In 2006, the first instance of White-Nose Syndrome was documented in upstate New York. Investigators found that bats in the North Eastern United States were dying at a tremendous rate. The cause of their deaths was initially unknown but later identified as the fungus Pseudogymnoascus destructans. This psychrophilic Ascomycete colonizes the muzzle and other exposed skin areas of several species of hibernating bats and can cause up to 100% mortality in hibernacula. The initial spread of this pathogenic fungus is believed to be transmitted by way of both professional and recreational cavers, visiting multiple caves with inadequately cleaned gear. The major aims of research pertaining to *P. destructans* includes efforts to control the spread and mortality associated with WNS, and identify and isolate metabolites from P. destructans with potential medical and industrial relevance. Namely, a rubicund pigment found diffusing throughout the agar under various environmental conditions. The aim of our research is to isolate and identify the pigment that is produced by *P. destructans*. The tools necessary to meet this challenge include protocols from both biology and chemistry. While we characterize the growth requirements and secondary metabolite production of this organism using biological understandings, we also employ chemical techniques during the various processes leading to isolation. An isolated pigment may play a significant role in the development and progression of WNS in bats and potentially have broad industrial uses as red pigment is rarely found in nature. The isolation of an industrially employable pigment holds great value.