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Reproduction and longevity in Cardiocondyla *ants*

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Perennial social insects are characterized by the extraordinarily long lifespan of their reproductive females, which may be tens or hundreds of times larger than that of non-social insects of similar body size and also greatly surpasses that of conspecific non-reproductives. Evolutionary theories of aging explain this phenomenon from the low extrinsic mortality queens experience once they have successfully established their colony. In my talk I will summarize recent findings from our studies on *Cardiocondyla* ants, which indicate that both mating and egg laying have a positive effect on queen life span. Furthermore, our studies show that individual life span is greatly affected by the queen's social environment without any changes in external mortality risks. I will also present preliminary data on the consequences of mating with viable or sterilized males on gene expression in queens.