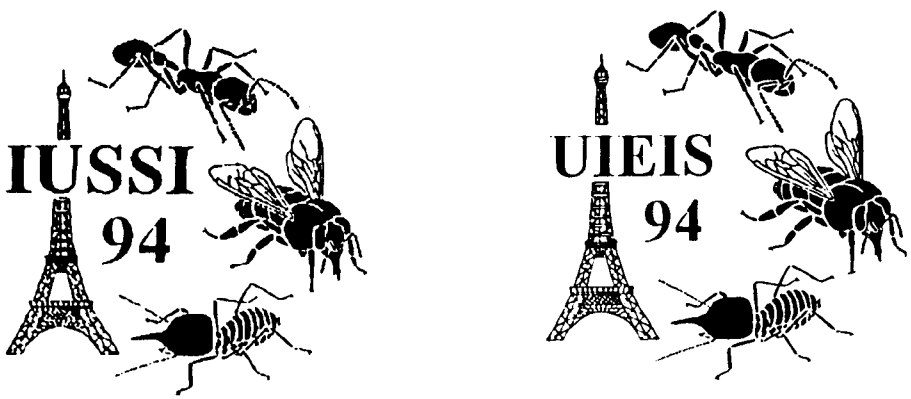
LES INSECTES SOCIAUX



12ème Congrès de l'Union Internationale pour l'Etude des Insectes Sociaux UIEIS
Paris, Sorbonne, 21-27 Août 1994

12th Congress of the International Union for the Study of Social Insects IUSSI
Paris, Sorbonne, 21-27 August 1994

Alain LENOIR, Gérard ARNOLD & Michel LEPAGE (Eds)

Publications Université Paris Nord, 1994
Published by Université Paris Nord, 1994

REARING *CERATINA CUCURBITINA* (ROSSI) (HYMENOPTERA, ANTHOPHORIDAE, XYLOCOPINAE)

M. Terzo, P. Rasmont, J.-C. Verhaeghe and C. Decuyper

Zoologie, Université de Mons-Hainaut, 19 Av. Maistriau, B-7000 Mons (Belgique)

The genus *Ceratina* Latreille was a long time considered as exclusively solitary (Michener, 1974) but presocial behaviours and existence of rudimentary castes are observed in several species (Michener, 1985; Sakagami & Maeta, 1987a, 1987b, 1989). In order to study social phenomenons, the authors have tried to rear *Ceratina cucurbitina*, the most frequent species of small carpenter bee in Europe. Nests collected in nature were placed into cages, in conditioned room. The authors have determined the optimal ecoclimatic, feeding and nidification conditions. The fly is observed between 20 and 36°C. However, between this extrema, the activity appears only in increasing temperature. The minimal illumination to observe activity is between 175 and 700 LUX. The light type seems indifferent (presence or absence of U.V. and I.R.). The copulation occurs mainly in decreasing atmospheric pressure.

References

Michener C. D., 1974. *The Social Behavior of the Bees. A Comparative Study*. The Belknap Press of Harvard University Press, Cambridge, Massachusetts, X+347 pp..

Sakagami S. F. & Y. Maeta, 1987a. Multifemale Nests and Rudimentary Castes of an "Almost" Solitary Bee *Ceratina flavipes*, with additional Observations on Multifemale Nests of *Ceratina japonica* (Hymenoptera, Apoidea). *Kontyu*, 53(3):391-409.

Sakagami S. F. & Y. Maeta, 1987b. Sociality, Induced and/or Natural, in the Basically Solytary Small Carpenter Bees (*Ceratina*). *Animal Societies: Theories and Facts*, 1-16.

Sakagami S. F. & Y. Maeta, 1989. Compatibility and Incompatibility of Solitary Life with Eusociality in Two Normally Solitary Bees *Ceratina japonica* and *Ceratina okinawana* (Hymynoptera, Apoidea), with Notes on the Incipient Phase of Eusociality. *Japanese Journal of Entomology*, 57(2):417-439.