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### Representatives of Firmicutes isolated from goats' milk in Slovakia

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Nowadays, nutrition is very popular return to all natural, e.g. also consumption of goats'/ewes'milk is increasing; although it has had long-term tradition in Slovakia. Ewes' milk contains a lot of minerals, calcium content is even bigger than in cows' milk. There are also vitamins involving folic acid and fatty acids such as butyric, capronic, caprylic, caprine, but also palmitic, linolenic and arachidonic acids. Proteins are represented by high percentage of amino acids (threonine, isoleucine, tyrosine, lysine, cysteine and valine). Ewes' milk has anti-allergic properties and it is easily digestible. Dairy industry in Slovakia uses mostly commercial cultures in dairy goats products. However, to select autochthonous strain for proper use is preferred. This is also the aim of our study. Up to now twenty-eight samples of milk from 156 goats were treated using the standard microbiological dilution method (ISO) and the appropriate dilutions were plated on MRS agar (Merck), M-Enterococcus agar (Difco) and MSA agar (Oxoid) to select mostly representatives of the genus *Lactobacillus* but *Enterococcus* and *Staphylococcus* as well. Three strains were belonged to the species *Lactobacillus paracasei* (LPa 12/1, LPar ZM-1, LPar ZM-2) using MALDI-TOF spectrometry. These strains sufficiently tolerate pH 3; after 90 min cultivation their counts still were not decreased (up to 6.0 log cycle) compared to start of cultivation. They inhibited the principal indicator *Enterococcus avium* EA5 with inhibition zones up to 24 mm. Among enterococci, four species were determined (*Enterococcus faecium*, *E. faecalis*, *E. hirae* and *E. mundtii*) and also species variability was demonstrated in coagulase-negative staphylococci (*Staphylococcus xylosum*, *S. warneri*, *S. pasteurii*, *S. schleiferi* and *S. hominis*). The other tests are in process including technological properties of *L. paracasei* strains. Results were achieved in the framework of the project APVV-17-0028.