

**Figure legends**

*Figure S1 Preference scores, task i*

Preference scores of the reciprocally trained groups of larvae from which the associative Performance Indices presented in Figs 2A, B were derived. Preference scores in (A) correspond to the Performance Indices from Fig. 2A. Reciprocal groups received either paired or unpaired presentation of odour and reward (e.g. for the first and second plot: 1O+ // EM training, or 1O // EM+ training; testing was then carried out as 1O1O – EM) (recall EM denotes an empty odour container). Companion groups of larvae were trained with an element and tested with its double quantity, or vice versa (e.g. for the first and third plot: train 1O+ // EM, test 1O1O -- EM, or train 1O1O+ // EM, test 1O -- EM). Preference scores in (B) likewise correspond to the Performance Indices from Fig. 2B.

*Figure S2 Preference scores, task ii*

Preference scores of the reciprocally trained groups of larvae underlying the associative Performance Indices presented in Fig. 3.

Figure S1A

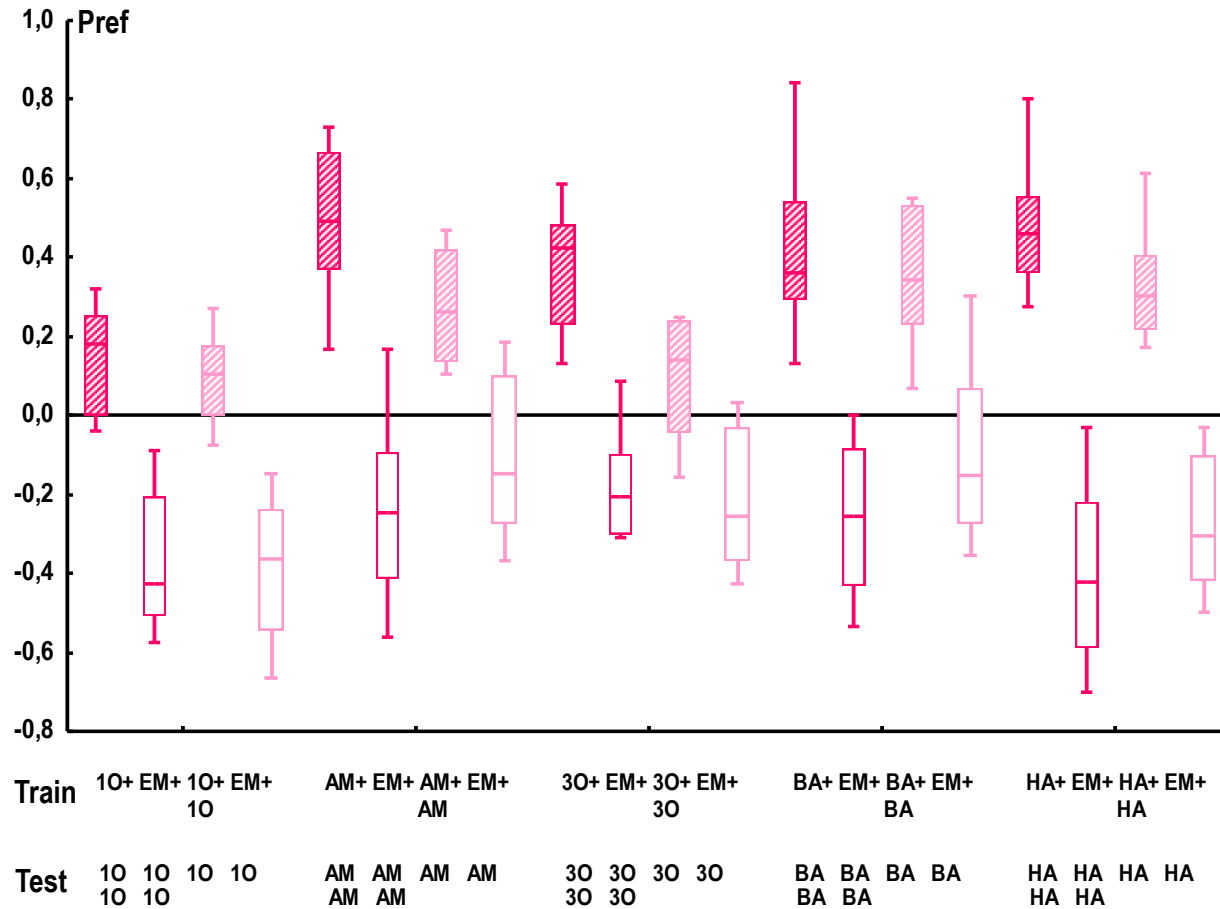
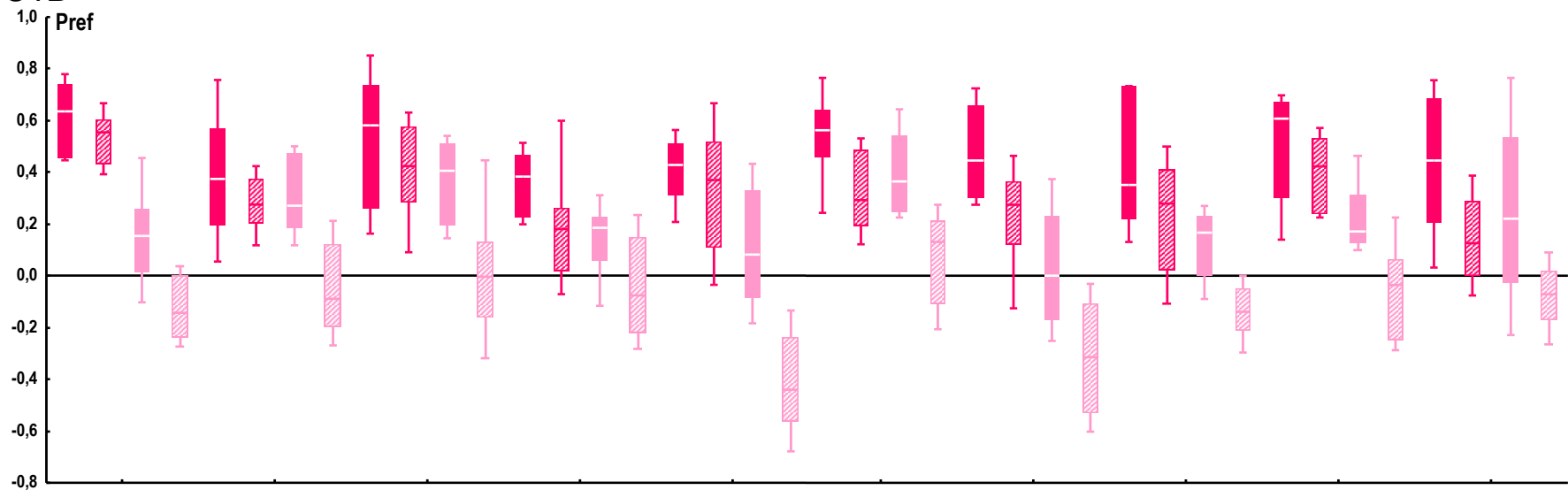


Figure S1B



ctd.

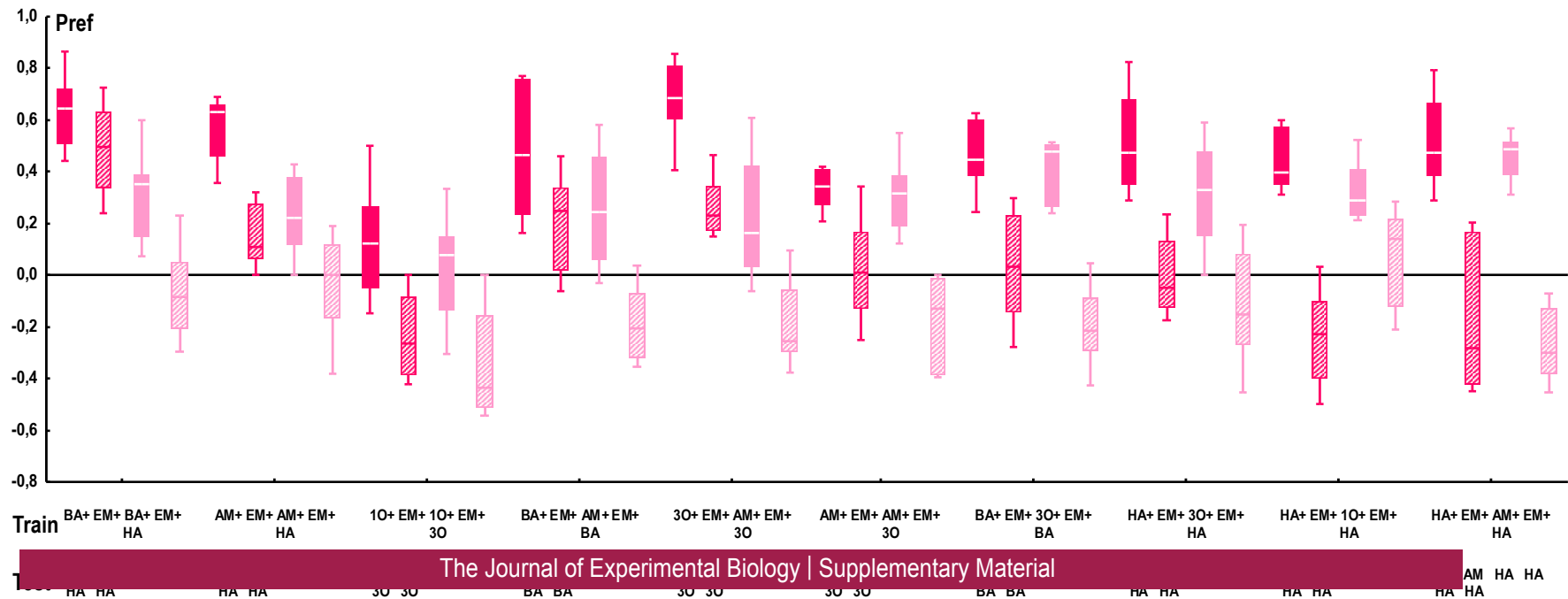


Figure S2

