

Supplementary Materials

Supp. Table 1. Biweekly averages of environmental factors: temperature, windspeed and rainfall, recorded in Florida counties where hibiscus mealybug survey sites were located.

Counties	FAWN ^a Station	Period	Temperature at 2 m (°C)	Rainfall (cm)	Windspeed at 10 m (Kmh ⁻¹)	Relative Humidity (%)
Polk	Lake Alfred	14-Feb-21	18.13	0.87	5.72	78.00
Polk	Lake Alfred	28-Feb-21	20.56	0.19	5.72	75.50
Polk	Lake Alfred	15-Mar-21	19.32	0.03	6.36	70.93
Polk	Lake Alfred	31-Mar-21	22.17	0.00	5.30	75.19
Polk	Lake Alfred	15-Apr-21	20.74	0.43	5.13	66.60
Polk	Lake Alfred	30-Apr-21	23.82	0.34	6.18	75.27
Polk	Lake Alfred	15-May-21	25.92	0.00	5.30	69.13
Polk	Lake Alfred	31-May-21	25.06	0.00	7.12	67.13
Polk	Lake Alfred	15-Jun-21	26.29	1.08	4.62	82.73
Polk	Lake Alfred	30-Jun-21	26.29	1.08	4.62	82.73
Polk	Lake Alfred	15-Jul-21	26.18	0.63	4.41	85.40
Polk	Lake Alfred	31-Jul-21	27.76	0.27	3.98	80.81

Polk	Lake Alfred	15-Aug-21	27.09	0.44	4.25	83.80
Polk	Lake Alfred	30-Aug-21	28.02	0.27	4.49	80.00
Polk	Lake Alfred	15-Sep-21	26.36	0.23	4.30	84.33
Polk	Lake Alfred	30-Sep-21	25.82	0.46	4.21	80.00
Polk	Lake Alfred	15-Oct-21	25.76	0.03	4.65	78.60
Polk	Lake Alfred	30-Oct-21	23.04	0.22	5.29	77.88
Polk	Lake Alfred	15-Nov-21	18.71	0.50	5.53	82.20
Polk	Lake Alfred	30-Nov-21	17.42	0.05	5.50	78.47
Polk	Lake Alfred	15-Dec-21	19.88	0.00	3.79	83.20
Polk	Lake Alfred	30-Dec-21	19.42	0.17	4.44	83.75
Polk	Lake Alfred	15-Jan-22	17.81	0.10	5.43	76.93
Polk	Lake Alfred	30-Jan-22	12.16	0.16	6.19	77.38
Hardee	Ona	14-Feb-21	18.71	0.35	8.07	82.13
Hardee	Ona	28-Feb-21	19.94	0.05	8.09	76.08
Hardee	Ona	15-Mar-21	18.55	0.03	6.92	73.20
Hardee	Ona	31-Mar-21	20.97	0.18	7.12	79.06
Hardee	Ona	15-Apr-21	19.60	0.34	6.42	71.40
Hardee	Ona	30-Apr-21	23.22	0.65	7.56	78.40

Hardee	Ona	15-May-21	24.53	0.10	6.35	74.60
Hardee	Ona	31-May-21	23.93	0.00	8.53	69.13
Hardee	Ona	15-Jun-21	26.00	0.55	7.43	79.67
Hardee	Ona	30-Jun-21	25.54	0.90	6.32	87.33
Hardee	Ona	15-Jul-21	25.78	1.77	6.73	87.40
Hardee	Ona	31-Jul-21	27.23	0.44	5.49	83.81
Hardee	Ona	15-Aug-21	26.45	0.64	6.01	86.40
Hardee	Ona	30-Aug-21	27.09	0.79	5.89	85.00
Hardee	Ona	15-Sep-21	25.81	0.47	5.27	88.13
Hardee	Ona	30-Sep-21	25.57	0.32	4.61	84.27
Hardee	Ona	15-Oct-21	25.24	0.58	5.27	81.80
Hardee	Ona	15-Nov-21	18.93	0.62	5.59	84.67
Hardee	Ona	30-Nov-21	17.89	0.00	5.50	80.13
Hardee	Ona	15-Dec-21	19.70	0.02	4.41	85.33
Hardee	Ona	30-Dec-21	18.95	0.08	5.61	85.56
Hardee	Ona	15-Jan-22	17.79	0.02	6.40	80.07
Hardee	Ona	15-Jan-22	12.53	0.12	6.32	79.94
DeSoto	Arcadia	14-Feb-21	19.22	0.25	11.51	80.33

DeSoto	Arcadia	28-Feb-21	20.64	0.09	11.83	78.38
DeSoto	Arcadia	15-Mar-21	18.96	0.06	10.44	75.33
DeSoto	Arcadia	31-Mar-21	21.65	0.02	10.48	77.56
DeSoto	Arcadia	15-Apr-21	20.16	0.25	10.21	68.87
DeSoto	Arcadia	30-Apr-21	23.96	0.08	10.83	76.13
DeSoto	Arcadia	15-May-21	25.31	0.00	9.74	73.20
DeSoto	Arcadia	31-May-21	24.49	0.01	12.07	67.00
DeSoto	Arcadia	15-Jun-21	26.52	0.44	10.03	78.27
DeSoto	Arcadia	30-Jun-21	25.87	0.56	8.88	85.73
DeSoto	Arcadia	15-Jul-21	26.03	1.33	9.49	86.20
DeSoto	Arcadia	31-Jul-21	27.55	0.38	7.55	83.13
DeSoto	Arcadia	15-Aug-21	26.69	0.44	8.26	86.13
DeSoto	Arcadia	30-Aug-21	27.48	0.17	8.10	83.25
DeSoto	Arcadia	15-Sep-21	26.20	0.91	7.62	86.53
DeSoto	Arcadia	30-Sep-21	25.86	0.36	6.98	83.33
DeSoto	Arcadia	15-Oct-21	25.57	0.00	7.74	80.00
DeSoto	Arcadia	30-Oct-21	23.50	0.18	8.97	81.06
DeSoto	Arcadia	15-Nov-21	19.20	0.34	9.38	83.73

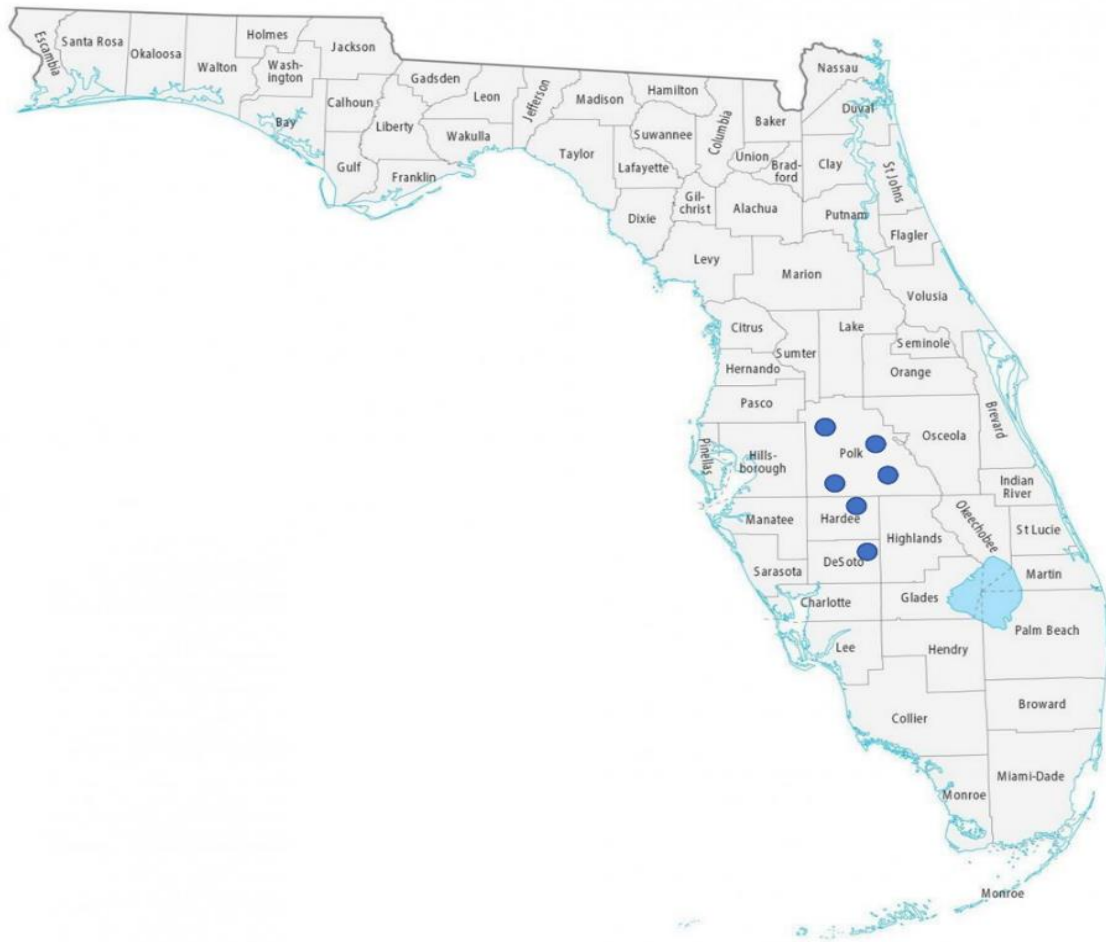
DeSoto	Arcadia	30-Nov-21	18.12	0.01	9.85	79.47
DeSoto	Arcadia	15-Dec-21	20.09	0.00	6.54	84.33
DeSoto	Arcadia	30-Dec-21	19.46	0.09	8.24	84.06
DeSoto	Arcadia	15-Jan-22	18.28	0.01	9.95	79.07
DeSoto	Arcadia	15-Jan-22	13.15	0.18	10.04	78.31

^aFAWN: Florida Automated Weather Network

Arcadia: 27.22621 °N, 81.83838 °W

Lake Alfred: 28.10185 °N, 81.71128 °W

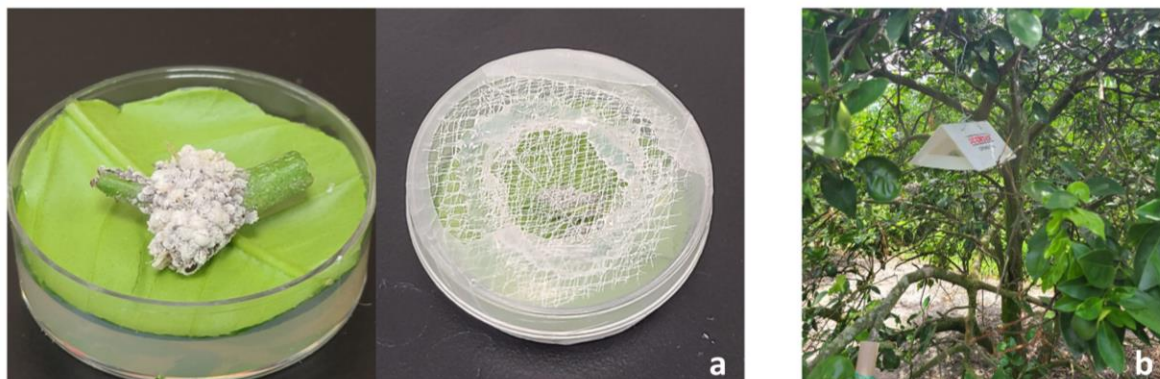
Ona: 27.39750 °N, 81.93973 °W



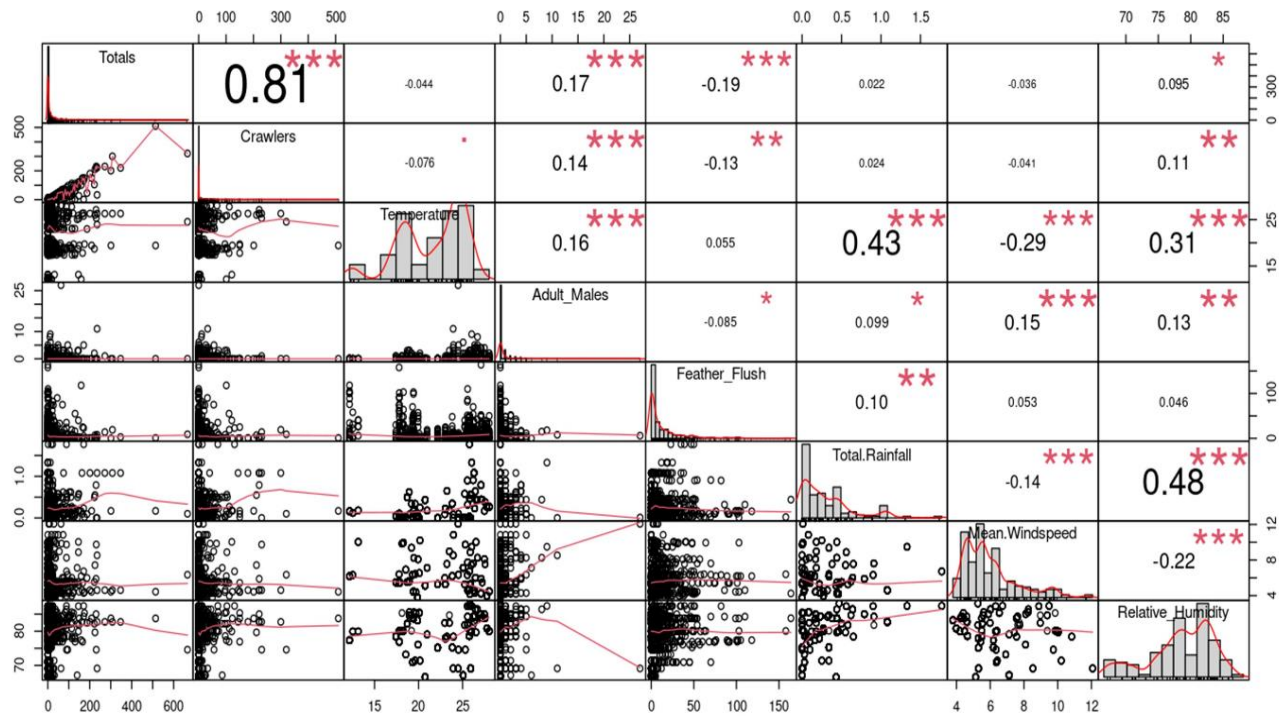
Supp. Fig. 1. Map of Florida showing approximate locations of the commercial citrus groves used in this study. Adapted from: <https://gisgeography.com/florida-county-map/>



Supp. Fig. 2. Relative sampling with corrugated cardboard band trap (CCBT). A) CCBT secured around a citrus tree trunk. B) CCBT secured around a branch of citrus tree. Photographs by David Olabiyi.



Supp. Fig. 3. Adult male hibiscus mealybug, *Nipaecoccus viridis*, trapping: a) Virgin Female Baited Sticky Trap (VFBT), b) VFBST deployed in white Scentry LP delta traps suspended from tree canopy. Photographs by David Olabiyi.



Supp. Fig. 4. Plot of multiple correlation analyses between new vegetative growth of citrus trees in Florida and mean population densities of crawlers and the totals (all life stage) of hibiscus mealybug, *Nipaecoccus viridis*, sampled and the environmental factors (mean temperature, mean windspeed, relative humidity, and total rainfall) collected from the Florida Automated Weather Network near the survey sites. The number within the boxes represents the correlation coefficient and the asterisks indicate the degree of significance of our correlation coefficient.