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## IZOLACIJA I KARAKTERIZACIJA AUTOHTONIH SOJEVA BAKTERIJA MLEČNE KISELINE IZDVOJENIH IZ SJENIČKOG SIRA

U radu su izolovani i karakterisani sojevi bakterija mlečne kiseline izdvojeni iz sjeničkog sira, proizvedenog autohtonom tehnologijom, bez dodavanja starter kultura.

Iz pet uzoraka sjeničkog sira izvršena je izolacija 40 termofilnih, mezofilnih i citrat<sup>+</sup> sojeva BMK na odgovarajućim selektivnim podlogama (MRS agar, LM17 agar i LDC agar). Ovi sojevi su dalje podvrgnuti ispitivanju na Gram reakciju i katalaza test, posle čega je izabrano 23 soja za dalja ispi-

tivanja. Na osnovu načina fermentacije laktoze i acidogene sposobnosti praćene u 1% rekonstituisanom obranom mleku, selekcionisano je samo šest sojeva. Determinacijom ovih sojeva pomoću API CHL 50 i Rapid ID 32 Strep testa, pokazalo se da dva soja pripadaju *Lactococcus lactis* ssp. *lactis*, jedan soj *Lactococcus lactis* ssp. *cremoris*, jedan soj *Lactococcus lactis* ssp. *lactis* bivar. *diacetylactis* i dva soja *Lactobacillus para. paracasei* vrsti.

**Ključne reči:** Bakterije mlečne kiseline • Sjenički sir

### SUMMARY

ISOLATION AND CHARACTERIZATION OF AUTOCHTHONOUS STRAINS OF LACTIC ACID BACTERIA ISOLATED FROM SJENICA CHEESE

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Lactic acid bacteria strains isolated from autochthonous cheeses of Sjenica were researched. In those products, where starters were not added, fermentation occurs as a result of natural flora present in the surrounding environment.

Forty thermophilic, mesophilic and citrat<sup>+</sup> LAB strains were isolated by selective mediums (MRS agar, LM17 agar and LDC agar) from 5 samples of Sjenica-cheese. These strains were exposed to the further analysis and identification. After examination by Gram test and catalase test, 23 strains of LAB, were selected for further analysis.

On the basis of lactose fermentation manner and acid production in 1% reconstituted skim milk, only 6 strains were selected. Determination of these strains by API 50 CHL and Rapid ID 32 Strep tests, showed that 2 strains belong to the *Lactococcus lactis* ssp. *lactis*, 1 strain to the *Lactococcus lactis* ssp. *cremoris*, 1 strain to the *Lactococcus lactis* ssp. *lactis* bivar. *diacetylactis* and 2 strains to the *Lactobacillus para. paracasei*.

**Key words:** Lactic acid bacteria • Sjenica cheese

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