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*The ant *Cataglyphis cursor*, a model to study sexual selection*

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Few studies on sexual selection have been carried out in social insects as it is generally believed that it should not play a major role in social insects. Here, we argue that this might not be the case in all species. In some ant species, mating takes place at the entrance of the nest where young virgin queens (gynes) perform sexual calling and mate with foreign males coming from surrounding colonies. Contrary to species where mating occurs during a nuptial flight, workers are present when mating takes place on the ground and they can have two main effects. First, workers may protect gynes so that mortality during mating is very low. Second, they may interfere with the mating process. For instance, in the ant *Cataglyphis cursor*, workers chase foreign males seeking to mate with gynes, and this may be a form of sexual selection where workers select for fittest mates for their sister gynes (inclusive mate choice). In this species, both males and gynes can mate multiply, which also opens the possibility of post-copulatory sexual selection. In this study, we analyse the effect of worker aggressions on male mating attempts by comparing the mating behaviour of three to four virgin males and one unrelated gyne placed together in a box, with or without workers under laboratory conditions. We also investigate the role of workers under natural conditions by experimentally removing workers at the nest entrance during the mating period. Our data reveals for the first time the involvement of non-reproductive individuals in sexual selection processes.