Department of Biology presents

"Putative Fungal Effectors for the Identification of Aggressive Isolates of *Fusarium oxysporum* from Soybean"

ABSTRACT. Fungi within the *Fusarium oxysporum* species complex (FOSC) can cause root rot, seedling blight, and wilt on a number of agronomically important crops, including soybean. Isolates recovered from soybean vary in aggressiveness and symptoms produced. The goal of this study was to identify a genetic marker to detect aggressive wilt isolates towards soybean. Seventy-seven FOSC isolates collected from soybean were screened for the presence of twelve fungal effectors. Additionally, 27 isolates collected from other host, primarily from common bean, were screened for the *Six6* effector. All isolates were tested in the greenhouse for their ability to produce wilt symptoms on soybean. Six of the effectors were present in all isolates screened and six effectors were dispersed among isolates. Based on our results isolates with a copy of the *Six6* effector seem to be associated with the ability of most isolates to produce wilt symptoms in soybean.

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For further information: <u>www.csufresno.edu/biology or phone 278-2001</u>. If you need a disability-related accommodation or wheelchair access information, please contact Lindasue Garner at the Department of Biology @ 278-2001 or e-mail <u>lgarner@csufresno.edu</u> (at least one week in advance of event).