

**P015**

*Begging signals in ant larvae*

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Animals sometimes use more than one signal to convey a message, although the multiple displays are supposed to be costly for the signaler. Theories on multiple signaling predict a possible modification or redundancy of the initial message [1], for instance to add new information, to reinforce the message or to reach different receivers. Offspring begging for parental care is widely spread in subsocial and social insects. Larval begging has been described in some wasps [2], bees [3,4] and ants [5]. For each studied species, researches have only focused on one modality of communication, such as acoustic, chemical or behavioral communication. In the ant *Ectatomma tuberculatum* (Ectatomminae), larvae may rely on odors and behaviors through movements, to modulate both larval care and foraging activities. So larvae in this species would use multiple signals to communicate their needs. Thus, we study if both larval signals are related to the hunger state of the larvae and if they induce feeding from the workers. The role of those multiple signals will be discussed. [1] Bro-Jørgensen, J. (2010). Trends in Ecology & Evolution 25 (5). [2] Ishay, J., Landau, E. M. (1972). Nature 237 (5353). [3] Boer, S. P. A. den, Duchateau, M. J. H. M. (2006). Insectes Sociaux 53 (3). [4] Huang, Z.-Y., et Otis, G. W. (1991). Journal of Insect Behavior 4 (2). [5] Kaptein, N., Billen, J., Gobin, B. (2005). Animal Behaviour 69 (2).