#### Statistical tables with Sarmento et al.

# A herbivorous mite down-regulates plant defence and produces web to exclude competitors

All analyses were done in R (v. 2.12.0) [1]. Notice that we present the full models here in order to give magnitude of the effects ("Value" in the tables below). The statistics presented in the main text were obtained through comparing models with and without the respective factor with the "anova" function in R [2].

Ad Figure 1a: Linear mixed effects model (LME) of oviposition by *T. urticae* on clean leaf discs and leaf discs damaged by *T. evansi*, either with or without web produced by *T. evansi*.

\* Here and in the tables to follow, the first value in this column is the size of the first fixed effect, subsequent values are relative to this first value (the value of "Clean" is 7.38, that of "Damaged" is 7.38 + 11.04, that of "Damaged + web" is 7.38 + 4.78, see Figure 1a).

Ad Figure 1b: LME of oviposition by *T. evansi* on clean leaf discs and leaf discs damaged by *T. urticae*, either with or without web produced by *T. urticae*.

Ad Figure 2a: LME of numbers of *T. urticae* on plants with or without *T. evansi* (Treatment). Notice that we do not report the significant effect of Time and the significant interaction of Time and Treatment in the manuscript for brevity.

# Ad Figure 2b: LME of numbers of *T. evansi* on plants with or without *T. urticae* (Treatment).

Linear mixed-effects model fit by maximum likelihood Random effect (Replicate): (Intercept) Residual StdDev: 2.95e-05 0.709 Fixed effects: Value S.E. DF t value 0.21 0.31 0.01 with T. urticae 1.53 79 7.13 0.000 w.o. T. urticae 0.37 6 1.21 0.269 79 19.73 Time 0.21 0.000 0.03 79 0.01

0.00

Treatment:Time

Ad Figure 3: Generalized Linear Model (GLM with binomial error distribution) of the percentage of *T*. urticae that reached the leaf surface covered with web of T. evansi or without web, and the percentage of *T. urticae* that was feeding.

0.993

On the leaf surface:									
		Value*	S.E.	z value p					
No web	(1.5h)	-0.23	0.21	-1.08 0.282					
Web	(1.5h)	-0.65	0.31	-2.09 0.037					
No web	(17.5h)	0.58	0.24	2.46 0.014					
Web	(17.5h)	-1.02	0.33	-3.12 0.002					
Feeding	g:								
	-	Value*	S.E.	z value p					
No web		-0.99	0.25	-3.91 9.17e-05					
Web		-1.40	0.47	-2.98 0.002					

<sup>\*</sup> Notice that the estimate is on a transformed, logit, scale. For backtransformation to proportion  $p = 1/(1+1/e^x)$ , with x being the value.

Ad Figure 4a: LME of oviposition by T. evansi on leaf discs damaged by T. evansi, by T. urticae, or clean.

Linear mixed-effects model fit by maximum likelihood Random effect (Replicate): (Intercept) Residual StdDev: 0.967 1.513

### Fixed effects:

		Value	S.E.	DF	t value	р
Clean		11.37	0.73	12	15.51	0.000
Damage $T$ .	evansi	7.00	0.87	12	8.01	0.000
Damage $T$ .	urticae	-5.26	0.87	12	-6.02	0.000

Ad Figure 4b: LME of web production by T. evansi on leaf discs damaged by T. evansi, by T. urticae, or clean.

Random effect (Replicate): (Intercept) Residual StdDev: 2.95e-06 0.088

### Fixed effects:

	Value*	S.E.	DF	t value	p
Clean	0.25	0.04	12	6.85	0.000
Damage <i>T. evansi</i>	-0.11	0.05	12	-2.19	0.049
Damage T. urticae	0.19	0.05	1	3.73	0.003

\* Value is given as proportion, data in Figure 4b are percentages.

Ad Figure 5a and b: LME of oviposition by *T. evansi* when exposed to distant cues of leaves with *T. urticae* or with *T. evansi*, or exposed to clean leaves.

```
Linear mixed-effects model fit by maximum likelihood
Random effect (Replicate):
          (Intercept) Residual
StdDev: 6.991
                         4.184
Fixed effects:
                        Value S.E. DF t value p
24.31 1.74 22 13.99 0.000
0.28 1.26 22 0.22 0.826
                       24.31
Clean
T. urticae
Random effect (Replicate):
     (Intercept) Residual
StdDev: 6.462
                           2.599
Fixed effects:

    Value
    S.E.
    DF t value
    p

    Clean
    16.68
    2.10
    11
    7.94
    0.000

    T. evansi
    -0.08
    1.11
    11
    -0.07
    0.942
```

Ad Figure 5c and d: LME of web production by *T. evansi* when exposed to distant cues of leaves with *T. urticae* or with *T. evansi*, or exposed to clean leaves.

```
Linear mixed-effects model fit by maximum likelihood
Random effect (Replicate):
       (Intercept) Residual
StdDev:
            0.061
                        0.032
Fixed effects:
                   Value* S.E. DF t value p
0.13 0.01 22 8.78 0.000
0.02 0.01 22 2.31 0.031
Clean
T. urticae
Random effect (Replicate):
        (Intercept) Residual
StdDev:
           0.088
                         0.062
Fixed effects:
                    Value* S.E. DF t value p
0.37 0.03 11 11.27 0.000
-0.01 0.03 11 -0.37 0.715
Clean
T. evansi
```

## References

- 1. R Development Core Team (2010) R: A language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing.
- 2. Crawley MJ (2007) The R Book. Chichester, England: John Wiley & Sons Ltd. 942 p.

<sup>\*</sup> Value is given as proportion, data in Figure 5c,d are percentages.