



Figs. 1–4, 11 Frontal view of head of *Acromyrmex ameliae* queen (1), *Acromyrmex subterraneus subterraneus* queen (2), *A. ameliae* male (3), *A. subterraneus subterraneus* male (4) and *A. ameliae* worker (11). The bars correspond to a scale of 0.5 mm in figures 1–4 and 0.25 mm in figure 11. **Figs. 5–8, 13** Lateral view of petiole, postpetiole, and gaster of *Acromyrmex ameliae* queen (5), *Acromyrmex subterraneus subterraneus* queen (6), *A. ameliae* male (7), *A. subterraneus subterraneus* male (8) and *A. ameliae* worker (13).

polygyny in the two host subspecies (Della Lucia & Vilela, 1989; Delabie, 1989). During nest collection, we indeed found three monoginic parasitized nests which had 2, 3 and 4 queens of *A. ameliae*. The first collection of the parasite was in October, 2003, when two nests were collected with hundreds of alate males and queens of the parasite. In April of the following year, we again collected nests with the alate parasites. This suggests that the production of the reproductive caste in *A. ameliae* may occur throughout the

year. In the laboratory, males and queens flew towards the light, indicating that this species is likely to perform the nuptial flight in nature. As in *A. insinuator*, *Acromyrmex ameliae* produce a workforce. This seems to be essential for the production of the parasite alates (Sumner *et al.*, 2003), but this trait is being selected against over evolutionary time, although it has not yet been lost. We need to investigate if the host cares for the parasite alates. In this case, parasite workers may not be needed.