

# Register list for 25 new names including Palauibacteraceae fam. nov.

Submitted by Aldeguer-Riquelme, Borja

## Order *Palauibacterales*

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### Etymology

[Pa.la.ui.bac.te.ra'les] N.L. masc. n. *Palauibacter*, type genus of the order; *-ales*, ending to denote an order; N.L. fem. pl. n. *Palauibacterales*, the Palauibacter order

### Nomenclatural type

Genus *Palauibacter*

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23816>

## Family *Palauibacteraceae*

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### Etymology

[Pa.la.ui.bac.te.ra.ce'ae] N.L. masc. n. *Palauibacter*, type genus of the family; *-aceae*, ending to denote a family; N.L. fem. pl. n. *Palauibacteraceae*, the Palauibacter family

### Nomenclatural type

Genus *Palauibacter*

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23815>

## Genus *Palauibacter*

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### Etymology

[Pa.la.ui.bac'ter] N.L. n. *Palau*, Republic of Palau; N.L. masc. n. *bacter*, rod; N.L. masc. n. *Palauibacter*, bacteria from the Republic of Palau

### Nomenclatural type

Species *Palauibacter soopunensis*<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter*

### References

Proposed: Aldeguer-Riquelme et al., 2023

Registry URL

<https://seqco.de/i:23808>

## Genus *Carthagonibacter*

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Etymology

[Car.tha.go.ni.bac'ter] N.L. n. *Carthago*, Carthago nova or Carthago spartaria, nowadays known as Cartagena, city in the southeast of Spain; N.L. masc. n. *bacter*, rod; N.L. masc. n. *Carthagonibacter*, bacterium from Carthago Nova, a city close to its isolation place

Nomenclatural type

Species *Carthagonibacter metallireducens*<sup>T5</sup>

Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Carthagonibacter*

References

Proposed: Aldeguer-Riquelme et al., 2023

Registry URL

<https://seqco.de/i:23809>

## Genus *Benthicola*

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Etymology

[Ben.thi'co.la] Gr. masc. n. *benthos*, bottom of a body water; L. masc. / fem. n. *-cola*, inhabitant; L. masc. n. *Benthicola*, inhabitant of the bottom of a body water

Nomenclatural type

Species *Benthicola marisminoris*<sup>T5</sup>

Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Benthicola*

References

Proposed: Aldeguer-Riquelme et al., 2023

Registry URL

<https://seqco.de/i:23810>

## Genus *Humimonas*

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Etymology

[Hu.mi.mo'nas] L. fem. n. *humus*, soil, ground; L. fem. n. *monas*, a unit; N.L. fem. n. *Humimonas*, a monad from soil

Nomenclatural type

Species *Humimonas hydrogenitrophica*<sup>T5</sup>

Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Humimonas*

References

Proposed: Aldeguer-Riquelme et al., 2023

Registry URL

<https://seqco.de/i:23811>

## Genus *Caribbeanibacter*

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### Etymology

[Ca.rib.bea.ni.bac'ter] N.L. n. *caribbean*, referring to the Caribbean Islands; N.L. masc. n. *bacter*, rod; N.L. masc. n. *Caribbeanibacter*, rod from the Caribbean Islands

### Nomenclatural type

Species *Caribbeanibacter nitroreducens*<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Caribbeanibacter*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23812>

## Genus *Kutchimonas*

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### Etymology

[Kut.chi.mo'nas] N.L. n. *Kutch*, Gulf of Kutch located in India; L. fem. n. *monas*, a unit; N.L. fem. n. *Kutchimonas*, a monad from the gulf of Kutch

### Nomenclatural type

Species *Kutchimonas denitrificans*<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Kutchimonas*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23813>

## Genus *Indicimonas*

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### Etymology

[In.di.ci.mo'nas] N.L. masc. n. *indicus*, referring to the Indian ocean; L. fem. n. *monas*, a unit; N.L. fem. n. *Indicimonas*, a monad from the Indian Ocean

### Nomenclatural type

Species *Indicimonas acetifermentans*<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Indicimonas*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23814>

## Species *Benthicola marisminoris*<sup>Ts</sup>

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### Etymology

[ma.ris.mi.no'ris] N.L. gen. n. *marisminoris*, referring to the Mar Menor lagoon, the site of isolation, located in Murcia, Spain

### Nomenclatural type

[NCBI Assembly: GCA\\_023554335.1](#)<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Benthicola* » *Benthicola marisminoris*<sup>Ts</sup>

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23797>

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## Species *Palauibacter poriticola*

### Etymology

[po.ri.ti'co.la] N.L. n. *Porites*, name of the coral genus; L. masc. /fem. n. suff. *-cola*, inhabitant; L. masc. n. *poriticola*, inhabitant of *Porites*

### Nomenclatural type

[NCBI Assembly: GCA\\_012270965.1](#)<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter poriticola*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23793>

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## Species *Palauibacter denitrificans*

### Etymology

[de.ni.tri.fi'cans] N.L. v. *denitrifico*, to denitrify; N.L. masc. part. adj. *denitrificans*, denitrifying

### Nomenclatural type

[NCBI Assembly: GCA\\_009841015.1](#)<sup>Ts</sup>

### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter denitrificans*

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23791>

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## Species *Kutchimonas denitrificans*<sup>Ts</sup>

### Etymology

[de.ni.tri.fi'cans] N.L. v. *denitrifico*, to denitrify; N.L. fem. part. adj. *denitrificans*, denitrifying

**Nomenclatural type**

[NCBI Assembly: GCA\\_011774835.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Kutchimonas* » *Kutchimonas denitrificans*<sup>Ts</sup>

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23800>

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## Species *Palauibacter ramosifaciens*

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**Etymology**

[ra.mo.si.fa'ciens] L. masc. adj. *ramosus*, branching, having many branches; L. pres. part. *faciens*, making; N.L. masc. n. *ramosifaciens*, branched synthesizer, referring to branched-chain amino acids

**Nomenclatural type**

[NCBI Assembly: GCA\\_009845855.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter ramosifaciens*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23790>

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## Species *Palauibacter irciniicola*

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**Etymology**

[ir.ci.ni.i'co.la] N.L. fem. n. *Ircinia*, name of the sponge genus; L. masc. or fem. n. suff. *-cola*, inhabitant; L. masc. n. *irciniicola*, inhabitant of *Ircinia*

**Nomenclatural type**

[NCBI Assembly: GCA\\_009836005.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter irciniicola*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23792>

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## Species *Carthagonibacter metallireducens*<sup>Ts</sup>

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**Etymology**

[me.ta.li.re.du'cens] L. neut. n. *metallum*, metal; L. pres. part. *reducens*, leading back, bringing back and in chemistry converting to a different oxidation state; N.L. masc. part. adj. *metallireducens*, reducing metal

**Nomenclatural type**

[NCBI Assembly: GCA\\_023554445.1](#) <sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Carthagonibacter* » *Carthagonibacter metallireducens* <sup>Ts</sup>

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23794>

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## Species *Palauibacter australiensis*

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**Etymology**

[aus.trā.li.en'sis] N.L. masc. adj. *australiensis*, of or belonging to Australia

**Nomenclatural type**

[NCBI Assembly: GCA\\_026705295.1](#) <sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter australiensis*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23802>

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## Species *Palauibacter polyketidifaciens*

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**Etymology**

[po.ly.ke.ti.di.fa.ci'ens] Gr. neut. n. *polyketidum*, polyketide; L. pres. part. *faciens*, making; N.L. masc. part. adj. *polyketidifaciens*, polyketide synthesizer

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581785.1](#) <sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter polyketidifaciens*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23807>

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## Species *Palauibacter scopulicola*

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**Etymology**

[s.co.pu.li'co.la] L. masc. n. *scopulus*, reef, rock under the sea; L. masc. or fem. n. suff. *-cola*, inhabitant; N.L. masc. n. *scopulicola*, inhabitant of reefs, rocks under the sea

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581915.1](#) <sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter scopulicola*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23803>

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**Species *Humimonas hydrogenitrophica*<sup>Ts</sup>**

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**Etymology**

[hy.dro.ge.ni.tro.phi'ca] N.L. neut. n. *hydrogenum*, hydrogen; Gr. masc. adj. *trophikos*, nursing, tending or feeding; N.L. fem. adj. *hydrogenitrophica*, feeding on hydrogen, referring to the ability of the micro-organism to grow with H<sub>2</sub>/CO<sub>2</sub> as energy source

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581615.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Humimonas* » *Humimonas hydrogenitrophica*<sup>Ts</sup>

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23799>

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**Species *Indicimonas acetifermentans*<sup>Ts</sup>**

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**Etymology**

[a.ce.ti.fer.men'tans] N.L. neut. n. *acetum*, vinegar; L. part. adj. *fermentans*, fermenting; N.L. fem. part. adj. *acetifermentans*, vinegar or acetic acid fermenting bacteria

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581815.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Indicimonas* » *Indicimonas acetifermentans*<sup>Ts</sup>

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23801>

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**Species *Palauibacter rhopaloidicola***

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**Etymology**

[rho.pa.loi.di'co.la] N.L. masc. n. *Rhopaloides*, name of the sponge genus; L. masc / fem. n. suff. *-cola*, inhabitant; N.L. masc. n. *rhopaloidicola*, inhabitant of *Rhopaloides*

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581625.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter rhopaloidicola*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23804>

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**Species *Palauibacter soopunensis*<sup>Ts</sup>**

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**Etymology**

[soo.pu.nen'sis] N.L. masc. n. *soopunensis*, from Soopun, the aboriginal name of Esk island, where the genome was recovered

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581735.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Palauibacter* » *Palauibacter soopunensis*<sup>Ts</sup>

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23788>

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**Species *Benthicola azotiphorus***

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**Etymology**

[a.zo.ti.pho'rus] N.L. neut. n. *azotum*, nitrogen; Gr. masc. n. *phoros*, carry, bring; N.L. masc. n. *azotiphorus*, nitrogen carrying bacteria, referring to the modification of nitrogen compounds

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581745.1](#)<sup>Ts</sup>

**Classification**

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Benthicola* » *Benthicola azotiphorus*

**References**

Proposed: Aldeguer-Riquelme et al., 2023

**Registry URL**

<https://seqco.de/i:23798>

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**Species *Caribbeanibacter nitroreducens*<sup>Ts</sup>**

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**Etymology**

[ni.tro.re.du'cens] Gr. neut. n. *nitron*, nitrate, nitrite; L. pres. part. *reducens*, leading back, bringing back and in chemistry converting to a different oxidation state; N.L. masc. part. adj. *nitroreducens*, referring to nitrite reducing organism

**Nomenclatural type**

[NCBI Assembly: GCA\\_947581645.1](#)<sup>Ts</sup>



### Classification

*Bacteria* » *Gemmatimonadota* » *Gemmatimonadetes* » *Palauibacterales* » *Palauibacteraceae* » *Caribbeanibacter* » *Caribbeanibacter nitroreducens*<sup>TS</sup>

### References

Proposed: Aldeguer-Riquelme et al., 2023

### Registry URL

<https://seqco.de/i:23805>

## References

1. Aldeguer-Riquelme et al. (2023). Distribution, abundance, and ecogenomics of the *Palauibacterales*, a new cosmopolitan thiamine-producing order within the *Gemmatimonadota* phylum. *mSystems*.  
[DOI:10.1128/msystems.00215-23](https://doi.org/10.1128/msystems.00215-23)

## 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:0hkazsoc](https://seqco.de/r:0hkazsoc) submitted by Aldeguer-Riquelme, Borja and including 25 new names has been successfully validated.

Date of Priority: 2023-06-23 07:38 UTC  
DOI: 10.57973/seqcode.r:0hkazsoc

