



## **Release LTP\_05\_2023**

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

The current All-Species Living Tree Project release (LTP\_05\_2023) contains a set of 19.452 type strain sequences and reflects the nomenclature and taxonomic changes accepted from the beginning of July 2022 until the end of April 2023 (IJSEM volume 72, issue 7 to volume 73, issue 4).

Since July 2022 (LTP\_6\_2022 release), a total of 713 new species, 93 new genera, 24 new families and 6 new order, 8 new classes and 1 new phylum have been validly published under The International Code of Nomenclature of Prokaryotes (ICNP) (Table 1. Summary of release LTP\_05\_2023).

The 16S rRNA gene sequences belonging to the new species, were aligned (pt-server based on 7.598 high quality sequences) and manually curated, quality checked and added to the tree\_ltp\_all (release LTP\_06\_2022) 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).

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 3. Taxonomic reclassification).

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 4. 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](mailto: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 from June 2022 to April 2023.

The All-Species Living Tree Project is an initiative lead and financially supported by the Marine Microbiology Group at the Mediterranean Institute for Advanced Studies (IMEDEA, UIB-CISC), the Molecular Ecology Group at the Max Planck Institute for Marine Microbiology (Bremen), and the Elsevier publisher.