Ants are less aggressive when overwhelmed by strong odour

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Surrounding odours can affect the ability of ants to distinguish friend from foe, a new University of Melbourne study has found.

Researchers observed ant behavior in perfume-scented containers. Ants from same and different colonies were observed for greeting and aggressive behaviors.

Lead Author University of Melbourne's Professor Mark Elgar from the Department of Zoology said, "Ants brush each others antennae, which helps them detect chemical signals that reveal whether the other ant is friend or foe. When ants were in a haze of perfume, they brushed their antennae more frequently, but they weren't necessarily more or less aggressive."

"Our results show that perfume obscures signal recognition. These odours act as a background noise in much the same way as it's more difficult to hear someone speaking at a rock concert, said Professor Mark Elgar."

"So background noise is an important factor in influencing the evolution of chemical communication because it requires a precise signal that can be detected reliability against the background noise"

"Perhaps its no surprise that worker ants engaging in territorial disputes with adjacent colonies prefer locations with less plants and thus perhaps low levels of olfactory interference." said Professor Elgar.

This study published in *Austral Entomology.*

Provided by University of Melbourne