Register list for 3 new names including Bostrichicola gen. nov.

Submitted by Kiefer, Julian

Genus *Bostrichidicola*

Etymology

[Bos.tri.chi.di'co.la] **L. n.** *Bostrichidae*, the Bostrichidae family of wood-boring beetles; **L. suff.** *-cola*, an inhabitant or dweller; **L. masc. n.** *Bostrichidicola*, the Bostrichidicola genus

Nomenclatural type

Species *Bostrichidicola ureolyticus*[Ts]

Description

"Bostrichicola" is a genus name proposed for a taxonomically significant organism associated with Bostrichid beetles, particularly those found in the subfamilies Dinoderinae and Lyctinae. The term "Bostrichicola" suggests an ecological connection with beetles belonging to the Bostrichidae family. The genus may harbor organisms with unique characteristics or symbiotic relationships, reflecting its role within the broader context of beetle biology.

While the specific attributes of "Bostrichicola" are not detailed in the provided information, the genus name serves as a taxonomic label, offering a means to categorize and identify this group of organisms in relation to Bostrichid beetles. Further taxonomic investigations and research may unveil additional insights into the biology, ecology, and functional roles of "Bostrichicola" within the Bostrichidae family.

Classification

Bacteria » *Bacteroidota* » *Flavobacteriia* » *Flavobacteriales* » *Flavobacteriaceae* » *Bostrichidicola*

References

Proposed: Kiefer et al., 2023
Assigned taxonomically: Kiefer et al., 2023

Registry URL

https://seqco.de/i:34324

Species *Shikimatogenerans bostrichidophilus*

Etymology

[bos.tri.chi.do.phi.lus] **L. n.** *Bostrichidae*, a family of beetles known as wood borers.; **N.L. masc. adj. suff.** *-philus*, friend or loving; **N.L. masc. adj.** *bostrichidophilus*, bacteria associated with Bostrichidae beetles

Nomenclatural type

NCBI Assembly: GCA_029851105.1 [Ts]

Description

"Shikimatogenerans bostrichidophilus" is a taxonomic designation that combines two key elements reflecting the characteristics and associations of a particular organism. The genus name "Shikimatogenerans" signifies the organism's notable ability to engage in the shikimate pathway, a crucial metabolic route. The term "bostrichidophilus" is a compound that implies an association with the Bostrichidae family, specifically beetles known as wood borers.

The combination of these two elements suggests that the organism possesses the metabolic capability related to the shikimate pathway and exhibits an association or affinity with beetles belonging to the Bostrichidae family, known for their wood-boring habits. This taxonomic designation encapsulates both biochemical and ecological aspects, providing insights into the organism's functional traits and ecological niche within the context of its relationship with wood-boring beetles.

Classification

Bacteria » *Bacteroidota* » *Flavobacteriia* » *Flavobacteriales* » *Flavobacteriaceae* » *Shikimatogenerans* » *Shikimatogenerans bostrichidophilus*

References

Proposed: Kiefer et al., 2023

Registry URL

https://seqco.de/i:32944

Species *Bostrichidicola ureolyticus*[Ts]

Etymology

[u.re.o.ly'ti.cus] **Gr. pref.** *ureo-*, indicating a relationship with urine; **N.L. masc. adj.** *lyticus*, able to break down or dissolve; **N.L. masc. adj.** *ureolyticus*, bacterium able to break down or dissolve urea

Nomenclatural type

NCBI Assembly: GCA_029851125.1 [Ts]

Description

Bostrichicola ureolyticus" is a taxonomic designation proposed for the second coobligate endosymbiont identified in Bostrichidae beetles of the subfamily Dinoderinae and Lyctinae. The genus name, "Bostrichicola," signifies its association with Bostrichid beetles, specifically those within the Dinoderinae and Lyctinae subfamilies. The species name, "ureolyticus," reflects its metabolic potential to recycle nitrogen from urea, as indicated by genomic data.

This taxonomic assignment conveys both the ecological association of the endosymbiont with Bostrichid beetles and its functional role in nitrogen recycling through ureolysis. In line with a systematic naming convention inspired by "Shikimatogenerans," a four-letter abbreviation representing the host species is proposed for strain identification. For instance, "B. ureolyticus LBRU" denotes the Bostrichicola endosymbiont found in Lyctus brunneus, highlighting the specificity of the strain associated with particular host species within the Bostrichidae family.

Classification

Bacteria » *Bacteroidota* » *Flavobacteriia* » *Flavobacteriales* » *Flavobacteriaceae* » *Bostrichidicola* » *Bostrichidicola ureolyticus*[Ts]

References

Proposed: Kiefer et al., 2023
Assigned taxonomically: Kiefer et al., 2023

Registry URL

https://seqco.de/i:32945

References

1. Kiefer et al. (2023). Cuticle supplementation and nitrogen recycling by a dual bacterial symbiosis in a family of xylophagous beetles. *The ISME Journal*. DOI:10.1038/s41396-023-01415-y

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:vppriic7** submitted by **Kiefer, Julian** and including 3 new names has been successfully validated.

Date of Priority: 2024-02-03 08:08 UTC
DOI: 10.57973/seqcode.r:vppriic7