ABSTRACT

TITLE:	Characterization of a Novel Fungal Species Found on Resident Bats in Colorado: Is Pseudogymnoascus Destructans Here?
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ABSTRACT: White nose syndrome has caused the death of millions of bats throughout the eastern United States. Since the 2006 discovery of Psuedogymnoascus destructans (P. destructans) in New York, the psychrophilic fungus has been observed as far west as Oklahoma. With bat populations seeing 70% decrease in numbers after being infected with P. destructans, we sampled bats from around Crestone, Colorado in order to determine if P. destructans was affecting local bat populations. Fungal spore samples were inoculated onto agar plates and incubated at 8 C and 20 C. Out of 144 fungal samples ten came back as potential matches for P. destructans, identified through ITS sequence analysis, and were then sequenced for the IGS and LSU regions for further analysis. All of the sequences for the IGS region yielded an unknown species of the Psuedogymnoascus genus and the LSU sequences matched to P. pullulans and P. pannorum. Morphologically, our unknown sample shared some characteristics with P. destructans but differed enough for us to believe our fungus may be a novel species.