

ORIGINAL ARTICLE

**FUNGAL CONTAMINATION IN THE PAPER CURRENCY NOTES IN THE
PUBLIC TRANSPORT OF KOLKATA CITY IN MONSOON**

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***Abstract:** A study was carried out to observe the potential of the circulating paper currency notes as a source of fungal contamination in the rainy season of 2019, in the public transports in the city of Kolkata, India. Thirty pieces of long-time circulating Indian paper currency notes (5 pieces for each of the denominations of rupees ten, twenty, fifty, one hundred, two hundred and five hundred) were collected from the public of Kolkata city and examined for fungal contamination in laboratory. The currency notes were found to have remarkable fungal contamination. Regarding the level of contamination five-hundred-rupee notes are less contaminated (20%) in comparison to the ten-rupees (75%) and twenty-rupees (56%) currency notes.*

*In laboratory, a total number of 242 fungal isolates were recorded from the collected paper currency samples. The isolated fungi belonged to ten genera, among which the most frequent was *Aspergillus flavus* (25.20%), followed by other genera like *Alternaria alternata* (13.63%), *Rhizopus spp.* (12.40%), *Trichoderma viridae* (11.98%) and others. These fungal members are well known sources of mycotoxins and allergen, which are harmful for human health.*

The observations of the study, indicates that awareness development and preventive measures are very much needed to minimize the fungal as well as pathogenic contamination through the circulation of contaminated paper currencies in public transport.

Key Words: Fungal contamination, paper currency notes, public transport, Kolkata city.