JUNE BRAUNLICH, JORDGE LAFANTASIE, LUKE G. HUGGINS, Dept of Biology West Virginia Wesleyan College, 59 College Avenue, Buckhannon, WV, 26201. Antimicrobial Activity Found in Appalachian Moss.

As antibiotic resistance continues to pose more of a threat everyday, the search for new sources leads researchers to the world of plants. Much investigation has gone into various plants, but a lot remains unknown of mosses. What is known is that they contain exciting secondary metabolites that allow them to survive in the presence of pathogens and other environmental stressors. Scientists are now exploring the potential use of moss in the pharmaceutical world by testing these metabolites against a number of bacteria. The purpose of this experiment was to analyze the antibacterial properties of two moss species collected in the Appalachian area. Methanol extractions were performed on the moss species: *Escherichia coli, Enterobacter aerogenes,* and *Staphylococcus aureus*. This allowed for the observation of their antibacterial activity. Results showed that both moss species presented zones of inhibition against the three bacterial species. This concurs with other literature. Determining the antimicrobial activity of plants, specifically moss, through extracts and antibacterial assays could potentially lead researchers to a further understanding of the metabolic processes of the secondary metabolites or a new antibiotic source.