

# Fungal Deterioration of Eighteenth- and Nineteenth-Century Documents: A Case Study of the Tilghman Family Collection, Wye House, Easton, Maryland

## ABSTRACT

Iron chests containing eighteenth- and nineteenth-century documents stored in a cellar of the R. C. Tilghman and E. Lloyd estate, Wye House, Easton, Maryland, were periodically submerged in water during seasonal floods over a period of eighty years before being found and re-opened. The documents stored in the chests were compacted into brick-shaped forms as a result of biological deterioration by fungi. The fungi, which produced vibrant pigmentation and fruiting structures, suggested a number of species rarely seen on the paper-based collections. Isolation and microscopic examination revealed four species representing members in the genus *Chaetomium* (*Ascomycetina*, *Sordariales*). These cellulolytic fungi are tentatively identified as *C. barilochense*, *C. brasiliense*, *C. cymbiforme*, and *C. globosum*. In addition to these, several conidiophores bearing conidia belonging to the genus *Penicillium* and the genus *Aspergillus* were also noted.

A full test report of this research appears in the reference cited below.

## REFERENCE

Szczepanowska and A. R. Cavaliere. 2000. Fungal deterioration of 18th and 19th century documents: a case study of the Tilghman Family Collections, Wye House, Easton, Maryland. *International Biodeterioration and Biodegradation* 46(3):245-249.

HANNA SZCZEPANOWSKA  
Maryland State Archives  
Annapolis, Maryland  
hanna@mdarchives.state.md.us

R. CAVALIERE  
Gettysburg College  
Gettysburg, Pennsylvania

---

Presented at the Book & Paper Group Session, AIC 28th Annual Meeting, June 8-13, 2000, Philadelphia, Pennsylvania. Received for publication Fall 2000.

