

Abstract

Male and female *Cosmopolites sordidus* were attracted to freshly cut banana rhizome and pseudostem in a still-air olfactometer. Females responded similarly to odors from a comparatively resistant and from a susceptible cultivar of banana, when presented as either freshly cut tissue or as Porapak-trapped volatiles. Females were also attracted to rotting banana pseudostem and to volatiles collected from it. Males and females gave similar responses to host tissue in both the behavioral bioassay and to collected volatiles in EAG recordings. Weevils did not respond, either behaviorally or electrophysiologically, to a synthetic mixture of mono- and sesquiterpenes, which made up over 9% of the volatiles collected from pseudostem.