

Females of the banana weevil, *Cosmopolites sordidus*, were attracted to and made longer visits to live conspecific males, trapped volatiles from males, and dissected male hindguts in a still-air olfactometer. Male weevils were attracted to volatiles trapped from males and made longer visits to live males and volatiles from males. Live females, collected volatiles from females and female hindguts, elicited small or no behavioral responses from either sex. Electroantennogram (EAG) responses from both male and female antennae were elicited by collected volatiles from males and by dichloromethane extracts of male hindguts and bodies but not by surface washes of males. No significant EAG responses were given to equivalent material from females. It is therefore suggested that male banana weevils release an aggregation pheromone via their hindgut.