Supplementary S1. Additional mortality (ΔAM, %) and hypothesis-testing results for treatment-vs-control contrasts across fruit types, host densities, and parasitoid release densities. ΔAM values (± SE) correspond to control-adjusted excess dead-pupa probabilities estimated from the dead-pupae GLMM. Hypothesis tests evaluate whether ΔAM is significantly greater than zero (treatment vs control) within each fruit type × host density combination. Estimates, standard errors, z-statistics, and p-values are derived from GLMM-based estimated marginal means contrasts, with p-values adjusted for multiple comparisons using the Sidak method.

Fruit type	Host density (hosts/cage)	Parasitoid release density (per cage)	DeltaAM (%)	SE (%)	Estimate (logit)	SE (logit)	z	Adjusted p-value (Sidak)
Orange	200	20	0.46	1.43	0.025	0.08	0.321	0.996
Orange	200	40	2.61	1.46	0.142	0.079	1.806	0.255
Orange	200	80	3.51	1.47	0.189	0.078	2.414	0.062
Orange	200	160	7.06	1.50	0.364	0.077	4.731	<0.001
Orange	300	20	3.84	1.26	0.202	0.065	3.101	0.008
Orange	300	40	2.57	1.24	0.137	0.066	2.099	0.136
Orange	300	80	3.13	1.25	0.166	0.065	2.548	0.043
Orange	300	160	9.54	1.30	0.472	0.064	7.408	<0.001
Orange	400	20	4.48	1.16	0.224	0.057	3.947	<0.001
Orange	400	40	5.80	1.17	0.287	0.057	5.072	<0.001
Orange	400	80	3.04	1.15	0.155	0.057	2.71	0.027
Orange	400	160	6.40	1.17	0.315	0.057	5.574	<0.001
Peach	200	20	10.90	1.36	0.672	0.084	7.966	<0.001
Peach	200	40	12.20	1.38	0.738	0.084	8.796	<0.001
Peach	200	80	13.55	1.39	0.805	0.084	9.638	<0.001
Peach	200	160	17.55	1.43	0.992	0.083	12.024	<0.001
Peach	300	20	12.64	1.20	0.717	0.068	10.51	<0.001
Peach	300	40	10.77	1.19	0.626	0.069	9.119	<0.001
Peach	300	80	14.84	1.22	0.82	0.068	12.103	<0.001
Peach	300	160	21.84	1.26	1.127	0.067	16.868	<0.001
Peach	400	20	9.86	1.11	0.527	0.059	8.983	<0.001
Peach	400	40	13.81	1.14	0.709	0.058	12.206	<0.001
Peach	400	80	15.23	1.15	0.772	0.058	13.327	<0.001
Peach	400	160	21.09	1.17	1.019	0.057	17.768	<0.001