

## Abstract

The fecal matters of animals contain undigested food products rich in carbon and nitrogen. These are suitable substrates for development of different coprophilous fungi. The present study was conducted for *in vitro* isolation of coprophilous fungi from dung of some herbivores from the Lahore Zoo. The occurrence of coprophilous fungi on dung samples of Spotted deer, Hog deer, Red deer, Sika deer and Fallow deer collected from the Lahore Zoo, Punjab, Pakistan was carefully monitored. Using morphological characterization, 87 fungal isolates representative of 13 genera and 17 species were identified. Among these species, 02 belonged to Zygomycetes and 15 were from Deuteromycetes. rDNA ITS regions of 05 species viz; *Aspergillus niger* Tiegh., *A. parasiticus* Speare, *Humicola* sp. Meyers & R.T. Moore GCU1, *Fusarium oxysporum* E.F. Sm. & Swingle and *Circinella muscae* (Sorokin) Berl. & De Toni were successfully extracted, amplified and sequenced. They were analyzed phylogenetically as well. In the community of isolated fungi, *Humicola* sp. Meyers & R.T. Moore GCU1 (16%), *Fusarium solani* (Mart.) Sacc. (15%) and *Rhizopus oryzae* Went & Prins. Geerl. (10%) were the dominant over all isolated coprophilous fungal species. The present study is first attempt to study coprophilous fungi growing on deer dung.