

Aflatoxin Contamination of Abattoir Wastes in Ogun State, Nigeria

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Abstract : The study investigated the level of aflatoxin contamination of abattoir wastes in Ogun State, Nigeria, due to continued complaints of poor hygiene of abattoir centers in the states as a result of improper disposal of abattoir wastes. Wastes from the three senatorial districts of the state were evaluated for their levels of aflatoxin contamination. The moisture content, total plate count, fungal counts, percentage frequency of fungal occurrence as well as the level of aflatoxin contamination of the abattoir wastes were determined by standard methods. The moisture content of the wastes ranged between 79.10-87.46 %, total plate count from $1.37-3.27 \times 10^3$ cfu/ml, and fungal counts from $2.73-3.30 \times 10^2$ cfu/ml. Four fungal species: *Aspergillus niger*, *Aspergillus flavus*, *Aspergillus ochraceus*, and *Penicillium citrinum* were isolated from the wastes, with *Aspergillus flavus* having the highest percentage frequency of occurrence of 29.76%. The aflatoxin content of the samples was found to range between 3.20-4.80 μ g/kg. These findings showed that abattoir wastes from Ogun State are contaminated with aflatoxins and pose a health risk to humans and animals.

Keywords : abattoir wastes, aflatoxin, microbial load, Ogun state

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