

ABSTRACT

This study aims to identify seed-borne pathogenic fungi in several varieties of groundnut (*Arachis hypogaea* L.) and assess their pathogenicity on seed viability. This research was conducted using the blotter test method for the isolation and identification of fungi, both macroscopically and microscopically. The seeds tested consisted of ten varieties, namely Tala 1, Tala 2, Talam 1, Takar 1, Jerapah, Garuda, Gajah, Sihobuk, Situraja, and Tuban. The identification results show the presence of several pathogenic fungal species, including *Aspergillus flavus*, *A. niger*, *Fusarium* sp., *Rhizopus* sp., *Penicillium* sp., and *A. terreus* with varying infection levels among the varieties. Variety Talam 1 was found to be free from infection, while other varieties were generally contaminated by more than one type of fungus. Pathogenicity tests showed that all fungal isolates caused a 100% disease incidence in the tested seeds, with symptoms ranging from seedling blight (TB) to necrosis in normal seeds (BN). These findings highlight the importance of seed treatment, such as sterilization or fungicide application, to reduce the risk of seed-borne pathogen infection and maintain the quality of peanut seeds.

Keywords: blotter test, colony color, pathogenic fungi, pathogenicity, seed infection