



Release LTP_10_2024

This release is available online at <https://imedea.uib-csic.es/mmg/ltp/>

The current All-Species Living Tree Project release (LTP_10_2024) contains a set of 20,286 type strain sequences and reflects the nomenclature and taxonomic changes accepted from the beginning of August 2023 until the end of March 2024 (IJSEM volume 73, issue 9 to volume 74, issue 3). Since August 2023 (LTP_08_2023 release), a total of 506 new species, 86 new genera, 33 new families and 5 new order, 2 new classes and 6 new phylum have been validly published under The International Code of Nomenclature of Prokaryotes (ICNP) (Table 1 - Table 6).

The 16S rRNA phylogenetic tree was reconstructed using sequences with a 'qual_ltp' score between 0 and 5. Multiple filters were applied in combination, including "termini", "gap_q5_95_08may24" (where q5 refers to 'qual_ltp' 0-5 and 95 indicates a gap symbol present in at least 95% of the q5 selection) and "ssu_q5*_08may24" (* = positional conservation: (highest) % of identical base symbols). Individual trees were generated for each combination of conservation filters using both ARB-parsimony and FastTree. A consensus tree was then generated applying the ARB consensus tree tool. Sequences with lower quality scores ('qual_ltp' higher than 5) were subsequently added to the consensus tree using ARB-pars, with "termini" and "gap_q5_95_08may24" applied but without any conservation filter.

Taxa names accuracy was crosschecked with the nomenclature list available on the LPSN website (<https://lpsn.dsmz.de/>). In case of discrepancy between the LTP and LPSN taxonomies (e.g. when the LTP taxonomy recorded synonyms at the species level) then the field sp_name_LPSN and correct_tax_LPSN were written with the correct species name and taxonomic hierarchy, respectively (Table 7. Fields description).

To update previous LTP releases with the current LTP taxonomy, please follow the short ARB guide published at <https://imedea.uib-csic.es/mmg/ltp/>

If you have any questions or doubts, please do not hesitate contacting with the LTP team at ltp@imedea.uib-csic.es

Acknowledgments

To Prof. Aharon Oren for kindly providing the lists of notification of new names of prokaryotes, new combinations, and new taxonomic opinions appeared in IJSEM.

Table 1. List of new species validly published under ICNP from August 2023 until the end of March 2024.

New Species	Accession code	Reference
<i>Thermococcus thermotolerans</i>	OP204787	Yang, et al. 2023
<i>Pseudomonas aestuarii</i>	OQ168351	Kim, et al. 2023
<i>Pseudodonghicola flavimaris</i>	OQ919143	Huang, et al. 2023
<i>Sedimentitalea xiamensis</i>	OQ919142	Huang, et al. 2023
<i>Variovorax durovernensis</i>	OU191593	Alcolea-Medina, et al. 2023
<i>Streptomyces koelreuteriae</i>	MW984607	Fu, et al. 2023
<i>Flavobacterium sedimenticola</i>	OQ612710	Wu, et al. 2023
<i>Chryseobacterium pyrolae</i>	OP279958	Wang, et al. 2023
<i>Micromonospora parastrephiae</i>	MG725921	Razmilic, et al. 2023
<i>Micromonospora tarensis</i>	MG725922	Razmilic, et al. 2023
<i>Hymenobacter endophyticus</i>	OR564189	Zhang, et al. 2023
<i>Lactiplantibacillus brownii</i>	OR436971	Heng, et al. 2023
<i>Marivirga aurantiaca</i>	MW467790	Zhang, et al. 2023
<i>Halothiobacillus diazotrophicus</i>	OR554264	Dai, et al. 2023
<i>Brevibacillus ruminantium</i>	OR122426	Kim, et al. 2023
<i>Frankia nepalensis</i>	OQ820197	Nouioui, et al. 2023
<i>Antiquaquibacter oligotrophicus</i>	OQ835024	Toumi, et al. 2023
<i>Pseudomonas aphyarum</i>	ON555786	Testerman, et al. 2023
<i>Pseudomonas idahonensis</i>	ON555782	Testerman, et al. 2023
<i>Pseudomonas rubra</i>	ON555796	Testerman, et al. 2023
<i>Pseudomonas fontis</i>	ON555788	Testerman, et al. 2023
<i>Tianweitania aestuarii</i>	MN872410	Song, et al. 2023
<i>Marinomonas transparens</i>	MK100845	Cui, et al. 2023
<i>Marinomonas sargassi</i>	MK100846	Cui, et al. 2023
<i>Phytohabitans aurantiacus</i>	OP935703	Triningsih, et al. 2023
<i>Tenacibaculum tangerinum</i>	OQ727416	Lee, et al. 2023
<i>Pseudomonas cucumis</i>	OR214995	Liao, et al. 2023
<i>Actinoplanes aureus</i>	MW272536	Song, et al. 2021
<i>Adlercreutzia aquisgranensis</i>	CALPDA01	Afrizal, et al. 2022
<i>Alsobacter ponti</i>	ON881906	Deng, et al. 2023
<i>Ancylobacter crimeensis</i>	MK929090	Belova, et al. 2023
<i>Aquibacillus rhizosphaerae</i>	OR091339	Ding, et al. 2023
<i>Arthrobacter burdickii</i>	JAROCG01	Simpson, et al. 2023
<i>Bacillus basilensis</i>	CAKLBZ01	Muigg, et al. 2022

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<i>Bacteroides rhinocerotis</i>	OP931997	Li, et al. 2023
<i>Billgrantia aerodenitrificans</i>	MW205680	de la Haba, et al. 2023
<i>Billgrantia ethanolica</i>	MW205683	de la Haba, et al. 2023
<i>Billgrantia sulfidoxydans</i>	CP053381	de la Haba, et al. 2023
<i>Billgrantia tianxiuensis</i>	CP035042	de la Haba, et al. 2023
<i>Billgrantia zhangzhouensis</i>	MW205678	de la Haba, et al. 2023
<i>Cedecea sulfonilyureivorans</i>	MW429197	Li, et al. 2023
<i>Chryseobacterium herbae</i>	OP352779	Zhang, et al. 2023
<i>Clostridium aromativorans</i>	LC631612	Luo, et al. 2023
<i>Corynebacterium ramonii</i>	OX444692	Crestani, et al. 2023
<i>Desulfobotulus pelophilus</i>	MW872673	Frolova, et al. 2023
<i>Emticicia fluvialis</i>	JANUSD01	Baek, et al. 2023
<i>Enterobacter pseudoroggenkampii</i>	OP930963	Wu, et al. 2023
<i>Ferirhizobium litorale</i>	ON040664	Romanenko, et al. 2023
<i>Flintibacter muris</i>	CALPCP01	Afrizal, et al. 2022
<i>Fulvivirga sedimenti</i>	MW391774	Liu, et al. 2022
<i>Glycomyces luteolus</i>	MH605374	Duan, et al. 2019
<i>Glycomyces tritici</i>	MG279143	Li, et al. 2018
<i>Gracilibacillus marinus</i>	FJ809748	Huang, et al. 2013
<i>Halorubrum hochsteinianum</i>	ON606013	Vreeland, et al. 2024
<i>Hymenobacter sediminicola</i>	MW073560	Ren, et al. 2023
<i>Iodidimonas nitroreducens</i>	BKCN01	Iino, et al. 2023
<i>Isoptericola croceus</i>	OQ504226	OuYang, et al. 2023
<i>Lacinutrix neustonica</i>	MZ820004	Choi, et al. 2023
<i>Lactococcus intestinalis</i>	OM926013	Sun, et al. 2023
<i>Leifsonia virtsii</i>	JAROCB01	Simpson, et al. 2023
<i>Leifsonia williamsii</i>	JAROFC01	Simpson, et al. 2023
<i>Luteolibacter rhizosphaerae</i>	ON845537	Shen, et al. 2023
<i>Massilia cellulositytica</i>	MN784464	Du, et al. 2021
<i>Methanobacterium spitsbergense</i>	OK037044	Trubitsyn, et al. 2023
<i>Methanomethylophilus alvi</i>	KC412010	Borrel, et al. 2023
<i>Microbacterium helvum</i>	MW009703	Li, et al. 2021
<i>Micromonospora rubida</i>	MG753996	Sun, et al. 2021
<i>Muribaculum caecicola</i>	SSTG01	Afrizal, et al. 2022
<i>Mycoplasma bradburyae</i>	OP918915	Ramírez, et al. 2023
<i>Neiella litorisoli</i>	MN911325	Sun, et al. 2023
<i>Nocardiopsis akebiae</i>	OM368592	Mo, et al. 2022

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<i>Nocardiopsis changdeensis</i>	OM368593	Mo, et al. 2023
<i>Nocardiopsis mangrovi</i>	JQ799045	Huang, et al. 2015
<i>Nonomuraea rhizosphaerae</i>	MG271809	Zhao, et al. 2018
<i>Nonomuraea sediminis</i>	MZ182297	Liu, et al. 2023
<i>Ochrobactrum soli</i>	MH094651	Choi, et al. 2020
<i>Odoribacter lunatus</i>	CALPCZ01	Afrizal, et al. 2022
<i>Paenibacillus arenilitoris</i>	MK249696	Deng, et al. 2022
<i>Paenibacillus aurantius</i>	MW130723	Hwang, et al. 2023
<i>Paenibacillus vandeheii</i>	JAROCD01	Simpson, et al. 2023
<i>Palleniella muris</i>	SRZC01	Afrizal, et al. 2022
<i>Paracoccus onchidii</i>	OP763053	Xu, et al. 2023
<i>Parerythrobacter lacustris</i>	OM267786	Xamxidini, et al. 2023
<i>Pelosinus baikalensis</i>	MW805760	Zakharyuk, et al. 2023
<i>Planococcus lenghuensis</i>	KX024697	Yang, et al. 2020
<i>Protaetiobacter mangrovi</i>	MK589789	Li, et al. 2023
<i>Pseudonocardia tritici</i>	MG753995	Song, et al. 2019
<i>Pyrofoliis japonicus</i>	AP028634	Miyazaki, et al. 2023
<i>Rhodalgimonas zhirmunskyi</i>	KC247325	Nedashkovskaya, et al. 2023
<i>Salinibacterium sedimenticola</i>	OP648225	Lu, et al. 2023
<i>Sedimenticola hydrogenitrophicus</i>	OP089092	Slobodkina, et al. 2023
<i>Shewanella zhuhaiensis</i>	OM761198	Liu, et al. 2023
<i>Sphaerisporangium fuscum</i>	MZ182293	Guo, et al. 2022
<i>Sphingomonas nostoxanthinifaciens</i>	MZ956805	Jiang, et al. 2023
<i>Sporosarcina highlanderae</i>	JAROCC01	Simpson, et al. 2023
<i>Staphylococcus brunensis</i>	OQ401401	Kovařovic, et al. 2023
<i>Stieleria tagensis</i>	OK103954	Godinho, et al. 2023
<i>Stratiformator vulcanicus</i>	MK554509	Kumar, et al. 2023
<i>Streptococcus caecimuris</i>	CALPCT01	Afrizal, et al. 2022
<i>Streptomyces akebiae</i>	OM368590	Mo, et al. 2022
<i>Streptomyces anatolicus</i>	MN239849	Ates, et al. 2023
<i>Streptomyces changanensis</i>	OP101621	Wu, et al. 2024
<i>Streptomyces spinosirectus</i>	MZ540307	Wang, et al. 2023
<i>Streptomyces xiangluensis</i>	MG807479	Zhao, et al. 2018
<i>Sulfurospirillum tamanense</i>	MW872671	Frolova, et al. 2023
<i>Thetidibacter halocola</i>	LC381420	Yoon 2023
<i>Thiocapsa imhoffii</i>	DQ498828	Asao, et al. 2007

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<i>Thiomicrobacterium marina</i>	MW712743	Tan, et al. 2023
<i>Thiorhodovibrio frisius</i>	FJ815159	Methner, et al. 2023
<i>Thiorhodovibrio litoralis</i>	CP121473	Methner, et al. 2023
<i>Vreelandella glaciei</i>	AJ431369	de la Haba, et al. 2023
<i>Vreelandella lionensis</i>	HE661586	de la Haba, et al. 2023
<i>Vreelandella maris</i>	MT372903	de la Haba, et al. 2023
<i>Vreelandella massiliensis</i>	LT223576	de la Haba, et al. 2023
<i>Vreelandella sedimenti</i>	MT372904	de la Haba, et al. 2023
<i>Vreelandella zhaodongensis</i>	JQ762286	de la Haba, et al. 2023
<i>Weissella fermenti</i>	OP376746	Lee, et al. 2023
<i>Weizmannia agrestimuris</i>	OM658624	Afrizal, et al. 2022
<i>Winogradskyella immobilis</i>	MZ895455	Wang, et al. 2023
<i>Aerococcus agrisoli</i>	MT764949	Sun, et al. 2023
<i>Paenibacillus spongiae</i>	OM970862	Zhang, et al. 2023
<i>Cutibacterium equinum</i>	OP975794	Yun, et al. 2023
<i>Marixanthotalea marina</i>	JAHLEH01	Fu, et al. 2023
<i>Solibacillus daqui</i>	CP114887	Liang, et al. 2023
<i>Bacillus mexicanus</i>	ON532842	de los Santos Villalobos, et al. 2023
<i>Lacibacter sediminis</i>	MT026976	Zhuo, et al. 2023
<i>Microbacterium festucae</i>	MZ596235	Li, et al. 2023
<i>Microbacterium nymphoidis</i>	MZ596236	Li, et al. 2023
<i>Salipaludibacillus daqingensis</i>	OQ800936	Guo, et al. 2023
<i>Kitasatospora fiedleri</i>	OR119836	Zimmermann, et al. 2023
<i>Aeromicrobium duanguangcaii</i>	ON974399	Ye, et al. 2023
<i>Aeromicrobium wangtongii</i>	ON979830	Ye, et al. 2023
<i>Aeromicrobium senzhongii</i>	MN535802	Ye, et al. 2023
<i>Jiella pelagia</i>	OR603131	Shin, et al. 2023
<i>Pontibacter harenae</i>	JAJWH01	Osman, et al. 2023
<i>Marinicella marina</i>	OP848507	Zhang, et al. 2023
<i>Marinicella gelatinilytica</i>	OP848508	Zhang, et al. 2023
<i>Sulfurovum mangrovi</i>	CP087124	Li, et al. 2023
<i>Trinickia violacea</i>	MK675114	Gao, et al. 2023
<i>Trinickia terrae</i>	MK675113	Gao, et al. 2023
<i>Roseateles amylovorans</i>	OK446497	Guliyeva, et al. 2023
<i>Flectobacillus longus</i>	OQ983542	Lu, et al. 2023
<i>Flectobacillus rivi</i>	OQ983544	Lu, et al. 2023

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<i>Salinigranum marinum</i>	KJ689294	Cheng, et al. 2023
<i>Halohasta salina</i>	KR012969	Cheng, et al. 2023
<i>Nocardioides cremeus</i>	OP090316	Wang, et al. 2023
<i>Nocardioides abyssi</i>	OP090318	Wang, et al. 2023
<i>Nocardioides oceani</i>	OP090317	Wang, et al. 2023
<i>Pseudalkalibacillus spartinae</i>	OQ457524	Liu, et al. 2023
<i>Pseudalkalibacillus sedimenti</i>	OQ457525	Liu, et al. 2023
<i>Alteriqipengyuania flavescens</i>	CP129107	Zhang, et al. 2023
<i>Gardnerella pickettii</i>	OP401218	Sousa, et al. 2023
<i>Gardnerella greenwoodii</i>	OP402842	Sousa, et al. 2023
<i>Hydrogenimonas cancrithermarum</i>	AP027370	Mino, et al. 2023
<i>Tepidibacter hydrothermalis</i>	OP320683	Dai, et al. 2023
<i>Candidatus Kirkpatrickella diaphorinae</i>	OP600170	Kirkpatrickella diaphorinae Henry, et al. 2023*,
<i>Microcella humidisoli</i>	OK384677	Molina Ayala and Kim 2023
<i>Microcella daejeonensis</i>	OK384693	Molina Ayala and Kim 2023
<i>Tumebacillus lacus</i>	MH027515	Zhang, et al. 2023
<i>Pinibacter soli</i>	MH368768	Huq, et al. 2023
<i>Curtobacterium caseinilyticum</i>	OR143695	Feng, et al. 2023
<i>Curtobacterium citri</i>	JAUCML01	Feng, et al. 2023
<i>Curtobacterium subtropicum</i>	JAUCMM01	Feng, et al. 2023
<i>Methanovulcanius yangii</i>	KU561067	Chien, et al. 2023
<i>Robiginitalea aurantiaca</i>	OR039556	Zhou, et al. 2023
<i>Algoriphagus sediminis</i>	OR039555	Zhou, et al. 2023
<i>Lysinibacillus irui</i>	OQ566940	Akintayo, et al. 2023
<i>Ligilactobacillus cholophilus</i>	OQ195692	Ren, et al. 2023
<i>Neopusillimonas aromaticivorans</i>	MZ453406	Lin, et al. 2023
<i>Thermobacterium salinum</i>	OM744364	Chen, et al. 2023
<i>Mycoplasma phocimorsus</i>	OQ945447	Skaft-Holm, et al. 2023
<i>Robiginitalea aestuariiviva</i>	OP117113	Cao, et al. 2023
<i>Blautia parvula</i>	LC722832	Miura, et al. 2023
<i>Methanolobus mangrovi</i>	OR298243	Zhou, et al. 2023
<i>Methanolobus sediminis</i>	OR298244	Zhou, et al. 2023
<i>Marinihelvus fidelis</i>	MK163915	Zhang, et al. 2023
<i>Paenibacillus caseinilyticus</i>	ON573455	Lee, et al. 2023
<i>Gordonia metallireducens</i>	OL582960	Grimm, et al. 2023
<i>Tessaracoccus caeni</i>	OQ550415	Wang, et al. 2023

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<i>Haloarcula terrestris</i>	ON653024	Straková, et al. 2023
<i>Mangrovimonas aestuarii</i>	OQ152540	Zhang, et al. 2023
<i>Shiella aurantiaca</i>	OR214975	Liu, et al. 2023
<i>Vibrio chanodichtyis</i>	OQ472976	Wu, et al. 2023
<i>Actinoallomurus soli</i>	ON714942	Chantavorakit, et al. 2023
<i>Actinoallomurus rhizosphaericola</i>	ON714943	Chantavorakit, et al. 2023
<i>Blastococcus carthaginiensis</i>	LN680867	Kammoun, et al. 2023
<i>Vibrio methylphosphonaticus</i>	MW926535	Wang, et al. 2023
<i>Parabacteroides leei</i>	ON362233	Byun, et al. 2023
<i>Psychrobacillus antarcticus</i>	KF026354	da Silva, et al. 2023
<i>Helicobacter ibis</i>	ON950425	Lopez-Cantillo, et al. 2023
<i>Marinitoga aeolica</i>	MZ571208	Postec, et al. 2023
<i>Paenibacillus polygoni</i>	OR063858	Long, et al. 2023
<i>Empedobacter sedimenti</i>	OQ804639	Ruan, et al. 2023
<i>Arthrobacter zhaoxinii</i>	OP271282	Zhang, et al. 2023
<i>Arthrobacter jinronghuae</i>	OP001724	Zhang, et al. 2023
<i>Muricauda myxillae</i>	OM647828	Moon, et al. 2023
<i>Acetatifactor aquisgranensis</i>	CALPDH01	Afrizal, et al. 2022
<i>Actinarchaeum halophilum</i>	CP071306	Tang, et al. 2023
<i>Aestuarius baculum lutulentum</i>	MZ674082	Gao, et al. 2023
<i>Anaerocaecibacter muris</i>	CALPCE01	Afrizal, et al. 2022
<i>Anaerotardibacter muris</i>	CALPCD01	Afrizal, et al. 2022
<i>Bombiscardovia apis</i>	LC726291	Kawasaki, et al. 2023
<i>Bombiscardovia nodaiensis</i>	LC726290	Kawasaki, et al. 2023
<i>Brachybacterium sillae</i>	MW139254	Ganbat, et al. 2023
<i>Brytella acorum</i>	ON876751	Sombolestani, et al. 2023
<i>Chitinophaga horti</i>	MK397783	Han, et al. 2023
<i>Convivina praedatoris</i>	OW028325	Hettiarachchi, et al. 2023
<i>Entomospira culicis</i>	CP118181	Graña-Miraglia, et al. 2020
<i>Entomospira entomophila</i>	CP118174	Graña-Miraglia, et al. 2020
<i>Entomospira nematocerorum</i>	CP118168	Graña-Miraglia, et al. 2020
<i>Flavimaribacter sediminis</i>	OP592206	Wang, et al. 2023
<i>Futiania mangrovi</i>	ON876767	Liu, et al. 2023
<i>Geminicoccus flavidus</i>	MK392026	Jiang, et al. 2022
<i>Halanaerobium polyolivorans</i>	OK643887	Boltyanskaya, et al. 2023
<i>Halomonas gemina</i>	OM536011	Hintersatz, et al. 2023
<i>Halomonas llamarensis</i>	OM536009	Hintersatz, et al. 2023

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<i>Herbiconiux daphnes</i>	JX273670	Deng, et al. 2023
<i>Herbiconiux oxytropis</i>	JX273672	Deng, et al. 2023
<i>Hominibacterium faecale</i>	MZ297465	Borhanudin, et al. 2023
<i>Kingella pumchi</i>	MW115420	Xiao, et al. 2023
<i>Lactobacillus xylocopicola</i>	AP026803	Kawasaki, et al. 2023
<i>Larkinella humicola</i>	MN396445	Park, et al. 2022
<i>Larkinella punicea</i>	MH817486	Zhou, et al. 2020
<i>Luteibacter aegosomaticola</i>	OM319627	Joe, et al. 2023
<i>Luteibacter aegosomatis</i>	OM319564	Joe, et al. 2023
<i>Luteibacter aegosomatissinici</i>	OM319623	Joe, et al. 2023
<i>Marinimicrobium haloxylanilyticum</i>	GQ920839	Møller, et al. 2010,
<i>Neptuniibacter victor</i>	LC716006	Kudo, et al. 2023
<i>Paenibacillus andongensis</i>	CP104467	Guan, et al. 2023
<i>Paenibacillus plantiphilus</i>	OQ300222	Kämpfer, et al. 2023
<i>Prevotella communis</i>	CP091792	Grabner, et al. 2023
<i>Profundicola chukchiensis</i>	OP604014	Romanenko, et al. 2023
<i>Pseudosulfitobacter koreensis</i>	ON979826	Jiang and Li 2023
<i>Pseudotabrificola formosa</i>	KY457223	Ye, et al. 2022
<i>Psychromarinibacter sediminicola</i>	ON954837	Wang, et al. 2023
<i>Pumilibacter intestinalis</i>	CALPCH01	Afrizal, et al. 2022
<i>Pumilibacter muris</i>	CALPCN01	Afrizal, et al. 2022
<i>Rasiella rasia</i>	CP049057	Kim, et al. 2022
<i>Roseibaca domitiana</i>	MW785571	Gattoni, et al. 2023
<i>Sinorhizobium chiapasense</i>	EU286550	Rincón-Rosales, et al. 2009
<i>Spirosoma foliorum</i>	MT076056	Han, et al. 2023
<i>Stenotrophomonas lacuserhaii</i>	OP059050	Deng, et al. 2022
<i>Stenotrophomonas mori</i>	ON514073	Deng, et al. 2022
<i>Streptomyces ortus</i>	ON356021	Williams, et al. 2023
<i>Stygiobacter electus</i>	OQ627009	Podosokorskaya, et al. 2023
<i>Tellurirhabdus bombi</i>	MW888470	Zhang, et al. 2023
<i>Xenorhabdus aichiensis</i>	OQ439939	Machado, et al. 2023
<i>Xenorhabdus yunnanensis</i>	OQ439940	Machado, et al. 2023
<i>Xylocopilactobacillus apicola</i>	LC726294	Kawasaki, et al. 2023
<i>Xylocopilactobacillus apis</i>	LC726285	Kawasaki, et al. 2023
<i>Zhongshania aquimaris</i>	MW020221	Weerawongwiwat, et al. 2022
<i>Amygdalobacter indicium</i>	OP540270	Srinivasan, et al. 2023

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<i>Amygdalobacter nucleatus</i>	KJ868804	Srinivasan, et al. 2023
<i>Sphingobium agri</i>	MK204996	Huq, et al. 2023
<i>Gracilibacillus salinarum</i>	ON911909	Subramanian, et al. 2023
<i>Gracilibacillus caseinilyticus</i>	ON911926	Subramanian, et al. 2023
<i>Lacticaseibacillus huelsenbergensis</i>	OQ779534	Grabner F., et al. 2023
<i>Polycladospora coralii</i>	MK253261	Mo, et al. 2023
<i>Danxiaibacter flavus</i>	OR036084	Zheng, et al. 2023
<i>Methylacidiphilum caldifontis</i>	OQ363319	Awala, et al. 2023
<i>Flavobacterium algotolerans</i>	OQ834563	Yin, et al. 2023
<i>Flavobacterium yafengii</i>	OQ834564	Yin, et al. 2023
<i>Galbibacter pacificus</i>	OP862737	Wei, et al. 2023
<i>Mesorhizobium liriopsis</i>	ON573327	Kim, et al. 2023
<i>Leucobacter tenebrionis</i>	OK090937	Ying, et al. 2023
<i>Shewanella ferrihydritica</i>	MZ477526	Yao, et al. 2023
<i>Shewanella electrica</i>	OL360147	Yao, et al. 2023
<i>Lactobacillus isalae</i>	OX442440	Eilers, et al. 2023
<i>Methylococcus mesophilus</i>	OQ080039	Awala, et al. 2023
<i>Bacillus changyiensis</i>	OQ080055	Xiao, et al. 2023
<i>Psychroserpens ponticola</i>	MZ310522	Kristyanto, et al. 2023
<i>Marinomonas maritima</i>	MZ313913	Kristyanto, et al. 2023
<i>Luteimonas suaedae</i>	KY003163	Chen, et al. 2023
<i>Rufibacter roseolus</i>	MT527575	Li, et al. 2023
<i>Rufibacter aurantiacus</i>	MT527580	Li, et al. 2023
<i>Rheinheimera oceanensis</i>	MW714780	Ren, et al. 2023
<i>Hoeflea poritis</i>	OP853055	Zhang, et al. 2023
<i>Arthrobacter vasquezii</i>	OP394147	Valenzuela-Ibaceta, et al. 2023
<i>Campylobacter magnus</i>	JAQSLK01	Gruntar, et al. 2023
<i>Alishewanella maricola</i>	MZ827410	Kim, et al. 2023
<i>Winogradskyella bathintestinalis</i>	OP920974	Uniacke-Lowe, et al. 2023
<i>Bacillus dicomae</i>	MN029053	Makuwa, et al. 2023
<i>Chakrabartyella piscis</i>	OP501869	Pardesi, et al. 2023
<i>Exercitatus varius</i>	L06081	Christensen, et al. 2023
<i>Halobacillus salinarum</i>	ON911927	Kim, et al. 2023
<i>Halobacillus shinanisalarum</i>	ON911949	Kim, et al. 2023
<i>Halobacillus amylolyticus</i>	ON911948	Kim, et al. 2023
<i>Paenimyroides aestuarii</i>	OP102011	Zhang, et al. 2023

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<i>Jeotgalibaca caeni</i>	OQ804623	Geng, et al. 2023
<i>Pacificoceanicola onchidii</i>	MK691663	Yang, et al. 2023
<i>Aurantibacillus circumpalustris</i>	OP800706	Vieira, et al. 2023
<i>Phycobacter azelaicus</i>	OR067377	Coe, et al. 2023
<i>Corynebacterium suedekumii</i>	OR048784	Baer, et al. 2023
<i>Corynebacterium breve</i>	CP126969	Baer, et al. 2023
<i>Streptomyces chengmaiensis</i>	OQ912903	Lin, et al. 2023
<i>Pontibacter kalidii</i>	MN116010	Wang, et al. 2023
<i>Acinetobacter higginsii</i>	OR350514	Nemec, et al. 2023
<i>Photobacterium obscurum</i>	MW984545	Hong, et al. 2023
<i>Marinobacter iranensis</i>	MK101100	Rafieyan, et al. 2023
<i>Pseudomonas hormoni</i>	OQ674074	Sorty, et al. 2023
<i>Tenacibaculum bernardetii</i>	OQ269877	Avendaño-Herrera, et al. 2023
<i>Marnyiella aurantia</i>	MN080329	Zhao, et al. 2023
<i>Achromobacter aestuarii</i>	MH651750	Kim, et al. 2021,
<i>Acinetobacter faecalis</i>	MN650687	Chen, et al. 2023
<i>Actinospica acidithermotolerans</i>	MK503593	Kusuma, et al. 2022
<i>Amycolatopsis camponoti</i>	KY952635	Zakalyukina, et al. 2023
<i>Ancylobacter radialis</i>	MT982345	Agafonova, et al. 2023
<i>Chlamydia crocodili</i>	CP060791	Chaiwattananarungruengpaisan, et al. 2021
<i>Cohnella hashimotonis</i>	JAGRPV01	Simpson, et al. 2023
<i>Coralimargarita parva</i>	JAPZEI01	Min, et al. 2023
<i>Corynebacterium faecium</i>	OK147994	Shamsuzzaman, et al. 2023
<i>Corynebacterium intestinale</i>	OK147962	Shamsuzzaman, et al. 2023
<i>Corynebacterium stercoris</i>	OK148071	Shamsuzzaman, et al. 2023
<i>Ectothiorhodospira lacustris</i>	OQ618219	Bryantseva, et al. 2023
<i>Ensifer canadensis</i>	CP083370	Bromfield, et al. 2023
<i>Falsigemmobacter faecalis</i>	MK184541	Li, et al. 2020,
<i>Flaviumibacter fluvii</i>	MK138657	Park, et al. 2023
<i>Flavobacterium potami</i>	MZ643207	Li, et al. 2023
<i>Geothrix oryzoisoli</i>	OM855548	Han, et al. 2023
<i>Gramella crocea</i>	OL853706	Zhang, et al. 2022
<i>Halomonas salinarum</i>	JQ010842	Yin, et al. 2022
<i>Halovivax gelatinilyticus</i>	MK640676	Li, et al. 2023
<i>Lentiprolixibacter aurantiacus</i>	ON935779	Ma, et al. 2023
<i>Limnobacter parvus</i>	OM462841	Xamxidini, et al. 2023

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<i>Limosilactobacillus caccae</i>	LT671596	Lo, et al. 2023
<i>Mangrovivirga halotolerans</i>	ON935777	Ma, et al. 2023
<i>Methylobacterium planeticum</i>	MN317338	Jiang, et al. 2020
<i>Microcaldus variisymbioticus</i>	AP024486	Sakai, et al. 2022
<i>Microvirga solisilvae</i>	OM758350	Zhang, et al. 2022
<i>Microvirga terricola</i>	MT078707	Zhang, et al. 2022
<i>Moraxella nasibovis</i>	OL841892	Li, et al. 2023
<i>Mucilaginibacter aquariorum</i>	OP055897	Le, et al. 2022
<i>Muricauda okinawensis</i>	OQ547168	Cao, et al. 2023
<i>Muricauda yonaguniensis</i>	OQ547169	Cao, et al. 2023
<i>Nakamurella alba</i>	MN317339	Jiang, et al. 2020
<i>Natronobeatus ordinarius</i>	MH628045	Li, et al. 2023
<i>Natrononativus amylolyticus</i>	CP101458	Li, et al. 2023
<i>Neisseria montereyensis</i>	OM363672	Volokhov, et al. 2023
<i>Neobacillus muris</i>	CALPDF01	Afrizal, et al. 2022
<i>Ornithinimicrobium sediminis</i>	OK576923	Gao, et al. 2022
<i>Otoolea muris</i>	CALPCY01	Afrizal, et al. 2022
<i>Oxalobacter aliiiformigenes</i>	CP098252	Chmiel, et al. 2023
<i>Oxalobacter paeniformigenes</i>	JAMKYL01	Chmiel, et al. 2023
<i>Oxalobacter paraformigenes</i>	ACDP02	Chmiel, et al. 2023
<i>Paracoccus aerodenitrificans</i>	CP115784	Zhang, et al. 2023
<i>Paracoccus albus</i>	CP115775	Zhang, et al. 2023
<i>Paracoccus lichenicola</i>	MN654118	Lang, et al. 2021,
<i>Paracoccus sediminicola</i>	CP115768	Zhang, et al. 2023
<i>Pectobacterium jejuense</i>	LC742805	Hong, et al. 2023
<i>Philodulcिलactobacillus myokonensis</i>	LC594620	Kouya, et al. 2023
<i>Pigmentibacter ruber</i>	MN791129	Peng, et al. 2023
<i>Pontibacter anaerobius</i>	ON935778	Ma, et al. 2023
<i>Pseudomonas petrae</i>	OM422691	Nováková, et al. 2023
<i>Salinilacihabitans rarus</i>	MH645804	Li, et al. 2023
<i>Salinimicrobium sediminilitoris</i>	OK161349	Xia, et al. 2022
<i>Spiribacter halobius</i>	KY407792	Gong, et al. 2022
<i>Streptococcus ruminicola</i>	MN075410	Park, et al. 2022
<i>Streptococcus thalassemiaie</i>	LR809138	Diouf, et al. 2023
<i>Streptomyces huiliensis</i>	MW547058	Qi, et al. 2021
<i>Streptomyces sichuanensis</i>	MG592747	Qi, et al. 2022

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<i>Tepidiforma flava</i>	CP115149	Palmer, et al. 2023
<i>Tepidiforma thermophila</i>	PDJQ01000001	Palmer, et al. 2023
<i>Thalassotalea hakodatensis</i>	LC757706	Yamano, et al. 2023
<i>Mesoterricola silvestris</i>	OP984401	Itoh, et al. 2023
<i>Mesoterricola sediminis</i>	LC505070	Itoh, et al. 2023
<i>Geothrix oryzae</i>	LC505065	Itoh, et al. 2023
<i>Geothrix edaphica</i>	LC505066	Itoh, et al. 2023
<i>Geothrix rubra</i>	LC505067	Itoh, et al. 2023
<i>Geothrix limicola</i>	LC505068	Itoh, et al. 2023
<i>Alteromonas gilva</i>	ON844180	Park, et al. 2023
<i>Erythrobacter fulvus</i>	ON679642	Park, et al. 2023
<i>Alkalimarinus alittae</i>	ON888658	Yang, et al. 2023
<i>Hymenobacter cellulosityticus</i>	ON911951	Kim, et al. 2023
<i>Hymenobacter cellulovorans</i>	ON911952	Kim, et al. 2023
<i>Hymenobacter aerilatus</i>	ON911957	Kim, et al. 2023
<i>Hymenobacter sublimis</i>	ON911963	Kim, et al. 2023
<i>Hymenobacter volaticus</i>	ON911959	Kim, et al. 2023
<i>Kaistella polysaccharea</i>	MZ158542	Yao, et al. 2023
<i>Pseudomonas benzopyrenica</i>	MT539110	Dong, et al. 2023
<i>Chryseobacterium luquanense</i>	ON076994	Zhu, et al. 2023
<i>Natronosalvus halobius</i>	KY468505	Tan, et al. 2023
<i>Natronosalvus caseinilyticus</i>	MN371462	Tan, et al. 2023
<i>Natronosalvus vesicus</i>	MK643131	Tan, et al. 2023
<i>Natronosalvus rutilus</i>	MH628041	Tan, et al. 2023
<i>Natronosalvus amylolyticus</i>	MH628042	Tan, et al. 2023
<i>Claveliimonas bilis</i>	LC761622	Hisatomi, et al. 2023
<i>Clavibacter lycopersici</i>	OP610590	Osdaghi, et al. 2023
<i>Oryzibacter oryzae</i>	LC574990	Lee and Whang 2023
<i>Novosphingobium cyanobacteriorum</i>	MZ389880	Kang, et al. 2023
<i>Muricauda meishanensis</i>	MZ025915	Sun, et al. 2023
<i>Winogradskyella vincentii</i>	MW822175	Yue, et al. 2023
<i>Winogradskyella alexanderae</i>	MW767112	Yue, et al. 2023
<i>Roseateles albus</i>	ON679650	Park, et al. 2023
<i>Roseateles koreensis</i>	ON679653	Park, et al. 2023
<i>Janthinobacterium fluminis</i>	ON668161	Park, et al. 2023
<i>Neorhizobium turbinariae</i>	OL905956	Sun, et al. 2023

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<i>Falsirhodobacter algicola</i>	MW173300	Cho, et al. 2023
<i>Peptoniphilus equinus</i>	OP975789	Jung, et al. 2023
<i>Microbacterium plantarum</i>	KT900598	Arroyo-Herrera, et al. 2023
<i>Microbacterium thalli</i>	KX940925	Arroyo-Herrera, et al. 2023
<i>Streptomyces fuscus</i>	OP862739	Xie, et al. 2023
<i>Nocardioides pini</i>	ON629614	So, et al. 2023
<i>Nocardioides pinisoli</i>	ON629615	So, et al. 2023
<i>Hufsiella ginkgonis</i>	MK208508	Kang, et al. 2023
<i>Hufsiella arboris</i>	MK660017	Kang, et al. 2023
<i>Aerococcus tenax</i>	CP127382	Choi, et al. 2023
<i>Aerococcus mictus</i>	CAJHLN01	Choi, et al. 2023
<i>Aerococcus loyolae</i>	OP410924	Choi, et al. 2023
<i>Hoeflea algicola</i>	ON077191	Baek, et al. 2023
<i>Hoeflea ulvae</i>	ON077190	Baek, et al. 2023
<i>Parasedimentitalea psychrophila</i>	MK801282	Li, et al. 2023
<i>Sphingomonas oryzae</i>	MW488003	Huq, et al. 2023
<i>Methylacidiphilum kamchatkense</i>	EF127896	Ratnadevi, et al. 2023
<i>Pseudophaeobacter profundus</i>	OR417330	Zhu, et al. 2023
<i>Silvimonas soli</i>	OQ221602	Jerabkova, et al. 2023
<i>Streptomyces silvisoli</i>	OQ600553	Klaysubun, et al. 2023
<i>Streptomyces tropicalis</i>	OQ600552	Klaysubun, et al. 2023
<i>Cereibacter flavus</i>	OQ940477	Liu, et al. 2023
<i>Aestuariaivivens marinum</i>	OM279491	Huang, et al. 2022
<i>Aestuariaivivens sediminicola</i>	OM279495	Huang, et al. 2022
<i>Aestuariaivivens sediminis</i>	OM279498	Huang, et al. 2022
<i>Agrobacterium cucumeris</i>	MW256423	Warabieda, et al. 2023
<i>Agrobacterium divergens</i>	AM403584	Naranjo, et al. 2023
<i>Aquibacillus salsiterrae</i>	ON652841	Galisteo, et al. 2023
<i>Bacillus daqingensis</i>	HM598403	Wang, et al. 2014
<i>Blautia fusiformis</i>	OK510345	Afrizal, et al. 2022
<i>Brotaphodocola catenula</i>	OK510300	Afrizal, et al. 2022
<i>Caniella muris</i>	CALPCK01	Afrizal, et al. 2022
<i>Chondrinema litorale</i>	OP823709	Muhammad, et al. 2023
<i>Curtobacterium allii</i>	OK275102	Khanal, et al. 2023
<i>Dellaglioia carnosa</i>	OP850828	Werum and Ehrmann 2023
<i>Devosia oryziradicis</i>	MT992792	Chhetri, et al. 2022
<i>Devosia rhizoryzae</i>	MN955414	Chhetri, et al. 2022

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<i>Dubosiella muris</i>	SRYG01	Afrizal, et al. 2022
<i>Enterocloster alcoholdehydrogenati</i>	LC466003	Oikawa, et al. 2023
<i>Fervidibacillus albus</i>	CP106878	Yang, et al. 2023
<i>Fervidibacillus halotolerans</i>	CP106877	Yang, et al. 2023
<i>Flavobacterium aestivum</i>	MW261874	Jo, et al. 2023
<i>Flavobacterium aquiphilum</i>	MW261878	Jo, et al. 2023
<i>Flavobacterium eburneipallidum</i>	MW261876	Jo, et al. 2023
<i>Flavobacterium flavigenum</i>	MW261875	Jo, et al. 2023
<i>Flavobacterium gelatinilyticum</i>	MW261877	Jo, et al. 2023
<i>Flavobacterium lacustre</i>	MW261868	Jo, et al. 2023
<i>Flavobacterium limnophilum</i>	MW261867	Jo, et al. 2023
<i>Flavobacterium luteolum</i>	MW261869	Jo, et al. 2023
<i>Flavobacterium marginilacus</i>	MW261872	Jo, et al. 2023
<i>Flavobacterium praedii</i>	MW261870	Jo, et al. 2023
<i>Fontisphaera persica</i>	OP858675	Podosokorskaya, et al. 2023
<i>Fulvivirga ligni</i>	OM403093	Nguyen, et al. 2023
<i>Fulvivirga maritima</i>	OM403092	Nguyen, et al. 2023
<i>Fulvivirga ulvae</i>	OM403091	Nguyen, et al. 2023
<i>Fuscibacter oryzae</i>	MN955430	Chhetri, et al. 2021
<i>Fusicatenibacter faecihominis</i>	JAJEPR01	Afrizal, et al. 2022
<i>Gemmatirosa kalamazoonensis</i>	HM154525	DeBruyn, et al. 2013
<i>Gottfriedia endophytica</i>	MW386408	Chhetri, et al. 2022
<i>Halomonas faecis</i>	KM199859	Liu, et al. 2022
<i>Halonatronomonas betaini</i>	MW075428	Boltyanskaya, et al. 2023
<i>Halorutilus salinus</i>	RKLV01	Durán-Viseras, et al. 2023
<i>Hominenteromicrobium mulieris</i>	JAJQC01	Afrizal, et al. 2022
<i>Hominicoprocola fusiformis</i>	OK510304	Afrizal, et al. 2022
<i>Hominifimenecus microfluidus</i>	JAJEQR01	Afrizal, et al. 2022
<i>Hominilimicola fabiformis</i>	JAJQM01	Afrizal, et al. 2022
<i>Hominisplanchenecus faecis</i>	OK510323	Afrizal, et al. 2022
<i>Hominiventricola filiformis</i>	OK510299	Afrizal, et al. 2022
<i>Hyalangium versicolor</i>	MZ577175	Zhang, et al. 2023
<i>Intestinimonas aquisgranensis</i>	OK510361	Afrizal, et al. 2022
<i>Lactobacillus agrestimuris</i>	CALPCQ01	Afrizal, et al. 2022
<i>Lactococcus ileimucosae</i>	CALPDE01	Afrizal, et al. 2022
<i>Lactococcus muris</i>	CALPCG01	Afrizal, et al. 2022

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<i>Lepagella muris</i>	SRYB01	Afrizal, et al. 2022
<i>Levilactobacillus yiduensis</i>	OM978642	Dong, et al. 2023
<i>Limnobaculum eriocheiris</i>	OP869858	Li, et al. 2023
<i>Limosilactobacillus agrestimuris</i>	CALPCW01	Afrizal, et al. 2022
<i>Limosilactobacillus caecicola</i>	CALPCI01	Afrizal, et al. 2022
<i>Magnetospirillum sulfuroxidans</i>	FJ860937	Koziaeva, et al. 2023
<i>Muricaecibacterium torontonense</i>	SRYE01	Afrizal, et al. 2022
<i>Nisaea acidiphila</i>	KX364080	Kwon, et al. 2023
<i>Nitratireductor thuwalensis</i>	MT146884	Marasco, et al. 2023
<i>Paenibacillus alkalitolerans</i>	MW380664	Li, et al. 2023
<i>Paraburkholderia tagetis</i>	OL347860	Chhetri, et al. 2023
<i>Peribacillus castrilensis</i>	OL619301	Rodríguez, et al. 2022
<i>Pseudomonas danubii</i>	OU957229	Mulet, et al. 2023
<i>Pseudomonas oligotrophica</i>	OM341414	Zhang, et al. 2022
<i>Pseudomonas serbica</i>	OP021714	Todorović, et al. 2023
<i>Pseudomonas serboccidentalis</i>	OP021715	Todorović, et al. 2023
<i>Ralstonia chuxiongensis</i>	ON844322	Lu, et al. 2023
<i>Ralstonia mojiangensis</i>	ON797091	Lu, et al. 2023
<i>Ralstonia nicotianae</i>	ON797093	Liu, et al. 2023
<i>Ralstonia soli</i>	ON797092	Lu, et al. 2023
<i>Rhizobium rhododendri</i>	CP117267	Kuzmanović, et al. 2023
<i>Rhizobium setariae</i>	MN955401	Kang and Seo 2022
<i>Robbsia betulipollinis</i>	KX450422	Shi, et al. 2023
<i>Ruminococcus turbiniformis</i>	JAJEQX01	Afrizal, et al. 2022
<i>Sphingopyxis lutea</i>	MN956702	Chhetri, et al. 2022
<i>Streptomyces pacificus</i>	LC702322	Takahashi, et al. 2023
<i>Streptomyces radicis</i>	LC094462	Kuncharoen, et al. 2023
<i>Terrihalobacillus insolitus</i>	ON652838	Galisteo, et al. 2023
<i>Veillonella agrestimuris</i>	CALPCS01	Afrizal, et al. 2022
<i>Veillonella fallax</i>	JAJEQD01	Afrizal, et al. 2022
<i>Veillonella intestinalis</i>	CALPDB01	Afrizal, et al. 2022
<i>Vulcanimicrobium alpinum</i>	LC579935	Yabe, et al. 2022
<i>Alicyclobacillus hesperidum</i> subsp. <i>Hesperidum</i>	AB059678	Goto et al. 2023
<i>Alicyclobacillus hesperidum</i> subsp. <i>Aegles</i>	LC314802	Goto et al. 2023
<i>Bifidobacterium longum</i> subsp. <i>Iuvenis</i>	OP696622	Modesto et al. 2023

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<i>Pallidibacillus thermolactis</i> subsp. <i>Kokeshiiformis</i>	JX848633	Yang <i>et al.</i> 2023
<i>Pallidibacillus thermolactis</i> subsp. <i>Thermolactis</i>	JAOUSE01	Yang <i>et al.</i> 2023

Table 2. List of new genera published unde ICNP from August 2023 until the end of March 2024

New genera	Type species	Reference
<i>Brotaphodocola</i>	<i>Brotaphodocola catenula</i>	Afrizal, et al. 2022
<i>Caldifermentibacillus</i>	<i>Caldifermentibacillus hisashii</i>	Yang, et al. 2023
<i>Caniella</i>	<i>Caniella muris</i>	Afrizal, et al. 2022
<i>Chondrinema</i>	<i>Chondrinema litorale</i>	Muhammad, et al. 2023
<i>Fervidibacillus</i>	<i>Fervidibacillus albus</i>	Yang, et al. 2023
<i>Fontisphaera</i>	<i>Fontisphaera persica</i>	Podosokorskaya, et al. 2023
<i>Fuscibacter</i>	<i>Fuscibacter oryzae</i>	Chhetri, et al. 2021
<i>Gemmatirosa</i>	<i>Gemmatirosa kalamazonensis</i>	DeBruyn, et al. 2023
<i>Halonatronomonas</i>	<i>Halonatronomonas betaini</i>	Boltyanskaya, et al. 2023
<i>Halorutilus</i>	<i>Halorutilus salinus</i>	Durán-Viseras, et al. 2023
<i>Hominenteromicrobium</i>	<i>Hominenteromicrobium mulieris</i>	Afrizal, et al. 2022
<i>Homnicoprocola</i>	<i>Homnicoprocola fusiformis</i>	Afrizal, et al. 2022
<i>Hominifimenecus</i>	<i>Hominifimenecus microfluidus</i>	Afrizal, et al. 2022
<i>Hominilimicola</i>	<i>Hominilimicola fabiformis</i>	Afrizal, et al. 2022
<i>Hominisplanchenecus</i>	<i>Hominisplanchenecus faecis</i>	Afrizal, et al. 2022
<i>Hominiventricola</i>	<i>Hominiventricola filiformis</i>	Afrizal, et al. 2022
<i>Lepagella</i>	<i>Lepagella muris</i>	Afrizal, et al. 2022
<i>Muricaecibacterium</i>	<i>Muricaecibacterium torontonense</i>	Afrizal, et al. 2022
<i>Pallidibacillus</i>	<i>Pallidibacillus thermolactis</i>	Yang, et al. 2023
<i>Paramagnetospirillum</i>	<i>Paramagnetospirillum magnetotacticum</i>	Koziaeva, et al. 2023
<i>Perspicuibacillus</i>	<i>Perspicuibacillus lycopersici</i>	Yang, et al. 2023
<i>Terrihalobacillus</i>	<i>Terrihalobacillus insolitus</i>	Galisteo, et al. 2023
<i>Vulcanimicrobium</i>	<i>Vulcanimicrobium alpinum</i>	Yabe, et al. 2022

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<i>Allocoprobacillus</i>	<i>Allocoprobacillus halotolerans</i>	Teng, et al. 2023
<i>Holtiella</i>	<i>Holtiella tumoricola</i>	Allen-Vercou, et al. 2023
<i>Oikeobacillus</i>	<i>Oikeobacillus pervagus</i>	Rao, et al. 2023
<i>Mariluticola</i>	<i>Mariluticola halotolerans</i>	Ishaq, et al. 2023
<i>Haliovirga</i>	<i>Haliovirga abyssi</i>	Miyazaki, et al. 2023
<i>Mokoshia</i>	<i>Mokoshia eurypsychrophila</i>	Bowman 2023
<i>Zemynaea</i>	<i>Zemynaea arenosa</i>	Bowman 2023
<i>Thiovibrio</i>	<i>Thiovibrio frassasiensis</i>	Aronson, et al. 2023
<i>Pseudokordiimonas</i>	<i>Pseudokordiimonas caeni</i>	Li, et al. 2023
<i>Profundirhabdus</i>	<i>Profundirhabdus halotolerans</i>	Liu, et al. 2023
<i>Mesoterricola</i>	<i>Mesoterricola silvestris</i>	Itoh, et al. 2023
<i>Thalassovita</i>	<i>Thalassovita gelatinovora</i>	Deshmukh and Oren 2023
<i>Alloyangia</i>	<i>Alloyangia pacifica</i>	Deshmukh and Oren 2023
<i>Natronosalvus</i>	<i>Natronosalvus halobius</i>	Tan, et al. 2023
<i>Claveliimonas</i>	<i>Claveliimonas bilis</i>	Hisatomi, et al. 2023
<i>Oryzibacter</i>	<i>Oryzibacter oryziterrae</i>	Lee and Whang 2023
<i>Allomuricauda</i>	<i>Allomuricauda ruestringensis</i>	Deshmukh and Oren 2023
<i>Allofranklinella</i>	<i>Allofranklinella schreckenbergerei</i>	Deshmukh and Oren 2023
<i>Hufsiella</i>	<i>Hufsiella ginkgonis</i>	Kang, et al. 2023
Methylacidiphilum	<i>Methylacidiphilum kamchatkense</i>	Ratnadevi, et al. 2023
<i>Falsigemmobacter</i>	<i>Falsigemmobacter intermedius</i>	Li, et al. 2020
<i>Lentiprolixibacter</i>	<i>Lentiprolixibacter aurantiacus</i>	Ma, et al. 2023
<i>Microcaldus</i>	<i>Microcaldus variisymbioticus</i>	Sakai, et al. 2022
<i>Natronobeatus</i>	<i>Natronobeatus ordinarius</i>	Li, et al. 2023
<i>Natrononativus</i>	<i>Natrononativus amylolyticus</i>	Li, et al. 2023
<i>Otoolea</i>	<i>Otoolea muris</i>	Afrizal, et al. 2022
<i>Peristeroidobacter</i>	<i>Peristeroidobacter agariperforans</i>	Montecillo 2023
<i>Philodulcिलactobacillus</i>	<i>Philodulcिलactobacillus myokonensis</i>	Kouya, et al. 2023
<i>Pigmentibacter</i>	<i>Pigmentibacter ruber</i>	Peng, et al. 2023
<i>Salinilacihabitans</i>	<i>Salinilacihabitans rarus</i>	Li, et al. 2023
<i>Amygdalobacter</i>	<i>Amygdalobacter indicium</i>	Srinivasan, et al. 2023

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<i>Polycladospora</i>	<i>Polycladospora coralii</i>	Mo, et al. 2023
<i>Danxiaibacter</i>	<i>Danxiaibacter flavus</i>	Zheng, et al. 2023
<u>Methylacidiphilum</u>	<i>Methylacidiphilum kamchatkense</i>	Awala, et al. 2023
<i>Petropleomorpha</i>	<i>Petropleomorpha daqingensis</i>	Li 2023
<i>Chakrabartyella</i>	<i>Chakrabartyella piscis</i>	Pardesi, et al. 2023
<i>Exercitatus</i>	<i>Exercitatus varius</i>	Christensen, et al. 2023
<i>Allospseudospirillum</i>	<i>Allospseudospirillum japonicum</i>	Molinari Novoa and Oren 2023
<i>Paenimyroides</i>	<i>Paenimyroides aestuarii</i>	Zhang, et al. 2023
<i>Pacificoceanicola</i>	<i>Pacificoceanicola onchidii</i>	Yang, et al. 2023
<i>Aurantibacillus</i>	<i>Aurantibacillus circumpalustris</i>	Vieira, et al. 2023
<i>Phycobacter</i>	<i>Phycobacter azelaicus</i>	Coe, et al. 2023
<i>Marnyiella</i>	<i>Marnyiella aurantia</i>	Zhao, et al. 2023
<i>Marixanthotalea</i>	<i>Marixanthotalea marina</i>	Fu, et al. 2023
<i>Methanovulcanius</i>	<i>Methanovulcanius yangii</i>	Chien, et al. 2023
<i>Thermobacterium</i>	<i>Thermobacterium salinum</i>	Chen, et al. 2023
<i>Marinihelvus</i>	<i>Marinihelvus fidelis</i>	Zhang, et al. 2023
<i>Shiella</i>	<i>Shiella aurantiaca</i>	Liu, et al. 2023
<i>Antiquaquibacter</i>	<i>Antiquaquibacter oligotrophicus</i>	Toumi, et al. 2023
<i>Aceticella</i>	<i>Aceticella autotrophica</i>	Frolov, et al. 2023
<i>Billgrantia</i>	<i>Billgrantia desiderata</i>	de la Haba, et al. 2023
<i>Bisbaumannia</i>	<i>Bisbaumannia pacifica</i>	de la Haba, et al. 2023
<i>Ferirhizobium</i>	<i>Ferirhizobium litorale</i>	corrige. Romanenko, et al. 2023
<i>Franzmannia</i>	<i>Franzmannia pantelleriensis</i>	de la Haba, et al. 2023
<i>Litchfieldella</i>	<i>Litchfieldella anticariensis</i>	de la Haba, et al. 2023
<i>Methanomethylophilus</i>	<i>Methanomethylophilus alvi</i>	Borrel, et al. 2023
<i>Onishia</i>	<i>Onishia taeanensis</i>	de la Haba, et al. 2023
<i>Pyrofoliis</i>	<i>Pyrofoliis japonicus</i>	Miyazaki, et al. 2023
<i>Rhodalgimonas</i>	<i>Rhodalgimonas zhirmunskyi</i>	Nedashkovskaya, et al. 2023
<i>Rhodococcoides</i>	<i>Rhodococcoides fascians</i>	Val-Calvo and Vázquez-Boland 2023, 143,
<i>Stratiformator</i>	<i>Stratiformator vulcanicus</i>	Kumar, et al. 2023
<i>Thetidibacter</i>	<i>Thetidibacter halocola</i>	Yoon 2023
<i>Vreelandella</i>	<i>Vreelandella aquamarina</i>	de la Haba, et al. 2023

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Table 3. List of new families published unde ICNP from August 2023 until the end of March 2024

New families	Type genus	Reference
<i>Dongiaceae</i>	<i>Dongia</i>	Koziaeva, et al. 2023
<i>Fodinicurvataceae</i>	<i>Fodinicurvata</i>	Koziaeva, et al. 2023
<i>Fontisphaeraceae</i>	<i>Fontisphaera</i>	Podosokorskaya, et al. 2023
<i>Halarsenatibacteraceae</i>	<i>Halarsenatibacter</i>	Boltyanskaya, et al. 2023
<i>Halorutilaceae</i>	<i>Halorutilus</i>	Durán-Viseras, et al. 2023
<i>Halothermotrichaceae</i>	<i>Halothermothrix</i>	Boltyanskaya, et al. 2023
<i>Limisphaeraceae</i>	<i>Limisphaera</i>	Podosokorskaya, et al. 2023
<i>Magnetospiraceae</i>	<i>Magnetospira</i>	Koziaeva, et al. 2023
<i>Magnetospirillaceae</i>	<i>Magnetospirillum</i>	Koziaeva, et al. 2023
<i>Magnetovibrionaceae</i>	<i>Magnetovibrio</i>	Koziaeva, et al. 2023
<i>Novispirillaceae</i>	<i>Novispirillum</i>	Koziaeva, et al. 2023
<i>Oceanibaculaceae</i>	<i>Oceanibaculum</i>	Koziaeva, et al. 2023
<i>Owenweeksiaceae</i>	<i>Owenweekisia</i>	Huang, et al. 2023
<i>Phaeocystidibacteraceae</i>	<i>Phaeocystidibacter</i>	Huang, et al. 2023
<i>Haladaptataceae</i>	<i>Haladaptatus</i>	Cui, et al. 2023
<i>Halorubellaceae</i>	<i>Halorubellus</i>	Cui, et al. 2023
<i>Haliovirgaceae</i>	<i>Haliovirga</i>	Miyazaki, et al. 2023
<i>Thiovibrionaceae</i>	<i>Thiovibrio</i>	Aronson, et al. 2023
<i>Alterococcaceae</i>	<i>Alterococcus</i>	corrig. Min, et al. 2023
<i>Cerasicoccaceae</i>	<i>Cerasicoccus</i>	Min, et al. 2023
<i>Coraliomargaritaceae</i>	<i>Coraliomargarita</i>	Min, et al. 2023
<i>Microcaldaceae</i>	<i>Microcaldus</i>	Sakai, et al. 2022
<i>Oceanipulchritudinaceae</i>	<i>Oceanipulchritudo</i>	Min, et al. 2023
<i>Pelagicococcaceae</i>	<i>Pelagicoccus</i>	Min, et al. 2023
<i>Aurantibacillaceae</i>	<i>Aurantibacillus</i>	Vieira, et al. 2023
<i>Abyssicoccaceae</i>	<i>Abyssicoccus</i>	Bello, et al. 2023
<i>Futianiaceae</i>	<i>Futiania</i>	Liu, et al. 2023
<i>Pumilibacteraceae</i>	<i>Pumilibacter</i>	Afrizal, et al. 2022
<i>Shiellaceae</i>	<i>Shiella</i>	Liu, et al. 2023
<i>Methanomethylophilaceae</i>	<i>Methanomethylophilus</i>	Borrel, et al. 2023
<i>Natranaerovirgaceae</i>	<i>Natranaerovirga</i>	Sorokin and Merkel 2024
<i>Sedimenticolaceae</i>	<i>Sedimenticola</i>	Slobodkina, et al. 2023
<i>Vulcanimicrobiaceae</i>	<i>Vulcanimicrobium</i>	Yabe, et al. 2023

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Table 4. List of new orders published under ICNP from August 2023 until the end of March 2024

New orders	Type genus	Reference
<i>Halorutilales</i>	<i>Halorutilus</i>	Durán-Viseras, et al. 2023
<i>Limisphaerales</i>	<i>Limisphaera</i>	Podosokorskaya, et al. 2023
<i>Microcaldales</i>	<i>Microcaldus</i>	Sakai, et al. 2022
<i>Steroidobacterales</i>	<i>Steroidobacter</i>	Montecillo 2023
<i>Vulcanimicrobiales</i>	<i>Vulcanimicrobium</i>	Yabe, et al. 2023

Table 5. List of new classes published under ICNP from August 2023 until the end of March 2024

New classes	Type genus	Reference
<i>Microcaldia</i>	<i>Microcaldales</i>	Sakai, et al. 2022
<i>Vulcanimicrobiia</i>	<i>Vulcanimicrobium</i>	Yabe, et al. 2023

Table 6. List of new phyla validly published under ICNP from August 2023 until the end of March 2024

New phylums	Type genus	Reference
<i>Abditibacteriota</i>	<i>Abditibacterium</i>	Tahon, et al. 2023
<i>Desulfobacterota</i>	<i>Desulfobacter</i>	Waite, et al. 2023
<i>Methanobacteriota</i>	<i>Methanobacterium</i>	Garrity and Holt 2023
<i>Nanobdellota</i>	<i>Nanobdella</i>	Huber, et al. 2023
<i>Microcaldota</i>	<i>Microcaldus</i>	Sakai, et al. 2022
<i>Vulcanimicrobiota</i>	<i>Vulcanimicrobium</i>	Yabe et al. 2023

Table 7. Fields related to the LTP database

Field	Definition
fullname_ltp	Species names (checked against LPSN)
tax_ltp	Taxonomic hierarchy (domain;phylum;class;order;family;genus) (checked against LPSN)
sp_name_LPSN	Correct species name according to LPSN
type_ltp	Type species giving the name to the genus
correct_tax_LPSN	Taxonomic hierarchy (domain;phylum;class;order;family;genus) according to LPSN
tax_status_ltp	Taxonomic status of the fullname_ltp entry (c: correct; s: synonym; I: illegitimate; o: orphaned; n: not validly published) (checked against LPSN)
qual_ltp	Quality ranking 0 (best) to 16 (worst)
nuc_term_ltp	Number of nucleotides calculated after alignment optimization in combination with filter termini
nuc_3_5_ltp	Number of nucleotides calculated after alignment optimization in combination with filter termini_5_3
nuc_5pr_ltp	Number of nucleotides calculated after alignment optimization in combination with filter 5_prime
nuc_3pr_ltp	Number of nucleotides calculated after alignment optimization in combination with filter 3_prime
ambig_ltp	Number of ambiguous positions calculated after alignment optimization
quest_reg_ltp	Alignment regions containing questionable characters indicated by helix numbers