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NATURAL ANTIBACTERIAL CAT LITTER WITH OLIVE OIL

Our innovative product Cat litter with olive oil biomass offers antibacterial activity (90% reduction of bacteria).

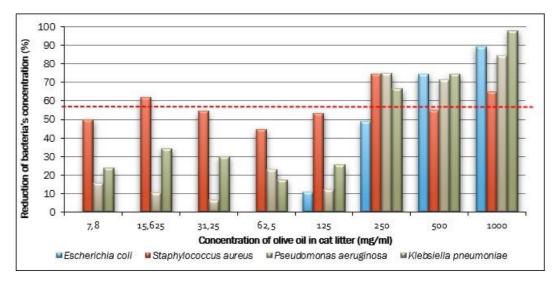
Samples of that were examined by Laboratory of Environmental Microbiology of the School of Chemical and EnvironmentalEngineering at Technical University of Crete, in order to assess their antibacterial activity.

Antibacterial properties of the samples were tested using four bacterial indicators, namely the Gram-negative Escherichia coli, Pseudomonas aeruginosa and Klebsiella pneumoniae and the Gram-positive Staphylococcus aureus.

Minimum Inhibitory Concentration (MIC) is lowest concentration of an agent that will inhibit the visible growth of a microorganism after incubation. So antimicrobial activity was assessed by estimating the Minimum Inhibitory Concentration that inactivate the bacterial population to acceptable levels.

According to the obtained results (below diagram) samples exhibited antibacterial activity depending on their concentration tested in each case.

Concentrations in the range 250-1000 mg/mL resulted in considerable reduction of bacterial population of the 4 bacterial species.



To sum up: The cat litter product in order to have an *effective antibacterial activity,* it must reduce the population of bacteria at least 60%.

<u>Our Cat Litter with olive oil biomass achieves at least 90% reduction with proven antibacterial</u> <u>activity.</u>

The testing of our samples implemented in collaboration with Technical University of Crete School of Chemical and Environmental Engineering Chania,Greece By: Dr. Danae Venieri Associate Professor