

EVALUATION OF SMARTGROW MATERIAL AS A SOURCE FOR PLANT PATHOGENIC FUNGI

Dr. Aron Palmateer & Dr. Yuncong Li , University of Florida, Tropical Research & Education Center

Six SmartGrow products were selected at random. Four sections from each product were surface sterilized for 20 seconds in 95% ethanol followed by 90 seconds in 0.525% sodium hypochlorite (NaOCl). Surface-sterilized sections were aseptically plated on potato dextrose agar acidified with lactic acid (APDA) to a pH of 4.0. The plates were incubated in the dark at 25 °C for 3 to 10 days. Fungal colonies emerging from material were recorded and identified to species based on reproductive morphology using the appropriate media.

Results show that the SmartGrow products do not serve as a source for plant pathogenic fungi (Figure 1). Additionally, the surface sterilized sections of material examined did not harbor any fungi. Further studies are in progress with several popular plant species to compare SmartGrow plugs with standard growing media. Based on preliminary observations the use of SmartGrow plugs may reduce the incidence and severity of plant disease.



Figure 1. Seven day old acidified potato dextrose agar (APDA) plates containing tissues from Smartgrow products, which did not produce any fungi.