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## **ANTI-SALMONELLA POTENTIAL OF SALVIA SCLAREA ESSENTIAL OIL IN CHICKEN MEAT**

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**Abstract:** The growth of *Salmonella enterica* subs. *enterica* ser. Enteritidis CCM 3807 in chicken meat was examined, as well as the *Salvia sclarea* essential oil alone and in combination, as well as their ability to prevent spoilage at two storage temperatures.

### • Introduction

The group of pathogens that most commonly cause food poisoning includes pathogens of the genus *Salmonella*.

### • Material and method

The meat samples were placed in sterile bags and kept at 4 °C or at an ambient temperature of 18 °C for the duration of the 15 min treatment with the SSEO (2%) solution. The rapeseed oil (RO) was used for preparing 2% solution of SSEO. Throughout the entire incubation time of 72 hours, the samples were examined at 0, 24, 48, and 72 h. After 48 hours of incubation at 30 °C with inoculated plates, total viable counts were made on Plate count agar (PCA). After 24 hours of incubation at 37 °C coliform bacteria on Violet red bile agar with lactose (VRBL).

### • Results and discussions

The highest total viable count was found in 72 hours in control group. The addition of SSEO reduced number of total viable count in each evaluated hours. The lower number of coliform bacteria were found in all groups in 0. hour. The highest numbers of coliform bacteria were found in 72 hours in the control group. A significant effect of essential oil against microbial meat spoilage was indicated by changes in the normal microbiota, where various groups were impacted by various treatments. According to reports, SSEO show a preserving effect in various food models against various bacterial species, which is in line with our findings.

### • Conclusions

Compared to the control samples, the treatment with *S. sclarea* essential oil decreased the quantity of salmonella cells.

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