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EFFCA communication on taxonomy of the genus *Lactobacillus*

On 15 April, the long-awaited study on the new taxonomy of the genus *Lactobacillus* was published (Zheng et al., 2020).

The study aimed at rationalizing and streamlining the classification of the genus *Lactobacillus* into 25 different genera.

To review the entire study: <https://doi.org/10.1099/ijsem.0.004107>

Zheng et al., 2020. A taxonomic note on the genus Lactobacillus: Description of 23 novel genera, emended description of the genus Lactobacillus Beijerinck 1901, and union of Lactobacillaceae and Leuconostocaceae. Int. J. Syst. Evol. Microbiol. 70: 2782-2858.

EFFCA welcomes this initiative and congratulates the scientists for their efforts and their results.

Over the last 100 years, the work of microbiologists has populated the genus *Lactobacillus* with over 250 species, and this resulted in a highly heterogeneous group of bacteria. The re-classification now groups lactobacilli into robust clades with shared ecological and metabolic properties.

Concretely, with the updated taxonomy, the genus *Lactobacillus* now includes a reduced number of species, while the remaining ones have been allotted into one of the 23 new genera.

It should be emphasized that it is only the genus name that has been changed; the species names have been kept even when belonging to any of the new genera. For example, *Lactobacillus curvatus* has been renamed to *Latilactobacillus curvatus*. Most importantly, this nomenclature update will not have an impact on the safety or the efficacy of the microorganisms that have been already indicated as safe and suitable for use in foods.

Search tools have been created to ensure the correct conversion from the old to the new name (or vice-versa):

- University of Alberta, Canada: <http://lactobacillus.ualberta.ca/>
- University of Antwerp, Belgium: <http://lactobacillus.uantwerpen.be/>

Taxonomy nomenclature follows scientific rules and procedures, governed by scientific organisations. Since the names have been published in the globally-recognized taxonomy journal "International Journal of Systematic and Evolutionary Microbiology" (IJSEM), they are to be considered official and scientifically binding as per April 15, 2020. However, changing labels broadly in the market according to updated taxonomy is complex as regulatory requirements differ from region to region with genus and species designation required on product label reflecting current nomenclature, whereas other regions rely on former positive lists.

A transition phase has started, but, to the best of our knowledge, there is currently no obligation by regulatory authorities to implement the new nomenclature. EFFCA is seeking to obtain clarity regarding applicable timelines from regulatory bodies in different countries/jurisdictions.
