Mold Samples Could Reveal More About the German Criminology Collection

The German Criminology Collection contains books from the sixteenth to the nineteenth century and provides insights into the history of German criminal law and politics. Prior to arriving at MSU in 1965, some of the books unfortunately acquired mold.

It is difficult to know when the mold might have developed in the books given their old age and the long journey they made from Germany to America. In an attempt to learn whether the mold was of German or American origin, Bexx Caswell-Olson, Special Collections Conservator, decided it was time to do an experiment.

She started her investigation by reaching out to an expert on campus, Dr. Frances Trail, who is a Professor of Plant Biology and specializes in studying microfungi. Trail was immediately intrigued, “Microfungi fascinate me, so wherever I can find them, I will be glad to explore and sample.”

In July, the two of them met in the Florence G. Wallace Conservation Lab to take mold samples from a few of the German Criminology books, and only one of the six mold samples ended up being viable. Trail was surprised, “I would have thought there would be more contamination from mold spores. The mold spores do not live forever, but it is hard to keep new ones from coming in. The library staff has done an excellent job with these books.”

The Conservation Lab is equipped with a washing sink with a deionized filtration system, a fume hood, and a refrigerator for freezing books, along with traditional conservation tools like brushes, erasers, and scalpels. Trail reflects on her visit, “I didn’t realize that you would have, essentially, a lab and all of the thought and work that it takes to keep rare books.”

Now that the samples have been taken, Trail is in the process of identifying the mold cultures using DNA sequencing. If she can determine whether the mold is of German or American origin, it could help us better understand when the water incident occurred, and more importantly, whether or not there is a threat of the mold continuing to grow.

Many thanks to Dr. Trail for sharing her expertise with us and taking the time to conduct this experiment! 😊