



Plate 1: *Myrmecia gulosa* workers build large nest mounds. Numerous large workers rush out of the nest entrance upon slight disturbance.



Plate 2: the aggressive workers do not hesitate to assault human intruders. The sting of a single worker is enough to discourage further disturbance and avoid the dozens of other guards.



Plate 3: collection site: sandstone area in Waterfall, near Sydney, New South Wales, Australia.



Plate 4: chambers are tightly packed in the nest mound and directly under it. They contained most of the brood. Talc has been blown in the chambers to help in following the tunnels during nest excavation.



Plate 5: deeper underground, chambers are further away from each other and the long tunnels connecting them spread out in several directions. The picture shows the surface occupied by the nest, after excavation. The scale is given by the equipment on the right side.



Plate 6: dissection presenting typical ovaries of a) a queen, b) a large worker and c) a small worker. Queens have 22 ± 3 ovarioles per ovary, large and small workers have 7 ± 2 and 4 ± 1 ovarioles per ovary respectively.



Plate 7: in presence of queens, workers only produce trophic eggs. This egg was initially destined to a larva, but is intercepted by a worker.



Plate 8: thoraces of a) a gamergate and b) a queen of *M. pyriformis*.



Plate 9: ergatandromorph of *M. gulosa*. This individual was male on the left side and female on the right. Notice the mandible, wing bud and color pattern of the gaster that are typical of males. Ergatandromorphs were often attacked by their nestmates (bottom right).

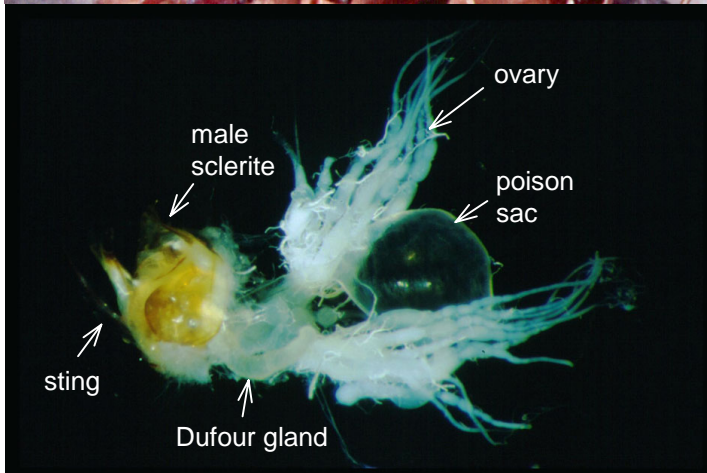


Plate 10: sting apparatus with associated glands and genital apparatus of an ergatandromorph. The individual's internal morphology was more female like: Dufour and poison gland were functional and two ovaries, a sting, as well as a spermatheca were present. Only sclerites of the sting apparatus were male.



Plate 11: a male attempting to mate with a worker in an orphan group of *M. gulosa*. Males were often attacked and found dead a few days later. No successful mating was observed.



Plate 12: a worker (left) showing the typical stretching posture at the approach of the queen (right). This behaviour is induced before actual physical contact takes place.

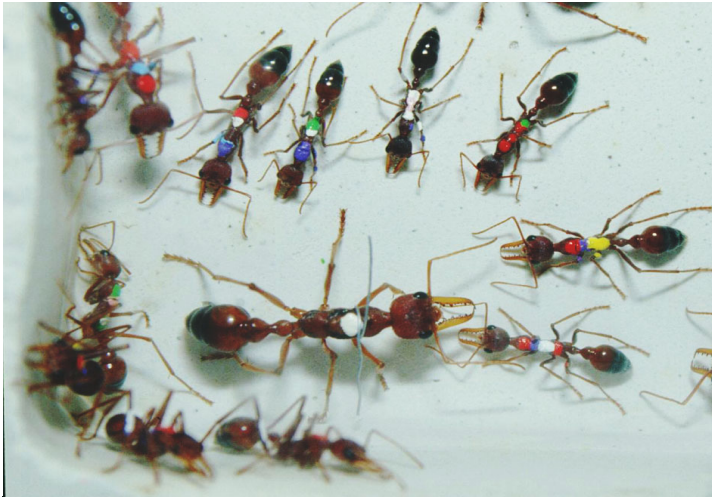


Plate 13: retinue of small workers around a queen of *M. gulosa*

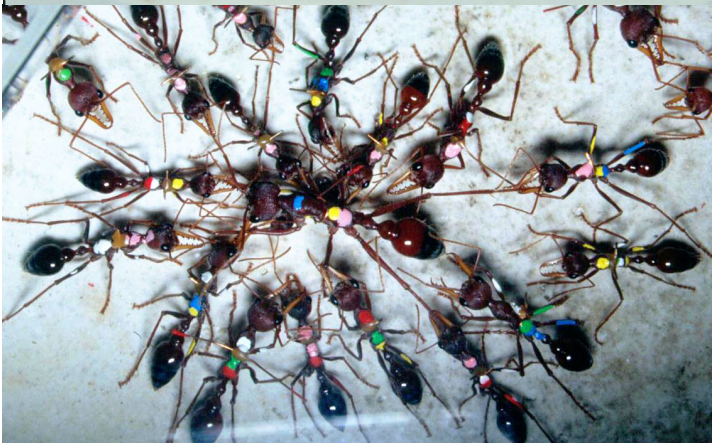


Plate 14: workers immobilising a nestmate that was prevented from establishing physical contact with the queen for several days. Workers that develop their ovaries in the queen's presence are thus policed.