**Supporting information 5**

**Testing hairiness as a predicitor of SVD for a different flower type**

To test if our method worked for another flower type, we measured SVD for kiwifruit *Actinidia deliciosa*, which is dioecious and has an open pollinated brush-shaped flower. SVD measurements (*n* = 8-12 per species) for *A*. *deliciosa* were taken for insect movements from staminate to pistillate flowers, using a method that differed from *B. rapa* as described below. Individual pistillate buds were enclosed within paper bags 2-3 days prior to opening, and were later used as test flowers to evaluate pollen deposition by flowering visiting species. Each bag was secured using a wire tie (coated in plastic) that was gently twisted to exclude pollinators from visiting the opening flowers. Following flower opening, the bag was removed and the flower pedicel abscised where it joined the vine. The test flower was then carefully positioned using forceps to hold the pedicel 1-2 cm from a staminate flower containing a foraging insect, avoiding any contacting between flowers. If the test flower was visited by an insect, we allowed it to forage with minimal disturbance until it moved from the flower on its own accord. The first stigma touched by the foraging insect was then lightly marked near its base using a fine black felt pen. We then placed the marked stigma onto a slide and applied a drop of Alexander stain (Dafni 2007). Alexander stain was used due to its effectiveness to stain staminate and pistillate pollen differently (pistillate pollen - green-blue, staminate pollen - dark red) (Goodwin & Perry 1992). We measured hairiness of insect pollinators (*n* = 8-10) using the same methods and analyses as described in the methods section of the main paper.

The best model for predicting SVD for *A*. *deliciosa* included the face and thorax ventral regions as predictors (adjusted R2 = 0.91) (Table S1; Figure S1). However, the subsequent top four models were within two AICC points of the best model and cannot be discounted as the potential top model. The face, thorax ventral, head ventral and abdomen ventral regions were retained in four of the five top models, which indicates that hairiness of the face and ventral regions is important for pollen deposition for *A. deliciosa*. The stigmas and anthers of *A*. *deliciosa* flowers form brush shaped structures, and therefore are most likely to contact the face and ventral regions of pollinators. This finding is important as it shows that our method works for other plant species with different flower morphologies.

**References**

Dafni, A. (2007) *Pollination ecology. A practical approach*. Oxford University Press, New York.

Goodwin, R.M. & Perry, J.H. (1992) Use of pollen traps to investigate the foraging behaviour of honey bee colonies in kiwifruit orchards. *New Zealand Journal of Crop and Horticultural Science,* **20,** 23-26.

**Table S1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Response variable** | **Model** | **Adj R2** | **AICc** | **Δ*i*** | ***wi*** | **acc *wi*** |
| SVD | **Face + Thorax ventral** | **0.91** | **74.18** | **0.00** | **0.15** | **0.15** |
| Abdomen dorsal | 0.81 | 74.21 | 0.03 | 0.15 | 0.30 |
| Face | 0.80 | 74.35 | 0.17 | 0.14 | 0.45 |
| Head ventral | 0.79 | 74.84 | 0.66 | 0.11 | 0.56 |
| Abdomen ventral | 0.78 | 75.08 | 0.90 | 0.10 | 0.65 |

Best regression models examining the effect of insect body region entropy on single visit pollen deposition (SVD) and pollen load for *Actinidia deliciosa*. Models are presented in ascending order based on AICC values. Δ*i* is the difference in the AICC value of each model compared with the AICC value for the top model. *wi* is the Akaike weight for each model and acc *wi* is the cumulative Akaike weight. Top models for the response variable (SVD) is highlighted in bold.

**Figure S1**

Relationships between mean entropy for each body region and mean single visit pollen deposition (SVD) on *Actinidia deliciosa* for 7 different insect pollinator species. Black lines are regressions for simple linear models.