

JESSICA S. KELLISON, ELIZABETH REA, and LAURA S. ROBERTSON, Dept of Biology, Shepherd University, Shepherdstown, WV 25443. Identification by DNA barcode of culturable, airborne, environmental fungi isolated from the Shepherd University campus.

Diverse fungi are abundant within soil communities and commonly found in association with many plant and tree species. This study investigates the culturable, airborne fungi found in the outside environment of the Shepherd University campus. Viable fungi were captured in two different locations on two different culture media, using the open plate method. Captured fungi were isolated and putative species identified by sequencing the internal transcribed spacer region (ITS) of the ribosomal RNA (rRNA) gene cassette. Due to insufficient sequence variability within the ITS region, most isolates could not be identified to species. 15 fungal isolates were identified to order, family, genus, or species complex: *Dothideales* (1 isolate), *Didymellaceae* (4 isolates), *Aureobasidium* (1 isolate), *Cladosporium* (1 isolate), *Mucor* (3 isolates), *Nigrospora* (1 isolate), *Pestalotiopsis* (2 isolates), and *Penicillium* (2 isolates), including *Penicillium thiersii* (1 isolate). These isolates are similar to those isolated from inside a teaching laboratory on the Shepherd University campus; *Didymellaceae*, *Cladosporiaceae*, and *Penicillium* fungi were isolated multiple times within the teaching laboratory. This research was supported by the Shepherd University Biology Department, a student fellowship from NASA-WVSGC (J. Kellison), and a research enhancement award from NASA-WVSGC (L. Robertson).