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Direct sequencing of table egg bacteria using 16S rRNA gene

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In this work, the aim is to study bacterial diversity of eggs. In the most recent research, the emphasis has been on development of techniques for molecular analysis, aimed at identifying viable but non-culturable (VBNC) bacteria. For the purpose of the analysis, a method for direct isolation of the bacterial genomic DNA from eggshell rinse and egg content homogenate was successfully developed. PCR conditions for amplification of part of the 16SrRNA gene were then optimized. DNA fragments amplified using a high-fidelity enzyme, were ligated with a 5-T overhang vector, and cloned in *Escherichia coli*. Purified clones were obtained by growing them on LB agar containing a selectable marker. Plasmids were extracted from the clones, and the presence of cloned DNA was confirmed by digesting the plasmids with the restriction enzyme *EcoRI*. The preliminary results of sequencing clones have revealed sequences related to the 16SrRNA sequence of *Psychrobacter* spp.

Biography

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