Sam Houston State University

PUBLIC DEFENSE ANNOUNCEMENT


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Thesis Defense
College of Science and Engineering Technology
Department of Biological Sciences
Masters of Science, Biology


## Microbial Succession of the Microbiome of Cadaver Islands in Southeast Subtropical Texas


This study examines the microbiome of three separate cadaver islands compared to a control soil plot to better understand the microbial succession of human decomposition. Bacterial DNA was extracted from soil samples taken from cadaver islands for 52 weeks and sequenced using Illumina MiSeq to generate genus level identities at the various stages of decomposition. Shannon and Simpson indices were calculated to determine alpha diversity of all sample plots. PERMANOVA tests and principal coordinate analysis plots were done to analyze the beta diversity and determine if within a year the microbiome of the cadaver islands returned to a statistically similar state to that of the control soil. This is a pilot study that aims to look further into the field of microbiomes in the use of forensics and postmortem intervals.


| Event Information | Committee Members |
|---|---|
| November 4th | Dr. Lynne |
| 11:30am-2:00pm | Dr. Bucheli |
| LSB 400M | Dr. Primm |