

OR365*Queen sex pheromones of two sympatric species of Polyergus***Les Greenberg**, Christine Johnson, James Trager, Steven McElfresh, Jocelyn Millar, Josh Rodstein

Our goal was to compare the sex pheromones of an eastern and a western North American species of *Polyergus* (*P. lucidus* group and *P. breviceps* group, respectively). We have previously described the queen sex pheromone in a species in the *P. breviceps* group, *P. topoffi*. Males fly to lures containing the pheromone. We now describe the queen sex pheromone of a species in the *P. lucidus* group. Both species share the major component of their queen sex pheromones, methyl 6-methylsalicylate. The minor component in the *P. breviceps* group is (R)-3-ethyl-4-methylpentanol, while in the *P. lucidus* group the minor component is (R)-3-ethyl-4-methylpentanoate. When lures of these blends are placed in a field in Missouri that contains a species in the *P. breviceps* group, *P. mexicanus* and a species in the *P. lucidus* group, *P. lucidus*, males fly almost exclusively to their own pheromone blend.