Figure S1. An optical microscope image of a water droplet resting on the wing membrane of a cicada revealing an apparent contact angle (CA) of *ca* 150° with the surface.

Figure S2. Top (a) and side (b) view, SEM images of a PDMS replica of the black cicada (*Gudanga* sp.).

Figure S3. Top and side SEM images of the coloured regions found on the cicada wings of *Tosena sybilla* ((a) and (b), respectively) and *Gaeana cheni* ((c) and (d), respectively).

Figure S4. A dehydrated (a) and 'fresh' (b) forewing of the bladder cicada, *Cystosoma schmeltzi*.

Figure S5. SEM images of the finer surface features of the three pollen surfaces used. (a) *Pimelea linifolia* ssp., (b) *Gravillea* 'Red Sunset' and (c) *Acacia fimbriata*.

Figure S6. AFM images of a silica bead, revealing the finer surface structures. (a) A topographical image, (b) a 3-d representation, and (c) an artificially shaded and leveled 3-d image showing the fine surface features. The imaging was performed with the bead attached to a lever and scanned over a calibration grid, ie reverse imaging.

Figure S7. A single representative f-d curve showing multiple 'jumps' on the retract curve (red) obtained on the moth wing (*Prasinocyma albicosta*). The approach curve (blue) shows a distinct snap-on feature (and a general downward trend) where the scales are presumably statically attracted to the surface of the Si bead.

Figure S8. The overlapping scale arrangement of the *Prasinocyma albicosta* moth wing.

Figure S9. A pollen grain found on the wing membrane of the hydrophilic flower wasp (*Scolia soror*).

Movie S1. A water droplet interacting with the surface of a flower wasp wing, revealing its hydrophilic nature. The wing is fixed at one end.

Movie S2. A water droplet interacting with the surface of a flower wasp wing which is fixed flat onto a surface.