SECTION A

THASIC VARIATIONS OF AFLATOXIN CONTENT IN SERIAL CULTURES OF *ASPERGILLUS PARASITICUS*

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The occurrence of phasic variations in aflatoxin content of serial cultures of *A. parasiticus* was first reported in 1972(1); evidence was presented that these were real variations and not artefactual inspite of the $\pm 20\%$ error of TLC visual determinations.

We now confirm the occurrence of such variations in serial cultures of *A. parasiticus* in solid (fresh coconut) and liquid (potato dextrose broth) media when UV spectrophotometry (error $\pm 2\%$) was used for toxin quantitation. The identity of the aflatoxin at the peaks and troughs of the phases, was confirmed by derivative formation and TLC. These phases were unrelated to variations in mycelial mass as determined by the estimation of glucosamine derived from acid hydrolysis of the fungal chitin in the solid cultures and by mycelial weight determinations in liquid cultures.

The importance of these variations in toxin content in relation to studies on the production and metabolism of aflatoxin and the suitability of food substrates for toxin accumulation, is re-emphasised.

Reference

1. Arseculeratne, S. N. *et al J. Appl. Bact.* **35** 43 (1972).