

Microbial Assessment of Fenugreek Paste during Storage and Antimicrobial Effect of Greek Clover, *Trigonella foenum-graecum*

Authors : Zerrin Erginkaya, Gözde Konuray

Abstract : In this study, antimicrobial effect of Greek clover was determined with usage of MIC (minimum inhibition concentration) and agar diffusion method. Moreover, pH, water activity and microbial change were determined during storage of fenugreek paste. At first part of our study, microbial load of spices was evaluated. Two different fenugreek pastes were produced with mixing of Greek clover, spices, garlic and water. Fenugreek pastes were stored at 4 °C. At the second part, antimicrobial effect of Greek clover was determined on *Escherichia coli*, *Staphylococcus aureus*, *Bacillus subtilis*, *Debaryomyces hansenii*, *Aspergillus parasiticus*, *Candida rugosa*, *Mucor* spp., when the concentrations of Greek clover were 8%, 12% and 16%. According to the results obtained, mould growth was determined at 15th and 30th days of storage in first and second fenugreek samples, respectively. Greek clover showed only antifungal effect on *Aspergillus parasiticus* at previously mentioned concentrations.

Keywords : antimicrobial, fenugreek, Greek clover, minimum inhibition concentration

Conference Title : ICHNFS 2016 : International Conference on Human Nutrition and Food Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : December 19-20, 2016