

Figure S1. (a) Example of a new cup, (b) the used stencil for standardized trap construction and (c) the prepared trap.

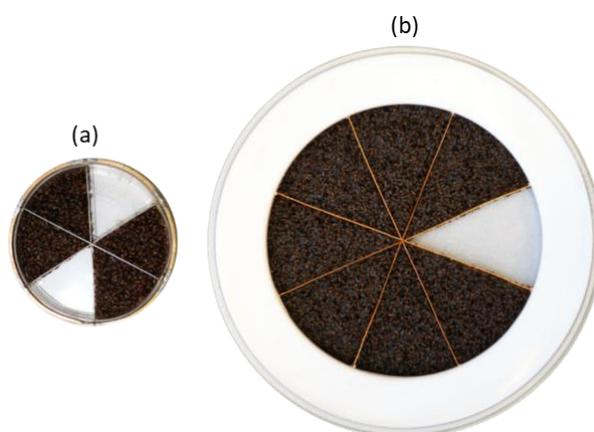


Figure S2. Partial counting of large captures (> 5 ml): (a) petri dish (Ø 6 cm) split into six equal sections for catches < 15 ml; (b) petri dish (Ø 14 cm) split into eight equal sections for catches >15 ml. The sections were made with wires attached to a plastic ring insert placed inside the petri dish.

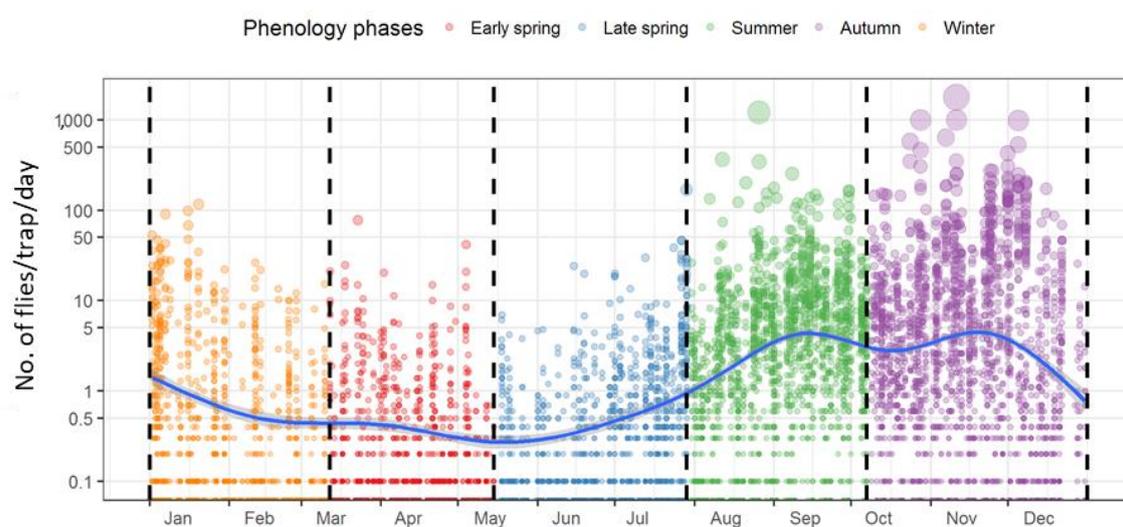


Figure S3. Captures per day from each trap over the monitoring period (2011 – 2018) with a smoothing curve (blue), based on which the five seasonal categories were created. The bubble size (small to big) is proportional to the capture size. Note: the y-axis is log-scaled.

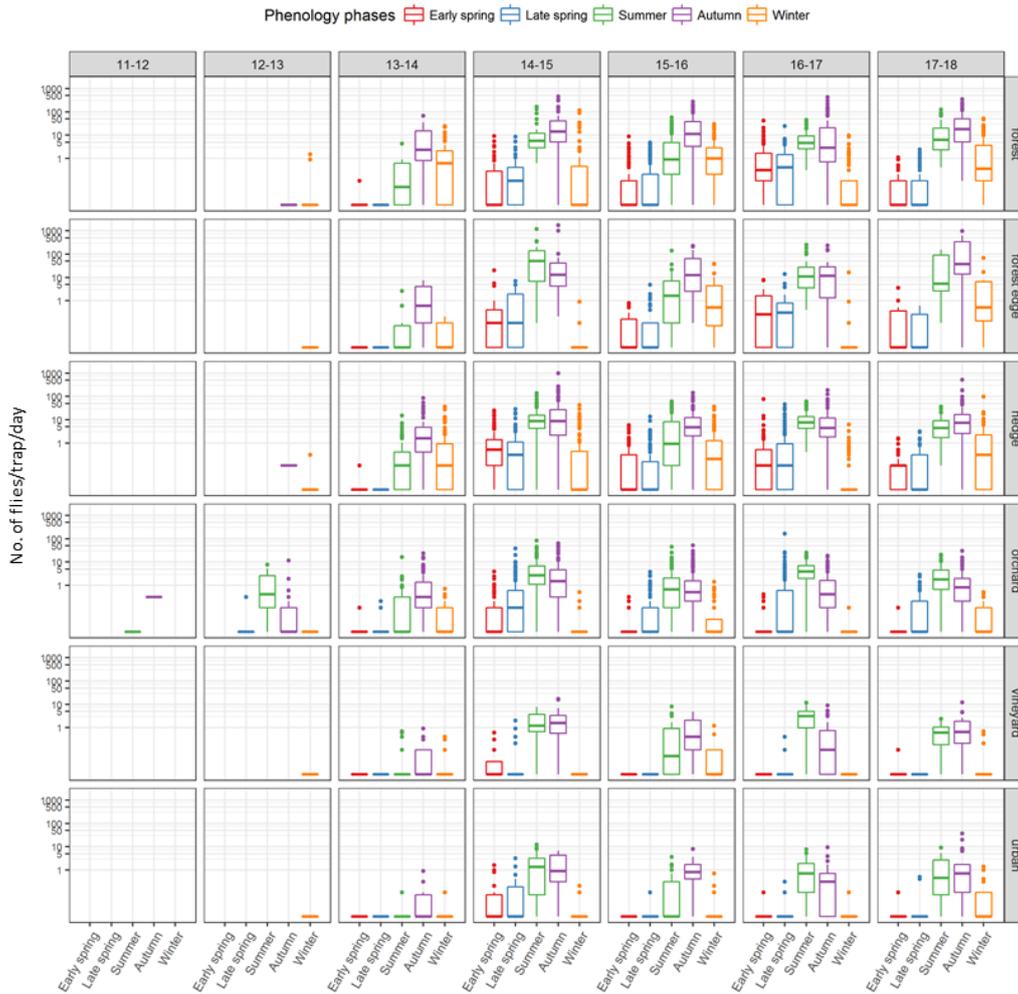


Figure S4. Box plots of captures/trap/day in each *D. suzukii* - year, grouped by sampled habitat types and *D. suzukii* phenology. The box represents the inter-quartile range (IQR) and the band inside, the median. The whiskers represent data that are within 1.5 IQR below or above the 1st and the 3rd quartiles. The outliers are represented by dots beyond the whiskers. Note.: Y-axis is log-scaled (captures/day/trap + 0.01).

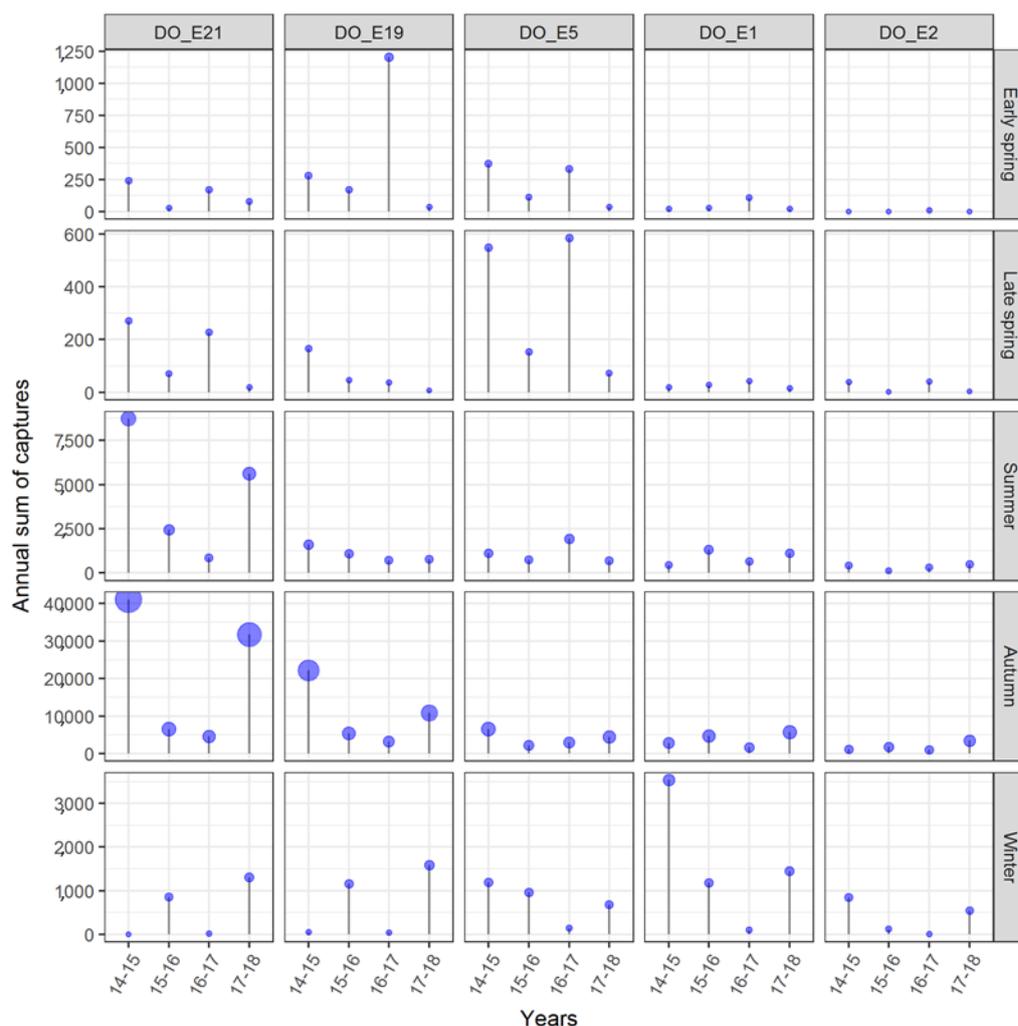


Figure S5. Annual sum of *D. sukuzii* captures in the *D. sukuzii*-years from 2014-2015 until 2017-2018 grouped by *D. sukuzii*-phenology and site/trap. The size of the blue bubble is proportional to the annual sum; Note: y-axis scale varies between rows.

Table S1. Distances of select traps from the forest border, orchards/vineyards and urban areas, coordinates and altitude. The five traps shown here are located in and around the Forest of Odes and captured significantly higher individuals than the rest of the traps from this study.

| Trap name | Trap location | Distance to forest border (m) | Distance to orchard/vineyard (m) | Distance to residential area (m) | Coordinates | Altitude asl (m) |
|-----------|------------------------|-------------------------------|----------------------------------|----------------------------------|------------------------------|------------------|
| DO_E1 | On the forest border | 0 | 300 | 110 | E8.68300703 N49.44914396 | 236 |
| DO_E2 | In the forest | 700 | 900 | 165 | E8.69164199 N49.45003001 | 285 |
| DO_E5 | Near the forest border | 150 | 1 | 390 | E8.67215700 N49.46331901 | 167 |
| DO_E19 | On the forest border | 17 | 5 | 170 | E8.67126801 N9.47380100 | 237 |
| DO_E21 | On the forest border | 13 | 10 | 100 | E 8.67096903 N49.47397602 | 231 |

