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ANTIMICROBIAL EFFECT OF THE SURFACE COMPONENTS OF BLACK PEPPER CORN

G. Özlük Çilak*, A. K. Halkman

Ankara University, Faculty of Engineering,
Dept of Food Engineering, Ankara, Turkey

It is known that the major microbial flora of black pepper corn is spore forming microorganisms. In order to decontaminate black pepper, these spores are considered to be germinated by moisturizing the pepper corns in a germination solution. Germination solution selection were done in another study and immersing the pepper corns in Tryptic Soy Broth for 1 hour at 28 °C was chosen as the best germination way. This study aims to find out if there will be any loss of antimicrobial components from black pepper corn while waiting in the solution. In order to determine antimicrobial effect of 10%, 30%, 50% of black peppercorn/germination solution, agar diffusion method was applied to *Echerichia coli* (ATCC 25922) and the spore form of *Bacillus cereus* (ATCC 11778), which resulted in no antimicrobial effect. The bacteria were also kept in the same proportion of solution and bacteria count was applied in different hours, however there were no statistically important change ($P>0.05$) in bacteria count even after 24 hours. These results show that the surface components of black pepper corn which interlace to the germination solution have no antimicrobial effect, and keeping in germination solution does not cause any loss in antimicrobial components from the surface of black pepper corn.

Keywords: Ozone, microbial load, peppercorn

*Corresponding author: gizem.ozluk@gmail.com