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ROLE OF WORKER THELYTOKY IN COLONIES OF THE ANT CATAGLYPHIS

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Thelytoky is not the rule in social insects. Cagniant demonstrated that, in the laboratory, queenless workers of Cataglyphis cursor can lay eggs which develop into workers and queens or males ; and a complete society is finally restored. Two problems were raised : is this phenomenon existing in natural conditions, and what is its adaptative value ? In the field we collected hundreds of colonies, but we never found solitary queens which could initiate a foundation as it is frequent for Lasius or Camponotus, but small colonies with a queen and a few tens of workers are not exceptional. In summer we observed that groups of workers can form temporary a separate nest near the principal nest with an important traffic between the two nests. We found also complete colonies (with a queen) separated only by one meter, which showed so many workers exchanges that they could be considered as a polycalic colony. We observed also that colony fission is possible in the laboratory. So we can hypothesize that thelitoky could be a mean to found a new colony, by a group of isolated workers, keeping momentaneously strong relations with the mother colony.