

**Surveying for antimicrobial activity within the sponge *Haliclona occulata* against *Escherichia coli* and *Staphylococcus epidermidis***

*Haliclona occulata* specimens were collected from Castine Harbor (Castine, ME) and assessed for antimicrobial compounds. Marine sponges have been shown to be promising candidates for containing compounds that can be extracted to make antimicrobial medicines. These novel compounds can help considerably with combatting antimicrobial resistant bacterial strains, increasing need to find these compounds. Extracts were prepared with 100% Methanol and vortexed with 1 gram of zirconia silica beads for one hour and allowed to evaporate. These extracts were diluted into three concentrations to test for inhibitory concentrations against *Staphylococcus epidermidis* (Gram positive) and *Escherichia coli* (Gram negative), performed with an antimicrobial diffusion assay incubated over 48 hours. These tests showed inhibitory response with *E. coli* however no inhibition was observed with *S. epidermidis*.

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