

The problem with names

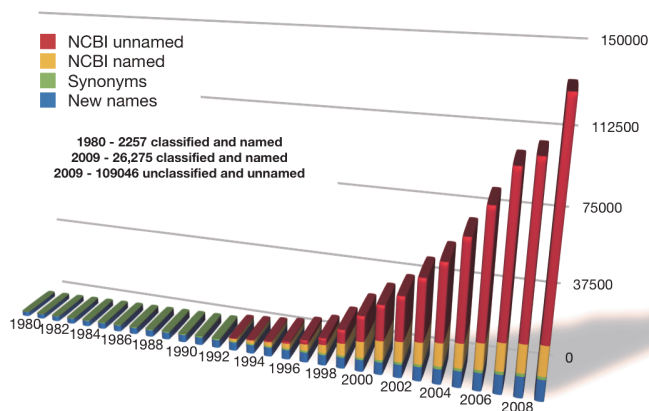
The validly published names of *Bacteria* and *Archaea* change roughly 15 times each week whereas invalid and trivial names appear in the literature and public databases at a rate more than three fold higher. A small number of experts work to keep pace; the rest of the community is left to catch up. The correct name is essential for accurate communication, but which name is it? And if a name changed, why did it change?

What does this mean for your online research?

Do you stop reading to check on a taxonomic status?

Do you look it up later?

Validly published and illegitimate names 1980 - 2009



There is a solution

In partnership with the *Society for General Microbiology* and the *International Committee on Systematics of Prokaryotes*, *NamesforLife* extracts all relevant information from the taxonomic literature for *Bacteria* and *Archaea*. *N4LGuide* presents this information, with additional annotation, for any name that is readable in a web browser (starting with Firefox, but expanding to other browsers in the near future), on-demand. Never again need a reader be ill informed about the status or meaning of a name.

"I am delighted about the new tool —
all pertinent info at your fingertips!"

M. G. Klotz, University of Louisville

Tell us what you think

The first open release of *N4LGuide* is now available.
Registration is free for individual users.

Read more at:

<https://services.namesforlife.com/guide>

Register for free at:

<https://services.namesforlife.com/register>

Contact us at

+1 517-708-3802

on the web at <http://namesforlife.com>

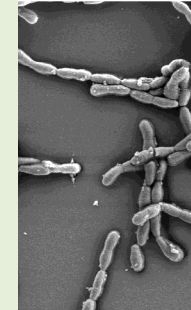
or e-mail info@namesforlife.com



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USA

Semantic Resolution Technology

Expert data
Always at hand



Haliangium ochraceum SMP-2^T
N4L doi:10.1601/nm.3778

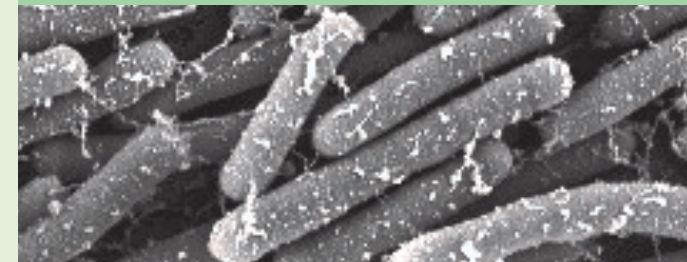


Image credit: Ivanova et al. 2010
Stand. Genomic Sci. 2010 2:1

Eggerthella lenta IPP VPI 0255^T
N4L doi:10.1601/nm.5754

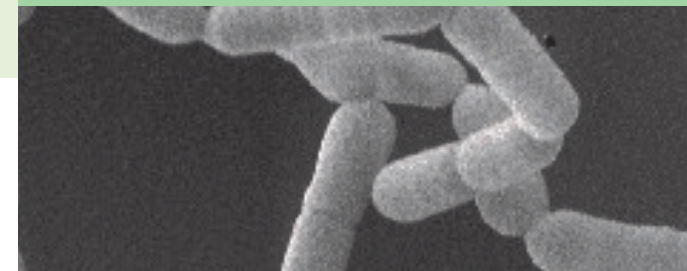


Image credit: Manfred Rohde, Helmholtz Centre for Infection Biology
Stand. Genomic Sci. 2009 1:2

A robust and reliable foundation

At *NamesforLife* we believe that online annotations must be sufficiently authoritative and persistent for other systems to rely on them and not reinvent them.

Services must work not only for *ad hoc* human users, who after all, have fail-safe alternatives, but also in third-party applications.

Our curators have fully researched each record in our database. Every piece of data is backed by one or more literature references, ensuring that readers have access to the key references.

NamesforLife creates objects from these data to represent units of knowledge in the life sciences — what is known about an organism, a taxonomic assertion — and identifies them with the now familiar digital object identifier (DOI). Units of knowledge thus become interlinked, and are reliably citable, directly accessible, and reusable.

No more searching; the data finds you >>>

We are not simply offering you another database to search. When you install *N4LGuide*, our knowledge comes to you. *N4LGuide* enables your browser to connect to N4L every time you read the literature. If you wish, *N4LGuide* will automatically annotate content while you are reading it.

There is no need to set one web page aside while you dig for data on another one. *N4LGuide* annotates any occurrence of a term from a curated termset in any resource, either data or narrative content. Annotations contain essential information assembled on the fly by N4L technology.

Every validly published bacterial and archaeal name that is viewed in the browser is highlighted (automatically or on demand) and serves as a direct link to encapsulated information about its past and present status as well as key references and other online resources, all with one click of a mouse.

Custom solutions >>>

N4LGuide is a free tool for users. We also develop custom solutions for business use.

Contact us to find out more.

Enhance your browser and accelerate your reading: Introducing N4LGuide

NamesforLife specializes in managing change in classification systems and terminologies. Our research tools make specialist knowledge trivially accessible to information workers where it was once the exclusive domain of experts.

Semantic Challenge >>>

A full-text literature search can quickly reach a dead end if the terminology has changed.

The rate of DNA sequencing of *Bacteria* and *Archaea* has accelerated tremendously and frequently the sequence records contain trivial or illegitimate names.

This confounds the retrieval of related information from databases and the scientific, technical and medical literature, as many of these invalidly named species cannot be readily tracked over time.

Expert Solution >>>

N4LTechnology, developed by *NamesforLife*, uses current authoritative data to resolve changes in bacterial nomenclature via a fully referenced model of the synonymies and corrections, and integrates data records with nomenclatural records.

Our expertise combines an information model that accommodates contradiction and change with skilled manual curation.

Validated Data >>>

Our biological data curators index the literature and database deposits as a sequence of interrelated taxonomic, nomenclatural, and organismal events, all tied to previous events and to the literature.

Each record is fully researched and backed by a bibliography, ensuring that the data is current and valid.

Trusted Authorities >>>

NamesforLife is partnered with the *Society for General Microbiology*, the *International Journal of Systematic and Evolutionary Microbiology*, and the *International Committee on Systematics of Prokaryotes*.

With *N4LGuide*, you have instant access to relevant data and citations without having to leave the page you are reading.

Each record has a complete bibliography and fully referenced strain and feature data.

Differentiation of species of the family Acetobacteraceae by AFLP DNA fingerprinting: Gluconacetobacter ko...

http://ijms.sgmjournals.org/cgi/content/full/59/7/1771

Gluconacetobacter hansenii; and *Acetobacter orleanensis* strains LMG 1545, LMG 1592 and LMG 1593. Cluster analysis of the AFLP DNA fingerprints of the reference strains

Bibliography

Cleenwerck I, De Wachter M, González A, De Vuyst L, Paul De Vos P. Differentiation of species of the family Acetobacteraceae by AFLP DNA fingerprinting: *Gluconacetobacter kombuchae* is a later heterotypic synonym of *Gluconacetobacter hansenii*. *Int J Syst Evol Microbiol* 2009; **59**: 1771-1786. doi:10.1099/ijms.0.005157-0 [19542117].

Lisdiyanti P, Navarro RR, Uchimura T, Komagata K. Reclassification of *Gluconacetobacter hansenii* strains and proposals of *Gluconacetobacter saccharivorans* sp. nov. and *Gluconacetobacter nataicola* sp. nov. *Int J Syst Evol Microbiol* 2006; **56**: 2101-2111. doi:10.1099/ijms.0.63252-0 [16957106].

List Editor. Validation List no. 64. Validation of publication of new names and new combinations previously effectively published outside the IJSB. *Int J Syst Bacteriol* 1998; **48**: 327-328.

doi:10.1601/nm.917