
口頭発表 | 5. 畜産物利用

畜産物利用

座長:水野谷 航(麻布大獣)、北澤 春樹(東北大院農)

2019年9月19日(木) 09:30 ~ 10:50 第II会場 (7 番講義室)

II-19-01~II-19-04 : 水野谷 航

II-19-05~II-19-08 : 北澤 春樹

10:30 ~ 10:40

[II-19-07]Investigation of a new production factor for gassericin T, the class II b bacteriocin produced by *Lactobacillus gasseri* LA158.

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Divalent metal ions are known as the negative control factor for production of gassericin T (GT) produced by *L. gasseri* LA158. In this study, initial pH of MRS broth was focused as a new production factor, and the effect of initial pH on GT production was verified. After cultivation of LA158 in MRS broth containing lactic acid and HCl (pH 5.5), respectively, antimicrobial activity of the cell-free supernatants (CFSs) was measured. Then, LA158 was cultivated in MRS broths (pH 6.0 and 5.5), and the culture turbidity and the bacteriocin activity of CFSs were measured. Compared to the control, antimicrobial activity of GT in CFSs obtained from the cultivation through MRS broths with lactic acid or HCl was decreased. Furthermore, each GT activity in CFSs obtained after incubation of LA158 at initial pH 5.5-6.0 was decreased in proportion to initial pH, while there was no significant correlation between antimicrobial activity and turbidity. These results suggest that initial pH of MRS broth is a new production factor for GT.