

INCIDENCE OF MOULDS IN SOME VARIETIES OF STORED COWPEA AND PEANUTS IN MAIDUGURI, NIGERIA

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ABSTRACT

Incidence and types of mould present in three varieties of peanuts (Ex-Poland, Double colour and Yar Dakar) and cowpea (D.90, GV and Borno Brown) stored in Bulumkutu market, Maiduguri were studied. Moisture content, percentage seeds surface-infected, total mould count (surface and inner infection) and mould identification were determined. Moisture content ranged from 13.5– 19.6% and 15.0–20.0% in varieties of peanuts and cowpea respectively. Varieties of stored cowpea had a wider range of surface infection (19.0-51.0%) compared with peanuts (21.3%-38.4%). Total mould count was however lower in cowpea (9.2×10^2 – 1.8×10^3 cfu/g) compared with peanuts (1.3×10^3 - 1.8×10^3 cfu/g), indicating that peanuts had more mould growing within the seeds than cowpea. Three genera of mould were identified in each crop—*Aspergillus*, *Penicillium* and *Zygomycete*. Borno Brown variety of cowpea had the highest load of these mould (57.6%) while GV had the least (14.3%). In peanut, Ex-Poland variety had the highest load of mould (42.9%) while each of Double colour and Yar Dakar variety had 28.6% load.

Keywords: Cowpea, peanuts stored, mould, incidence, Nigeria.