

Release LTP_09_2021

The current All-Species Living Tree Project release (LTP_09_2021) contains a set of 17,960 type strain sequences and reflects the nomenclature and taxonomic changes accepted from May 2021 to September 2021 (IJSEM volume 71, issue 5 to volume 71, issue 9).

During the past four months, a total of 425 new species, 82 new genera, 10 new families, 2 new orders and 1 new classes, have been validly published under The International Code of Nomenclature of Prokaryotes (ICNP) (Table 1. Summary of release LTP_09_2021).

The 16S rRNA gene sequences belonging to the new species, were aligned (pt-server based on 6,925 high quality sequences) and manually curated, quality checked and added to the tree_ltp_all (release LTP_12_2020) using the Maximum Parsimony tool (positional filters 'termini_5_3' and 'gap95_q0_to_q5' used in combination) from the ARB software package (Table 2. List of new species).

Note that there are 2 species that have been excluded from this release but they will be taken into consideration in the upcoming update of the database (Table 3. Sequences excluded).

There have been several taxonomic reclassifications and changes in taxonomic status proposed and accepted by the list editors of the IJSEM. All such changes were manually checked and recorded in the field tax_ltp and tax_status_ltp (Table 4. Taxonomic reclassification).

Taxa accuracy was cross checked with the nomenclature list available on the LPSN website (<https://lpsn.dsmz.de/>). All synonyms were recorded, and their status is given in the field tax_status_ltp. The field fullname_ltp contains the species name as proposed and accepted by the list editors of the IJSEM, whereas the fields sp_name_LPSN that show the correct name and the tax_LPSN that records the correct taxonomic hierarchy, both according to LPSN in case of discrepancy (Table 5. Fields description).

Acknowledgments

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