Abstract

Sawvell

Endophytes, microorganisms that grow within plant tissues without causing disease, often produce chemical compounds which benfit their host by fostering growth or killing pathogenic microbes. These compounds may be clinically useful in treating infections in humans. In this study, fungal endophytes were collected from plants in the Northern Kentucy area and were tested for antimicrobial activity using co-culture assays. The eleven isolates that showed activity were identified through DNA sequencing and BLAST analysis. The compounds responsible for inhibiton were extracted from liquid cultures for further testing and verification of anti-fungal activity. Overall, the diversity and abundance of antimicrobial endophytes offers promising new direction in the search for sources of antibiotics.