Botryosphaeria dothidea is an opportunistic pathogen found in some of the cavitated branches of the chaparral vegetation in the Santa Monica Mountains. In this study, we focused on investigating the presence of Botryosphaeria dothidea in Ceanothus spinosus located on Pepperdine University's campus. We wanted to test this hypothesis because we had observed a large amount of dieback in the Ceanothus spinosus population and wanted to identify a possible contributor. Because of the large number of cavitated branches in the Ceanothus spinosus we tested, we hypothesized that they contained fungus. To test this, we took twenty samples of twenty different Ceanothus spinosus, isolated the fungus from the xylem of each sample, and incubated the samples in petri dishes for one week. After fungal growth was complete, we found that only 30% of our samples showed evidence of fungus that could be tentatively identified as B. dothidea. To discover whether or not the fungus present was Botryosphaeria dothidea, we extracted a small amount of DNA from five of the samples showing fungal growth. Of those five samples, we chose the three with the highest concentration of DNA in the sample and sequenced them in order to find out if the fungus infecting the Ceanothus spinosus was Botryosphaeria dothidea. Our results confirmed the fungus was Botryosphaeria dothidea.