# Supplementary material 3: The effect of Mature Plant Resistance in Sugar Beet (*Beta vulgaris spp vulgaris*) on survival, fecundity and behaviour of green peach aphids (*Myzus persicae*)

An overview of the feeding characteristics of *Myzus persicae* aphids on young and old sugar beet leaves measured during EPG analysis.

Table S1: Overview of the feeding characteristics measured during the EPG analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| variable | Old leaf | Young leaf |  |
| Total duration non probing | 45.6 ± 7.3 | 54.2 ± 5.5 | ns |
| Total duration epidermis/mesophyll | 152.2 ± 15.1 | 160.0 ± 12.6 | ns |
| Mean duration epidermis/mesophyll | 6.0 ± 1.0 | 6.6 ± 0.6 | \* |
| Number of ultra short probes <0.5 min | 5.2 ± 1.0 | 9.9 ± 1.3 | \*\* |
| Number of short probes <3 min | 19.2 ± 2.0 | 17.0 ± 1.7 | ns |
| Total duration difficulties | 85.0 ± 17.2 | 101.2 ± 16.5 | ns |
| Number of difficulties | 2.4 ± 0.6 | 2.0 ± 0.4 | ns |
| Latency to 1st salivation | 164.2 ± 22.0 | 212.4 ± 20.2 | \* |
| Total duration salivation | 14.9 ± 3.3 | 19.3 ± 5.1 | ns |
| Number of salivations | 2.9 ± 0.4 | 2.8 ± 0.4 | ns |
| Mean duration salivation | 4.5 ± 1.1 | 6.2 ± 2.0 | ns |
| % Salivation in phloem phase | 6.1 ± 1.3 | 9.2 ± 2.3 | ns |
| Latency to 1st phloem feeding | 164.8 ± 22.1 | 213.1 ± 20.2 | \* |
| Latency to 1st sustained phloem feeding | 154.7 ± 20.1 | 213.7 ± 20.1 | \* |
| Total duration phloem feeding | 221.0 ± 19.5 | 184.2 ± 14.4 | ns |
| Total duration sustained feeding | 226.6 ± 18.7 | 181.7 ± 14.6 | ns |
| Number of phloem feedings | 2.4 ± 0.3 | 2.3 ± 0.3 | ns |
| Number of sustained feedings | 1.9 ± 0.2 | 1.8 ± 0.2 | ns |
| Mean duration phloem feeding | 119.2 ± 18.3 | 93.9 ± 10.8 | ns |
| Mean duration sustained feeding | 226.6 ± 18.7 | 181.7 ± 14.6 | ns |
| Total duration xylem ingestion | 36.6 ± 4.7 | 44.1 ± 15.8 | ns |
| Number of xylem ingestions | 0.8 ± 0.2 | 0.8 ± 0.4 | ns |
| Duration times are shown in minutes. Mean ± SE. Mann-Whitney U pairwise comparisons were performed between young and old leaves, separately (\*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.0001, and ns = not significant).  “Difficulties” involve penetration difficulties. “Sustained” involves events > 10 min. Latency was measured from the start of the recording. 29 and 34 biological replicates were recorded for old and young leaves, respectively. | | |  |