**Why to Sequence Monomorium Minimum (Little Black Ant)**

By Chinmay Raut

The little black ant (*Monomorium minimum*) is a species of ant native to North America common in households[1]. There are 358 valid species in genus Monomorium as of 2018[1] the only one to have been sequenced in this genus being Monomorium pharaonic (pharaoh ant) native to Africa[2]. Both species of ants have demonstrated adaptability into the urban and rural environments becoming common household pests in both of their countries of origin[3]. As pests, they are infamous for being difficult to control getting into food and hospitals[4]. With their ability to transmit pathogens such as *Salmonella* spp, *Staphylococcus* spp, and *Streptococcus* spp[5] they are a dangerous and problematic pest. Notable phenotypic differences between both species of ants include M. minimum being much smaller than M. pharaonic, 1mm compared to 2mm[1]. Also, M. minimum and M. pharaonic are both polygynous[1] meaning that each colony can have more than 1 queen previously known to increase genetic diversity between members of the colony and lower competition between neighboring colonies[4]. Understanding and comparing the genomes of M. minimum and M. pharaonic could offer greater understanding into the evolutionary differences between the species of ants and highlight the similarities which allow both species to thrive alongside people. Also deeper genetic understanding of M. minimum could provide avenues for safe and effective pest control in the American regions which they reside.

References:

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