

**RECENT ADVANCEMENTS AND BIOLOGICAL MANAGEMENT OF *FUSARIUM UDUM*:
A CAUSATIVE AGENT OF PIGEONPEA WILT**

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ABSTRACT

Fusarium udum Butler is an important soil borne pathogenic fungi causing wilt disease in pigeonpea. The disease is predominant in all major pigeonpea growing areas throughout the world, and causes 30-100% yield loss, where resistance sources are not available. The seedling stage is more prone to wilt infection, but the visible symptoms mostly appear at different growth stages of host plants based on the severity of infection. Though a number of well accepted techniques are available for resistance screening of *F. udum* wilt in pigeonpea, but most of the resistance sources are prevalent disease at early stage of plants. The incidence and relative importance together of this pathogen with present understanding of its interactions with host plants are of great concern. With the contemporary and traditional management practices adopted to control this disease, the increasing importance of development of ultimate resistance in elite pigeonpea cultivars with the help of advanced biotechnological strategies are listed and critically discussed. The present study aimed to discuss and find out a permanent solution by utilizing the best biotechnological approaches for the development of economically viable and ecologically sustainable effective management of wilt disease of pigeonpea caused by *F. udum*.

KEYWORDS: Disease, Fusarium, Management, Pigeonpea, Resistance, Wilt