

# Register list for *Ryujinia shimokita* gen. nov. sp. nov. and their lineage

Submitted by Rinke, Chris

## Phylum *Ryujiniota*

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### Etymology

[Ry.u.ji.ni.o'ta] **N.L. fem. n.** *Ryujinia*, referring to the type genus *Ryujinia*; *-ota*, ending to denote a phylum; **N.L. neut. pl. n.** *Ryujiniota*, the *Ryujinia* phylum

### Nomenclatural type

Genus *Ryujinia*

### Description

*Ryujiniota* phyl. nov. has a global distribution and was mainly present in public shotgun metagenome datasets labelled as marine sediment metagenome, peat metagenome, sediment metagenome, soil metagenome and groundwater metagenome. The highest relative abundances of *Ryujiniota* were found in Costa Rica margin subsurface and east pacific subsurface metagenomes with 15.75% and 15.33%, respectively.

### Classification

*Bacteria* » *Ryujiniota*

### References

Effective publication: Sun et al., 2025 [1]

Assigned taxonomically: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49691>

## Class *Ryujiniia*

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### Etymology

[Ry.u.ji.ni'i.a] **N.L. fem. n.** *Ryujinia*, referring to the type genus *Ryujinia*; *-ia*, ending to denote a class; **N.L. neut. pl. n.** *Ryujiniia*, the *Ryujinia* class

### Nomenclatural type

Genus *Ryujinia*

### Description

The description is the same as for the type genus *Ryujinia*

### Classification

*Bacteria* » *Ryujiniota* » *Ryujiniia*

### References

Effective publication: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49693>

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## Order *Ryujiniales*

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### Etymology

[Ry.u.ji.ni.a'les] **N.L. fem. n.** *Ryujinia*, referring to the type genus *Ryujinia*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Ryujiniales*, the *Ryujinia* order

### Nomenclatural type

Genus *Ryujinia*

### Description

The description is the same as for the type genus *Ryujinia*

### Classification

*Bacteria* » *Ryujiniota* » *Ryujiniia* » *Ryujiniales*

### References

Effective publication: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49694>

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## Family *Ryujiniaceae*

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### Etymology

[Ry.u.ji.ni.a'ce.ae] **N.L. fem. n.** *Ryujinia*, referring to the type genus *Ryujinia*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Ryujiniaceae*, the *Ryujinia* family

### Nomenclatural type

Genus *Ryujinia*

### Description

The description is the same as for the type species is *Ryujinia shimokita* sp. nov

### Classification

*Bacteria* » *Ryujiniota* » *Ryujiniia* » *Ryujiniales* » *Ryujiniaceae*

### References

Effective publication: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49695>

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## Genus *Ryujinia*

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### Etymology

[Ry.u.ji'ni.a] **N.L. fem. n.** *Ry.u.ji'ni.a*, named after Ryūjin (龍神, lit. 'Dragon God') the protector deity of the sea in Japanese mythology; **N.L. fem. n.** *Ryujinia*, named after Ryūjin (龍神, lit. 'Dragon God') the protector deity of the sea in Japanese mythology

### Nomenclatural type

Species *Ryujinia shimokita*<sup>Ts</sup>

### Description

The description is the same as for the type species is *Ryujinia shimokita* sp. nov

### Classification

*Bacteria* » *Ryujiniota* » *Ryujiniia* » *Ryujiniales* » *Ryujiniaceae* » *Ryujinia*

### References

Effective publication: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49696>

## Species *Ryujinia shimokita*<sup>Ts</sup>

### Etymology

[shi.mo.ki'ta] **N.L. fem. n.** *shimokita*, named after the sampling site, the international waters off the Shimokita Peninsula in Japan

### Nomenclatural type

[INSDC Nucleotide: BAAGKY000000000.1](#)<sup>Ts</sup>

### Description

This uncultured species is represented by the genome 'SP\_28H5\_5', whose genome size is 2.0 MB, with the presence of 23S, 16S and 5S rRNA genes. *R. shimokita* is inferred to have a chemolithotrophic lifestyle, since this species encodes a nearly complete Wood-Ljungdahl (WL) pathway. It also has the potential for a heterotrophic lifestyle with substrate-level phosphorylation through glycolysis, while it lacks most genes for the citrate cycle and beta-oxidation. The type genome does not encode the ability for the oxidoreduction of nitrogen or sulphur compounds.

### Classification

*Bacteria* » *Ryujiniota* » *Ryujiniia* » *Ryujiniales* » *Ryujiniaceae* » *Ryujinia* » *Ryujinia shimokita*<sup>Ts</sup>

### References

Effective publication: Sun et al., 2025 [1]

Assigned taxonomically: Sun et al., 2025 [1]

### Registry URL

<https://seqco.de/i:49692>

## References

1. Sun et al. (2025). Metagenomic insights into taxonomic and functional patterns in shallow coastal and deep seafloor sediments in the Western Pacific. *Microbial Genomics*.  
[DOI:10.1099/mgen.0.001351](https://doi.org/10.1099/mgen.0.001351)

## Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List **seqco.de/r:zf1yjhk0** submitted by **Rinke, Chris** and including 6 new names has been successfully validated.

**Date of Priority:** 2025-09-17 07:39 UTC

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