

## Zygomycosis in captive Asian Elephant (*Elephas maximus*)

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### Case Report

Asian elephant (*Elephas maximus*) largest and most viable wild population is in India and Kerala supports a very good number of elephants under captivity. Asian elephants in captivity are susceptible to poor health, behavioral abnormalities and breeding problems (Ramanathan *et al.*, 2008). The present paper reports the occurrence of *Apophysomyces elegans* infection in a 40 year old male captive Asian elephant in Kerala.

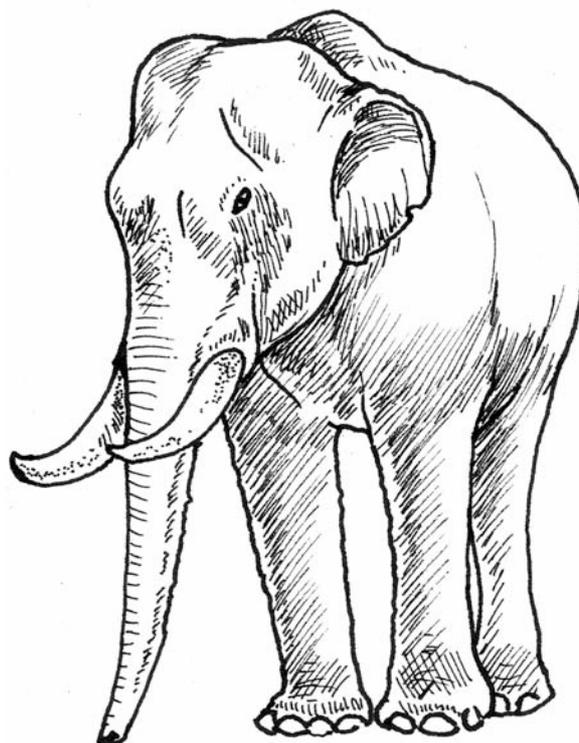
Loss of epidermal cells and pus formation was observed for last seven months, especially in trunk and ear region of the elephant. Skin scrapings and pus swabs from infected area were collected and inoculated into 2% Mycological Peptone with chloramphenicol (0.2 mg/ml) and incubated at room temperature. The developed colonies were sub-cultured on to Czapek Dox Agar (CDA) and Sabouraud Dextrose Agar (SDA).

*Apophysomyces elegans* was confirmed by macroscopic and microscopic observations and isolated from all collected samples. *Apophysomyces elegans* is a common environmental contaminant which is commonly found in tropical and subtropical regions. The colonies are rapidly growing with abundant aerial hyphae and no reverse pigmentation. Sporulation was induced and sporangiospores with funnel-shaped apophyses and pyriform sporangia was observed by microscopy. Most of the infections are reported from regions with warm climates, such as the southern portions of the United States, Mexico, North Australia, and South India (Ribes *et al.*, 2000). Infection is usually acquired through traumatic implantations associated with soil or decaying vegetable matter (such as from accidental injuries or insect bites). Invasive soft tissue infections can develop on burns or wounds which are contaminated by soil. The fungus has the ability to invade blood vessels. *Apophysomyces elegans* infections present most commonly as necrotizing fasciitis, osteomyelitis and angioinvasion (Reddy *et al.*, 2008). Human infections from South India are observed by many workers (Thomas *et al.*, 2008; Kindo *et al.*, 2007). Reports on infections due to *Apophysomyces elegans* in animals like bottle nose dolphin, killer whale and white sided dolphins (Robeck *et al.*, 2002) are available.

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