

Re-discovery of *Lysurus mokusin*, lantern stinkhorn mass fruiting bodies on soil at Fort Worth Botanic Garden, Texas

Harold W. Keller and Bob O'Kennon

Botanical Research Institute of Texas, 1700 University Drive,
Fort Worth, Texas, 76107–3400

Lysurus mokusin is a distinctive, easily recognized fungus, in a group of fungi commonly referred to as stinkhorns. Development of fruiting bodies of this species was highlighted recently in FUNGI on bark mulch found on the Botanical Research Institute of Texas campus grounds (O'Kennon et al., 2020). Heavy rainfall in the Fort Worth area (8 to 14 inches on August 22, 2022) within a short period of time (less than 18 hours) resulted in extensive flooding of small waterways, the Trinity River, and low-lying areas due to runoff of excessive water. This rain event resulted in a small stream in the FWBG overflowing its banks and supersaturating mostly bare soil lacking surface debris and mulching. The only ground cover was grass greenery and *Melothria pendula*, a climbing vine in the cucumber family (Fig. 1).

This area was approximately 14 feet in length and 10 feet wide with thousands of buried white stinkhorn eggs and emerging fruiting bodies of *Lysurus mokusin*. Earlier summer temperatures, exceeding 100 F (47 days) with little or no rain, preceded this rain event followed by cooler, sunny daytime temperatures (80–90 F) and cooler nighttime temperatures (60–70 F). From about September 1–17, 2022, fruiting bodies of this species emerged every day when there was no rain (Fig. 2). Fruiting bodies were associated with carrion flies feeding on the gleba spore mass.

Reference Cited

O'Kennon, B., H.W. Keller, and B.A. Bunyard.
2020. Observation of the stinkhorn *Lysurus mokusin* (Phallales: Phallaceae), and other fungi found on the BRIT campus in Texas. FUNGI 3(3):41–48. ↑



Figure 1. Panoramic view of soil site area with *Taxodium distichum* (Bald Cypress trees and knees) in background. Photo by Bob O'Kennon.



Figure 2. Mature fruiting bodies and eggs of *Lysurus mokusin*. Photo by Bob O'Kennon.