Supplementary Materials

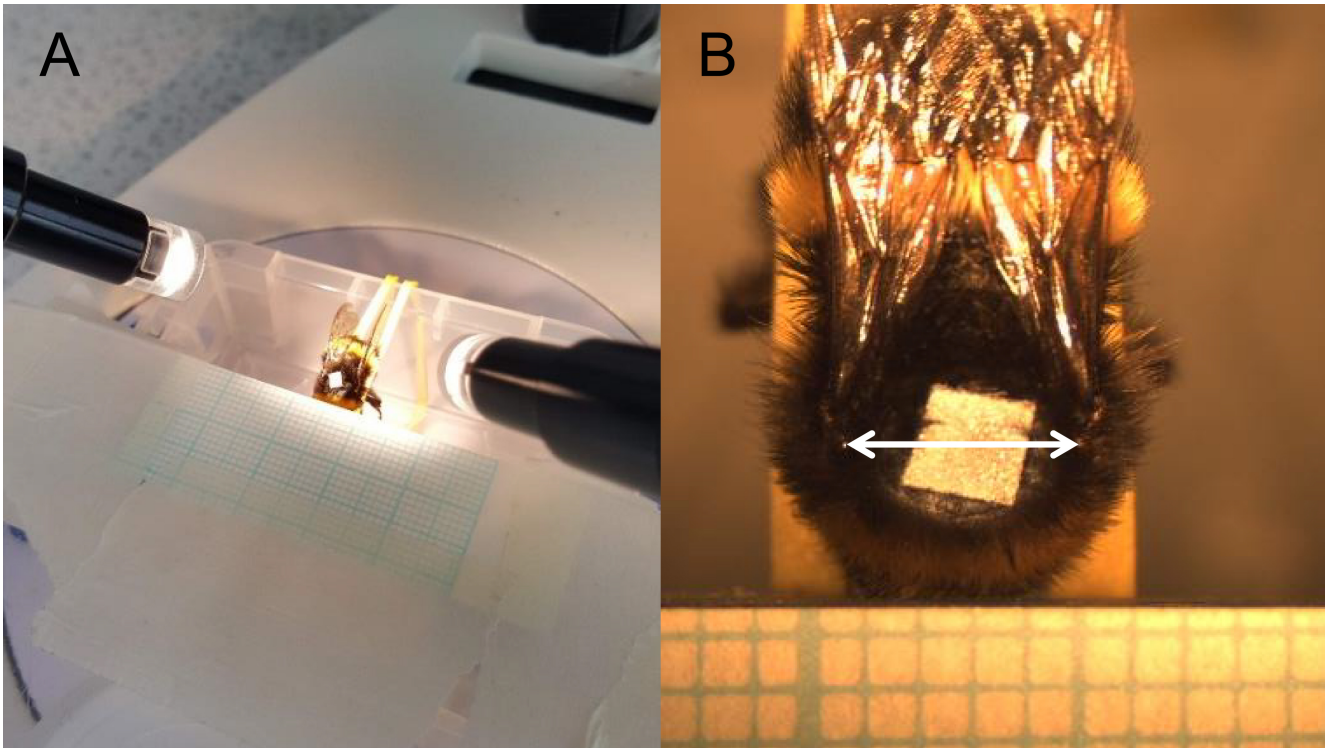

Figure S1: Procedure for assessing bee size. Euthanised bees were held level with graph paper using rubber bands (left), such that a clear image of the intertegular distance (right, white arrow) could be captured by the camera-mounted microscope. The resulting images were then analysed using Image J., using the graph paper to assess the intertegular distance in mm.

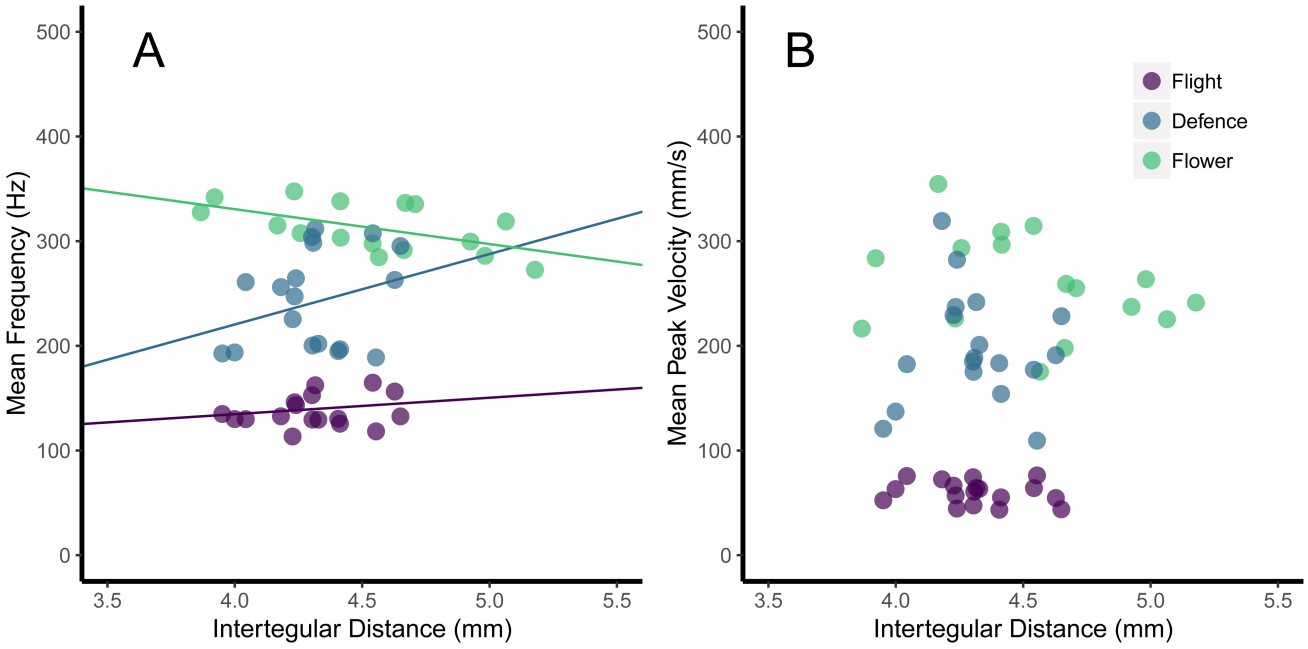

Figure S2: **The effect of bee size (in terms of intertegular distance) and behavioural context (flower buzzing, defence and flight) on the frequency (A) and peak velocity (B) of thoracic vibrations.** For frequency (A), There was a significant interaction between bee size and behavioural context, with larger bees producing higher frequency defence buzzes, slightly higher frequency flight vibrations, but lower frequency flower buzzes. There was no equivalent interaction for peak velocity (B), with all types of buzzes showing a slight decrease in velocity as bee size increased, although this was not significant (Table 1).