Database Systems, Barcode of Life Database, Barcode of Life Data Systems, BOLD : The Barcode of Life Data System

Resource Type: service resource, production service resource, data analysis service, database, analysis service resource, data or information resource, storage service resource, data repository

Defining Citation: PMID:18784790

Keywords: protists, taxonomy, dna, barcode, dna barcode, gene sequence, primer, publication, barcode index number, unique identifier, annotation, platform, data management, data sharing, dna sequence, bioinformatics, molecular biology, biology, geography, species, sequence cluster, map, web service, image collection, FASEB list

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Availability: Free, Public

Resource Name: BOLD

Resource ID: SCR_004278

Alternate IDs: DOI:10.17616/R3PP7J, nlx_29236, DOI:10.25504/FAIRsharing.en9npn, DOI:10.5883

Alternate URLs: http://www.boldsystems.org/, https://doi.org/10.17616/R3PP7J, https://doi.org/10.17616/r3pp7j, https://doi.org/10.5883/, https://dx.doi.org/10.5883/, https://fairsharing.org/10.25504/FAIRsharing.en9npn

Record Creation Time: 20220129T080223+0000

Record Last Update: 20250517T055631+0000

Ratings and Alerts

No rating or validation information has been found for BOLD.

No alerts have been found for BOLD.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 259 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

Kilian IC, et al. (2025) Maximizing Identification Precision of Hymenoptera and Brachycera (Diptera) With a Non-Destructive DNA Metabarcoding Approach. Ecology and evolution, 15(1), e70770.

Hebert PDN, et al. (2025) Barcode 100K Specimens: In a Single Nanopore Run. Molecular ecology resources, 25(1), e14028.

Uquillas A, et al. (2025) Climate drives the long-term ant male production in a tropical community. Scientific reports, 15(1), 428.

Gong X, et al. (2025) Chromosome-level genome assembly of Iodes seguinii and its metabonomic implications for rheumatoid arthritis treatment. The plant genome, 18(1), e20534.

Hendrycks W, et al. (2025) Deterministic and stochastic effects drive the gut microbial diversity in cucurbit-feeding fruit flies (Diptera, Tephritidae). PloS one, 20(1), e0313447.

Lin C, et al. (2025) Data on insect biodiversity in a Chinese potato agroecosystem from DNA metabarcoding. Scientific data, 12(1), 131.

Wieczorek K, et al. (2024) The lost generation of Pemphigus populiglobuli (Hemiptera, Aphididae): exploring the taxonomy of the Svalbard aphids of genus Pemphigus. Zoological letters, 10(1), 21.

Nguyen TT, et al. (2024) Survey of sand fly fauna in six provinces of Southern Vietnam with species identification using DNA barcoding. Parasites & vectors, 17(1), 443.

Bossert S, et al. (2024) Evolutionary History and Ecology of Andrena (Foveoandrena) androfovea: A New Nearctic Mining Bee (Hymenoptera, Andrenidae) Species and Subgenus. Ecology and evolution, 14(11), e70453.

Rodrigues BL, et al. (2024) Hidden diversity in anthropophilic sand flies of the Monticola Series (Diptera, Psychodidae). Scientific reports, 14(1), 27215.

Athey KJ, et al. (2024) Molecular identification of predation on the Dubas bug (Hemiptera: Tropiduchidae) in Oman date palms: density-dependent response to prey. Journal of insect science (Online), 24(4).

McCarthy JS, et al. (2024) Population growth of two limno-terrestrial Antarctic

microinvertebrates in different aqueous soil media. Environmental science and pollution research international, 31(22), 33086.

Gan HY, et al. (2024) The hidden oases: unveiling trophic dynamics in Namib's fog plant ecosystem. Scientific reports, 14(1), 13334.

Moraes Zenker M, et al. (2024) Low coverage of species constrains the use of DNA barcoding to assess mosquito biodiversity. Scientific reports, 14(1), 7432.

Zhang L, et al. (2024) Multi-dimensional niche differentiation of two sympatric breeding secondary cave-nesting birds in Northeast China using DNA metabarcoding. Ecology and evolution, 14(7), e11709.

Knorrn AH, et al. (2024) Gaidropsarus mauritanicus (Gadiformes, Gaidropsaridae) a new three-bearded rockling from a deep-water coral ecosystem with a genetically verified biogeographical distribution of the genus and notes to its ecology and behavior. Journal of fish biology, 105(6), 1643.

Ergunay K, et al. (2024) Metagenomic Nanopore Sequencing of Tickborne Pathogens, Mongolia. Emerging infectious diseases, 30(14), 105.

da Moura AJF, et al. (2024) Vector competence of Culex quinquefasciatus from Santiago Island, Cape Verde, to West Nile Virus: exploring the potential effect of the vector native Wolbachia. Parasites & vectors, 17(1), 536.

Qian X, et al. (2024) ?Syntormon Loew (Diptera, Dolichopodidae) from Inner Mongolia, China, with the description of a new species. ZooKeys, 1212, 143.

Costantini MS, et al. (2024) The Role of Geography, Diet, and Host Phylogeny on the Gut Microbiome in the Hawaiian Honeycreeper Radiation. Ecology and evolution, 14(10), e70372.