**Supplementary materials:**

**The role of nocturnal and diurnal pollinators in the commercial production of Dragon Fruit crops in Costa Rica**

Jordán Villegas-Murillo & Mauricio Fernández Otárola

\*Correspondence: [mauricio.fernandez@ucr.ac.cr](mailto:mauricio.fernandez@ucr.ac.cr)

Diagrama

Descripción generada automáticamente

**Fig. S1.** Stigmatic receptivity according to the moment of the night during the massive flowering events (n=315 for 19:00 h, 20:00 h, and 4:00 h; n=290 for midnight). The boxes represent the interquartile range, the horizontal line of the box represents the median, and the whiskers represent the 98% distribution of the data. The pink box represents the interval where pollen is available for pollination.

**Table S1.** Spatiotemporal context of the sampling nights. The number of sampled nights is indicated. Times are in CST.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Sampling** | | | | | |
| **Plantation** | **2019** | |  | **2020** | | |
|  | **June** | **September** |  | **May** | **July** | **August** |
| Curubandé | 2 | - |  | - | - | - |
| Atenas | - | 1 |  | 1 | 2 | - |
| El Salto | - | - |  | - | - | 2 |
| **Sunset\*** | 18:02 | 17:31 |  | 17:50 | 18:01 | 18:00 |
| **Sunrise\*** | 5:18 | 5:26 |  | 5:17 | 5:27 | 5:32 |

**Table S2.** The specimens collected and identified as floral visitors of *H. costaricensis*. Daytime (D), evening (E), nighttime (N), and early morning (M).

\* *M. rustica* probably*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Order** | **Family** | **Taxon** | **Site** | **Period** |
| Coleoptera | Cantharidae | sp.1 | Atenas | D |
|  |  | sp.2 | Atenas | D |
|  | Chrysomelidae | Eumolpinae sp.1 | Curubandé | D |
|  |  | Eumolpinae sp.2 | Atenas | D |
|  |  | Galerucinae sp.1 | El Salto | E |
|  |  | Galerucinae sp.2 | Atenas | E |
|  | Nitidulidae | sp.1 | Curubandé | N |
|  |  | sp.2 | Atenas | N |
|  |  | sp.3 | Atenas | N |
|  |  | sp.4 | Atenas | N |
|  | Scarabaeidae | *Cyclocephala* sp. | Curubandé | N |
|  |  | Rutelinae sp.1 | Atenas | E,N |
|  |  | Rutelinae sp.2 | Atenas | E,N |
|  |  | Scarabaeinae sp.1 | Curubandé | E,N |
|  |  | Scarabaeinae sp.2 | El Salto | N |
| Diptera | Muscidae | sp.1 | Atenas | E |
|  | Sarcophagidae | sp.1 | Atenas | E |
| Hemiptera | Cixiidae | sp.1 | Atenas | N |
| Hymenoptera | Apidae | *Apis mellifera* | All sites | M |
|  |  | *Cephalotrigona zexmeniae* | Atenas | E |
|  |  | *Melipona beecheii* | Curubandé | M |
|  |  | *Partamona orizabaensis* | Atenas | M |
|  |  | *Trigona corvina* | Atenas | E |
|  |  | *Trigona silvestriana* | Atenas | E |
|  |  | *Xylocopa fimbriata* | Curubandé | N,M |
|  |  | *Xylocopa c.f. gualanensis* | Curubandé | N,M |
|  | Halictidae | *Agapostemon texanus* | Curubandé | N |
|  |  | *Augochlora sidaefoliae* | Curubandé | N |
|  |  | *Caenaugochlora costaricensis* | Curubandé | N |
|  |  | *Megalopta* *amoena* | Curubandé, El Salto | N |
|  | Ichneumonidae | *Ophion* sp. | Atenas | N |
|  | Vespidae | *Agelaia centralis* | Atenas | M |
| Lepidoptera | Sphingidae | *Manduca rustica* | Curubandé, El Salto\* | N |