

## Antimycotic Activity of Lactic Acid Bacteria on the Growth of Cheese Contaminating Molds

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### Abstract

*Local cheese is frequently contaminated by toxigenic molds which is harmful for human health. Lactic acid bacteria have been proven to inhibit the growth of toxigenic mold in some food products. The research was aimed to study the activity of indigenous lactic acid bacteria to inhibit the growth of toxigenic molds in local cheese. The molds studied were isolated from local cheese production (Gouda type). The cheese contaminating molds were identified as *Penicillium* sp. and *Aspergillus* sp. Nine species of indigenous lactic acid bacteria (LAB) were tested for antimycotic activities, i.e. *Lactobacillus plantarum* kik, *Lactobacillus plantarum* sa, *Lactobacillus plantarum* pi28a, *Lactobacillus plantarum* dd, *Lactobacillus coryneformis*, *Lactobacillus brevis*, *Lactococcus piscium*, *Leuconostoc mesenteroides*, and *Leuconostoc paramesenteroides*. The research revealed that the promising indigenous LAB which inhibited the contaminating molds was *Lb plantarum* pi28a. Application of *Lb plantarum* pi28a on local cheese production could inhibit the growth of *Penicillium* sp. and *Aspergillus* sp. up to 12 days.*

**Key words:** cheese, contaminating mold, lactic acid bacteria