FUSARIUM INFECTION IN TEXAS TORTOISES (Gopherus berlandieri)

Kimberly Doll,1 Jordan Gentry, DVM,2 Jeffrey Musser, DVM, PhD, Dipl ABVP,3 and J. Jill Heatley, DVM, MS, Dipl ABVP, Dipl ACZM2∗

1College of Veterinary Medicine & Biomedical Sciences, Texas A&M University, College Station, TX 77843 USA; 2Dept. of Small Animal Clinical Sciences, College of Veterinary Medicine & Biomedical Sciences, Texas A&M University, College Station, TX 77843 USA; 3Dept. of Pathobiology, College of Veterinary Medicine & Biomedical Sciences, Texas A&M University, College Station, TX 77843 USA

ABSTRACT

The Texas tortoise (Gopherus berlandieri) has been a threatened species in Texas since 1977; however, many of these animals are kept in captivity as pets in addition to the tortoises held by wildlife rescue organizations (Rose et al., 2001). Several Texas tortoises housed at Texas A&M University were identified as suffering from a fungal keratitis condition upon intake based on observation. Samples from the affected shell area were scraped from 13 such tortoises, placed in sterile tubes either with or without alcohol, and photos were taken of each tortoise at that time. After 24 hours of refrigeration, 0.3mL of tryptose broth was added, samples were agitated, and then each was swabbed onto a plate containing Sabouraud dextrose agar with chloramphenicol. Four days later, colonies of fungal growth were recultured for isolation on potato dextrose agar with chloramphenicol; growth was analyzed 11 days later using lactophenol blue tape mounts for identification.2 While multiple hyphae were apparent, no macro- or microconidia were seen. 10 days following, re-examination confirmed Fusarium spp. on three plates and Fusarium-characteristic growth without identifying spores on three plates. Fusarium spp. appear prevalent in Texas tortoises and are known pathogens; however, multiple other pathogenic agents are also present in this population, such as Mycoplasma agassizii and other fungi.1 Fusarium-induced fungal keratitis has not resulted in death, but treatment trials are recommended to reduce spread in captive populations and between former captive and wild specimens in event of future release.3

LITERATURE CITED