



Digital supplementary material to

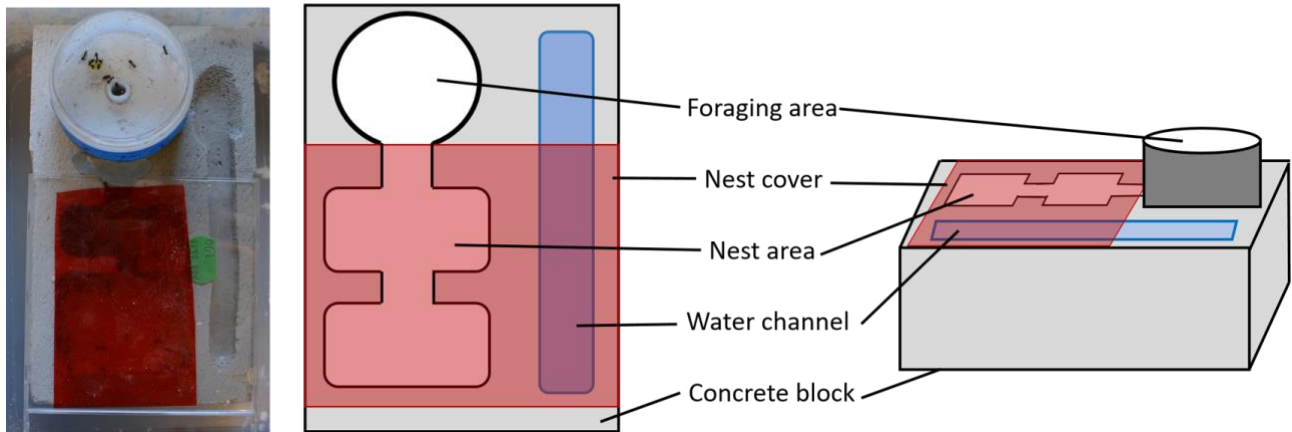
FUCHS, S., SUNDSTRÖM, L., BOS, N., STUCKI, D. & FREITAK, D. 2018: Induced immune responses in *Formica fusca* (Hymenoptera: Formicidae). – Myrmecological News 28: 53-66.

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.

1 **Supplementary material:**

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Nest design



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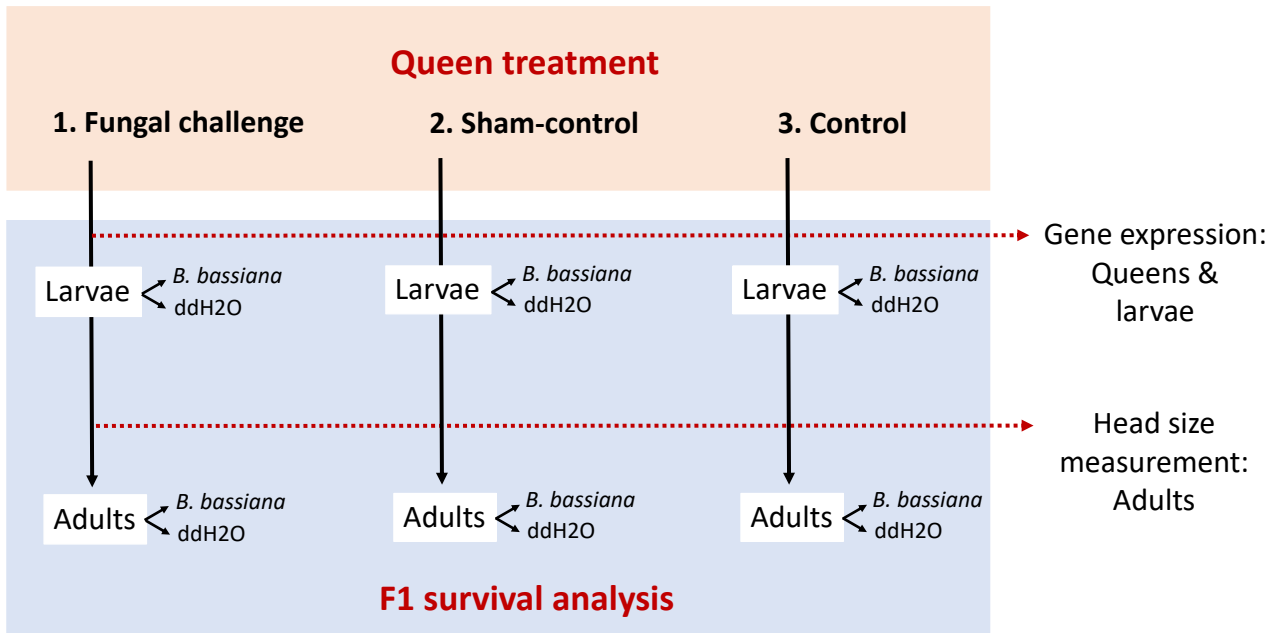
5 **Figure S1:** The design of the ant nest. The nests were cut out of concrete blocks (23cm x 13cm x
6 6cm). The nest area was carved as 2cm deep holes with a size of 8cm x 6cm and covered with
7 plastic lids and transparent red plastic foil in order to prevent ants from escaping. A round pot (\varnothing 7
8 cm, H 5 cm) was used as a foraging area and connected to the nest area via a tunnel. A 2cm deep
9 water channel (20cm x 2cm) was carved to the side of the nest to keep the humidity.

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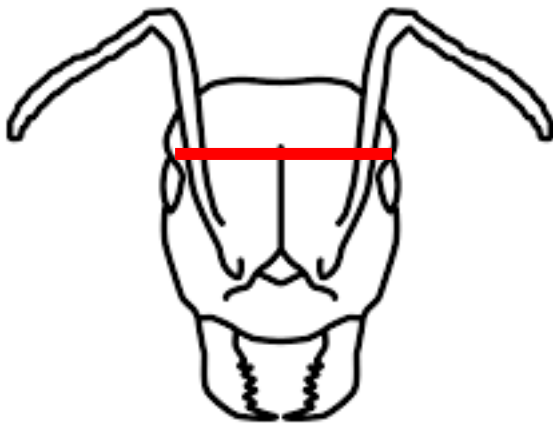
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15 **Figure S2.** Experimental set up. Three experimental nests were established per colony and assigned
 16 to a different treatment: 1) Fungal injection, queens injected with dead fungal conidia, 2) Sham-
 17 control, queens injected with phosphate buffered saline (PBS) solution, and 3) control, queens left
 18 untreated. To detect the effect of maternal priming on the resistance against *B. bassiana*, offspring
 19 survival analysis was conducted at both the larval, and the adult stages, with distilled water (ddH₂O)
 20 as the control treatment. In addition, we took gene expression samples from the queens and larvae,
 21 and measured the head width of adult offspring.

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25 **Figure S3.** Head width. The maximum width of the head capsule (red line) was measured on adult
 26 offspring, using the software package ImageJ 1.49. The area of the eyes that came over the actual
 27 head capsule was not included in the measurement.

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