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Widespread antibiotic resistance is a public health crisis of global concern. Identification and development of new antibiotics is time-consuming and expensive, and few new antibiotics have been developed in recent years. While the first antibiotic, penicillin, was isolated from fungi, fungi in general are understudied. We are identifying wild-collected fungi, characterizing growth of these fungi, and investigating potential antibacterial activity. Filamentous fungi were isolated from the surface of wild-collected fruiting bodies of *Auricularia fuscossuccinea* (Jelly Ear), *Polyporus squamosus* (Dryad's Saddle), and *Loweomyces fractipes*. Three isolates were identified to species by DNA barcode: two strains of *Mucor nidicola* and one strain of *Geotrichum klebahnii*. Growth of these three strains was assessed on four different culture media: Cherry Sawdust Agar, Dog Food Agar, Malt-Yeast Extract-Peptone Agar, and Potato Dextrose Yeast Agar. The three strains did not grow well on cherry sawdust agar, but grew well on the other three media. The ability to inhibit growth of the bacteria *Escherichia coli* K-12, *Staphylococcus epidermidis*, and *Bacillus cereus* was assessed for *G. klebahnii*, the two isolates of *M. nidicola*, and for six other fungal strains that we isolated previously: *Aspergillus niger*, *Penicillium herquei*, *Epicoccum nigrum*, and three separate isolates of *Trichoderma atroviride*. Several of the tested strains inhibited growth of the Gram-positive *B. cereus*.