



Digital supplementary material to

SAUVAGET, M., GUÉRINEAU, C., ZIMMER, C., SAVARIT, F. & FÉNÉRON, R. 2025: Morphology, but not morphometry, identifies instars in *Ectatomma tuberculatum* ant. – Myrmecological News 35: 99-109.

The content of this digital supplementary material was subject to the same scientific editorial processing as the article it accompanies. However, the authors are responsible for copyediting and layout.

Tab. S1: Morphometry of immature stages of the ant *Ectatomma tuberculatum*. Measurements are shown for worker (W), gyne (G), and both castes pooled (WG). Data are based from eight colonies. n_{head} =number of larvae measured for head width, n =number of eggs, larvae and cocoons measured for length and width.

| Stage | Caste | n_{head} | Head width (mm) | | n | Length (mm) | | Width (mm) | |
|------------|-------|-------------------|-----------------|-----------|-----|-------------|-------------|------------|-----------|
| | | | Mean±SD | Range | | Mean±SD | Range | Mean±SD | Range |
| Egg | W | --- | ----- | ----- | 16 | 0.99±0.04 | 0.92-1.05 | 0.58±0.04 | 0.53-0.64 |
| Larvae I | W | 16 | 0.36±0.03 | 0.31-0.39 | 16 | 0.99±0.15 | 0.68-1.16 | 0.53±0.07 | 0.39-0.61 |
| Larvae II | W | 105 | 0.41±0.02 | 0.36-0.45 | 107 | 1.36±0.29 | 0.73-1.96 | 0.69±0.10 | 0.46-0.88 |
| Larvae III | W | 162 | 0.51±0.02 | 0.46-0.56 | 163 | 2.47±0.64 | 0.88-3.64 | 1.21±0.21 | 0.49-1.71 |
| Larvae IV | W | 152 | 0.62±0.02 | 0.57-0.68 | 210 | 4.88±1.35 | 2.43-7.80 | 2.09±0.38 | 1.43-3.10 |
| Cocoon | W | --- | ----- | ----- | 40 | 8.79±0.51 | 7.89-9.96 | 3.40±0.22 | 2.98-3.86 |
| Egg | WG | --- | ----- | ----- | 15 | 0.99±0.03 | 0.94-1.05 | 0.56±0.01 | 0.53-0.58 |
| Larvae I | WG | 15 | 0.37±0.02 | 0.33-0.39 | 15 | 1.01±0.06 | 0.87-1.10 | 0.57±0.05 | 0.42-0.65 |
| Larvae II | WG | 110 | 0.42±0.01 | 0.38-0.44 | 110 | 1.45±0.31 | 0.83-2.05 | 0.73±0.09 | 0.56-0.88 |
| Larvae III | WG | 145 | 0.53±0.01 | 0.48-0.56 | 146 | 2.73±0.70 | 1.26-3.75 | 1.27±0.21 | 0.88-1.87 |
| Larvae IV | WG | 184 | 0.64±0.02 | 0.57-0.68 | 186 | 5.57±1.33 | 2.85-7.99 | 2.32±0.47 | 1.58-3.69 |
| Larvae IV | G | 47 | 0.63±0.01 | 0.58-0.65 | 47 | 9.51±0.83 | 8.07-10.86 | 3.87±0.32 | 3.20-4.59 |
| Cocoon | G | --- | ----- | ----- | 37 | 12.25±0.38 | 11.47-13.16 | 4.85±0.25 | 4.27-5.25 |

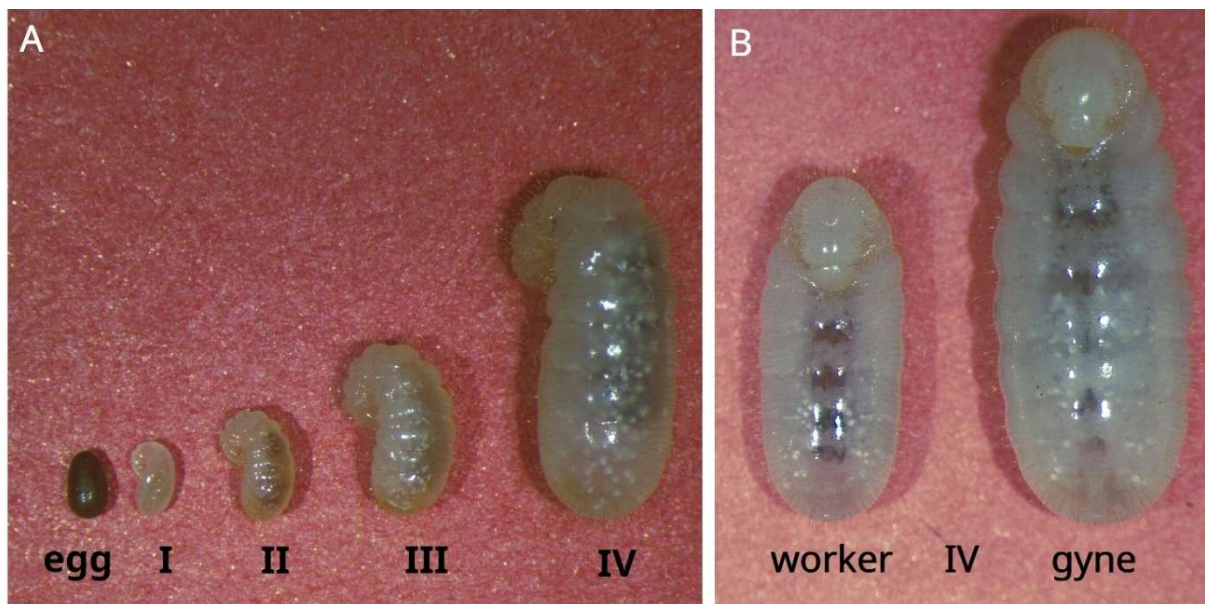


Fig. S1: Immature stages of the ant *Ectatomma tuberculatum*. (A) Egg and worker larvae of the four instars on side view. Newly-laid eggs are white and become black after oviposition (VILLET & FÉNERON 1998). (B) Worker larvae (on the left) and gyne larvae (on the right) on ventral view. Both larvae are at the fourth instar just before pupation.

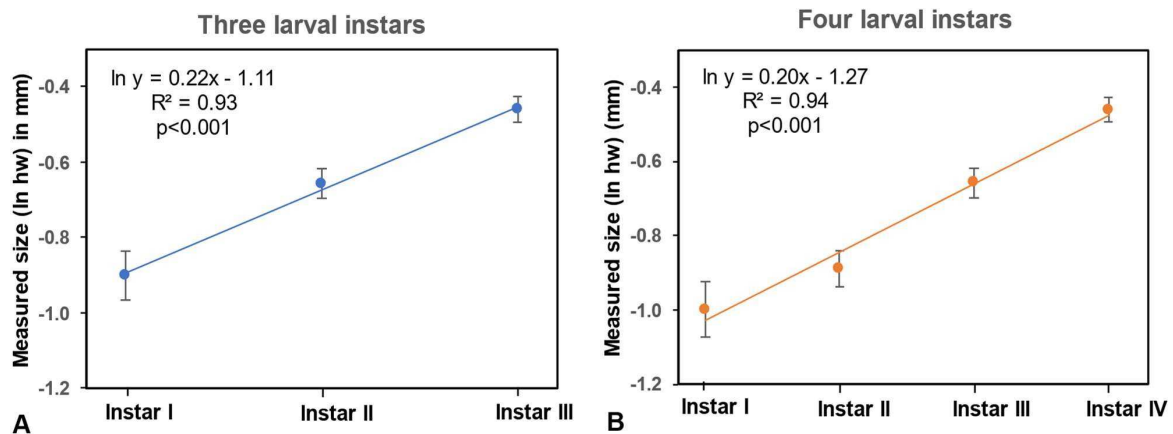


Fig. S2: Relationship between predicted and measured head widths when considering (A) three instars and (B) four instars, respectively. Head widths are log-transformed. Following Dyar's rule, points are expected to lie on a straight line with a ratio of 1:1. Measured head widths are mean \pm SD calculated from a total of 936 larvae (instar I: n=31; instar II: n=215; instar III: n=307; instar IV: n=383 larvae).

Reference

VILLET, M.H. & FÉNERON, R. 1998: Maternal investment in egg production in ponerine ants (Hymenoptera: Formicidae). – African Entomology 6: 151-156.