

Izemoplasma acidinucleici sp. nov.

Submitted by Loy, Alexander

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Order <i>Izemoplasmatales</i>	[I.ze.mo.plas.ma.ta'les] N.L. neut. n. <i>Izemoplasma</i> , the type genus of the order; L. fem. pl. suff. -ales , ending to denote an order; N.L. fem. pl. n. <i>Izemoplasmatales</i> , the Izemoplasma order	The type species of this order is <i>Izemoplasma acidinucleici</i> capable of degrading and metabolizing nucleic acids. Comparative genomics indicated that diverse <i>Izemoplasmatales</i> members encode multiple (up to five) predicted extracellular nucleases and are probably specialized DNA-degraders.	<i>Bacilli</i>	<i>Izemoplasma</i>	seqco.de/i:23535
Family <i>Izemoplasmataceae</i>	[I.ze.mo.plas.ma.ta'ce.ae] N.L. neut. n. <i>Izemoplasma</i> , the type genus of the family; L. fem. pl. suff. -aceae , ending to denote a family; N.L. fem. pl. n. <i>Izemoplasmataceae</i> , the Izemoplasma family	The type species of this family is <i>Izemoplasma acidinucleici</i> capable of degrading and metabolizing nucleic acids. Comparative genomics indicated that diverse <i>Izemoplasmataceae</i> encode multiple (up to five) predicted extracellular nucleases and are probably specialized DNA-degraders.	<i>Izemoplasmatales</i>	<i>Izemoplasma</i>	seqco.de/i:42145
Genus <i>Izemoplasma</i>	[I.ze.mo.plas'ma] Gr. neut. n. izema , a settling down, sediment; Gr. neut. n. plasma , anything formed or moulded, image, figure; N.L. neut. n. <i>Izemoplasma</i> , a form from sediment	We have revised the previously suggested genus name <i>Ca. Izimaplasma</i> (Skenner et al., 2016) to <i>Izemoplasma</i> of the family <i>Izemoplasmataceae</i> and order <i>Izemoplasmatales</i> . Members of this genus degrade and metabolize nucleic acids.	<i>Izemoplasmataceae</i>	<i>Izemoplasma acidinucleici</i> ^{Ts}	seqco.de/i:50971
Species <i>Izemoplasma acidinucleici</i> ^{Ts}	[a.ci.di.nu.cle'i.ci.] N.L. neut. n. acidum <i>nucleicum</i> , nucleic acid; N.L. gen. n. acidinucleici , of nucleic acid, referring to the capacity of this species	Based on a combination of unique phylogeny (based on 16S rRNA genes and concatenated single copy marker proteins) and genomic similarity (ANI), as well as genome-based predictions of nucleic acid catabolism that are supported by SIP results, we propose a novel species name <i>Izemoplasma acidinucleici</i> for the <i>Izemoplasma</i> MAG	<i>Izemoplasma</i>	NCBI Assembly: GCA_004195325.1 ^{Ts}	seqco.de/i:23533

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
	to degrade and metabolize nucleic acids	recovered in this study. We have revised the previously suggested genus name <i>Ca. Izimaplasma</i> to <i>Izemoplasma</i> of the family <i>Izemoplasmataceae</i> and order <i>Izemoplasmatales</i> .			