



Supplement

The following supplementary materials are available for this article: Tsai, C.-C., L.F. Hung, J.D. Chung, W.Y. Kao and L.L. Kuo-Huang. 2020. Regulation of tree crown phenology and fruit set of *Cinnamomum kanehirae* Hayata, an endangered evergreen tree in Taiwan. *Taiwania* 65(1): 15-26. Doi: [10.6165/tai.2020.65.15](https://doi.org/10.6165/tai.2020.65.15)

Table S1. Summary statistics by group – before fruit thinning.

	Fruits		Inflorescence leaves		Ordinary leaves	
	mean	sd	mean	sd	mean	sd
I	11.759	7.638	-	-	3.586	1.086
II	10.143	5.268	5.821	2.722	3.750	1.404
III	13.071	7.576	5.286	1.883	3.321	1.362

Table S2. Summary statistics by group – after fruit thinning.

	Fruits		Inflorescence leaves		Ordinary leaves	
	mean	sd	mean	sd	mean	sd
I	0.846	0.967	-	-	3.231	1.210
II	0.286	0.535	5.714	2.720	3.643	1.393
III	0.464	0.576	-	-	3.143	1.380

Table S3. Preliminary evaluation of model approaches in analyzing the growth curves of fruit diameter.

Modelling approaches	df	χ^2	P
Comparison group	2	6.55	0.038
Fruit set stage	1	214.82	<0.001
Number of OL	1	2.71	0.099
Comparison group × Fruit set stage	2	14.29	<0.001
Number of OL × Fruit set stage	1	24.49	<0.001

OL: ordinary leaves

Table S4. Climate data.

Temperature	J	F	M	A	M	J	J	A	S	O	N	D	Average
2011	10.3	13.3	12.7	17.4	21.3	24.6	25.3	25.4	23.2	20	19.4	13.5	18.9
2012	12.6	13.5	16.1	19.5	22.1	24.1	26.1	25.1	23.2	19.5	17.5	14.2	19.5
2013	13.1	15.8	16.6	17.7	22.2	24.9	25.7	26	24	20	17.6	12.6	19.7
2014	12.3	13.3	15.6	19.5	22.3	25.1	26.8	26.2	26	19.8	17.8	12.3	19.7
1988-2010	13.1	13.8	15.7	18.9	21.8	24.2	25.7	25.3	23.5	20.4	17.6	14.6	19.6
Precipitation	J	F	M	A	M	J	J	A	S	O	N	D	Annual
2011	299	139	173	64.5	487	548	154	422	109	548	476	554	3974
2012	271	338	131	290	472	688	300	1064	466	145	228	324	4719.5
2013	198	83.5	66.5	274	341	248	330	686	408	493	184	404	3715.0
2014	112	317	151	116	500	595	452	277	395	192	330	210	3647.5
1988-2010	168	195	169	172	240	319	253	430	592	463	264	206	3479
Sunshine hour	J	F	M	A	M	J	J	A	S	O	N	D	Annual
2011	17.1	87.8	55	153	94.2	146	182	196	170	53.3	74.5	23.5	1252
2012	23	43.7	109	61.2	128	77	207	159	140	155	80.9	74.1	1257
2013	79.1	69.9	118	53.6	77.4	108	157	160	194	97.1	90.7	57.6	1261
2014	144	81.2	66.9	99.5	45.9	57.4	178	171	202	125	99.3	60.5	1332
1981-2010	81.7	71.8	90.4	93.9	115	118	176	192	150	122	97.6	91.9	1577

Temperature and precipitation were recorded by Tonghou auto-weather station (24°51'0.2" N, 121°35'22.7" E, 387 m a.s.l.). Sunshine hours were recorded by Taipei climate station, CWB (25°02'15" N 121°30'54" E, 5 m a.s.l.)

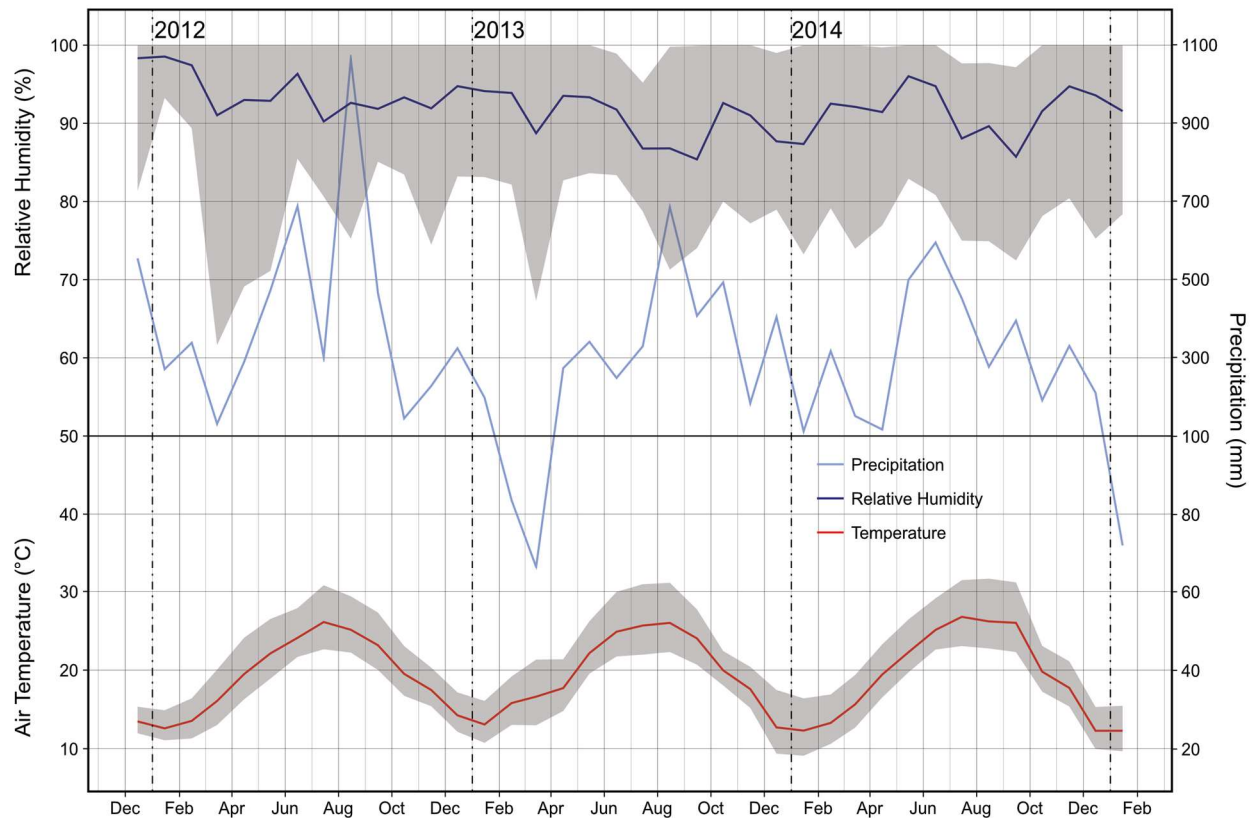


Fig. S1. Climatic information for the study site reprinted from Tsai *et al.* (2018). Three-year climatic data recorded by Tonghou auto-weather station of Central Weather Bureau. The monthly mean temperature increased from about 12.5 °C in January, peaked at 26.5 °C between July and August and declined back to 12.5 °C in next January. The precipitation was overall abundant and was relatively high in summer due to heavy rain caused by typhoons. The relative humidity (RH) was high and seldom fell below 70%, except that the minimum RH approached 62% in March 2012. The grey envelope around the red line indicates the range between the mean monthly maximum and mean monthly minimum temperature. The grey envelope around the dark blue line shows the range between the monthly maximum and minimum RH.

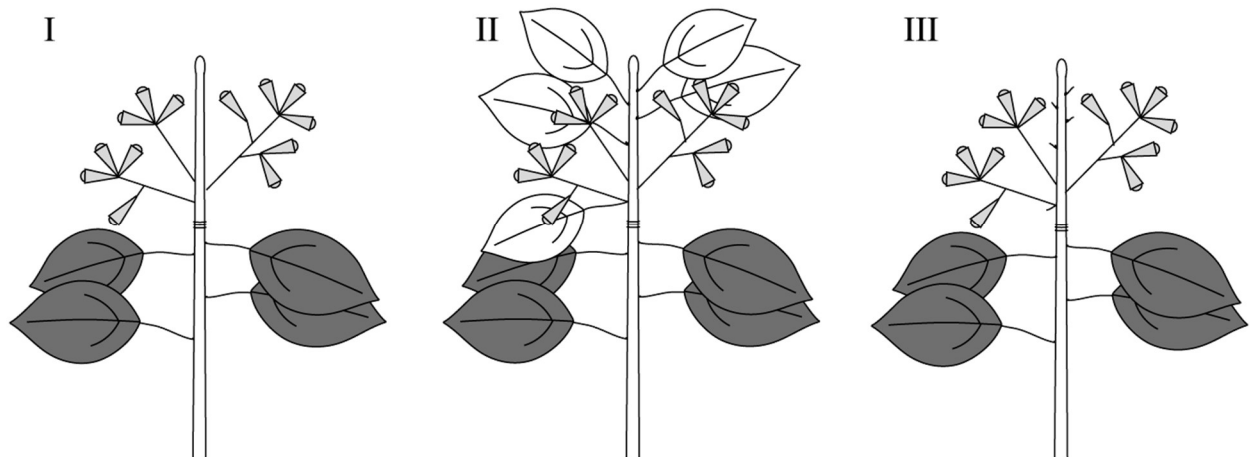


Fig. S2. Illustration of the 3 comparison groups in the manipulation experiment: (I) leafless inflorescence, (II) leafy inflorescence, (III) leafy inflorescence with IL being removed on 4th or 19th March when leaves just emerged.

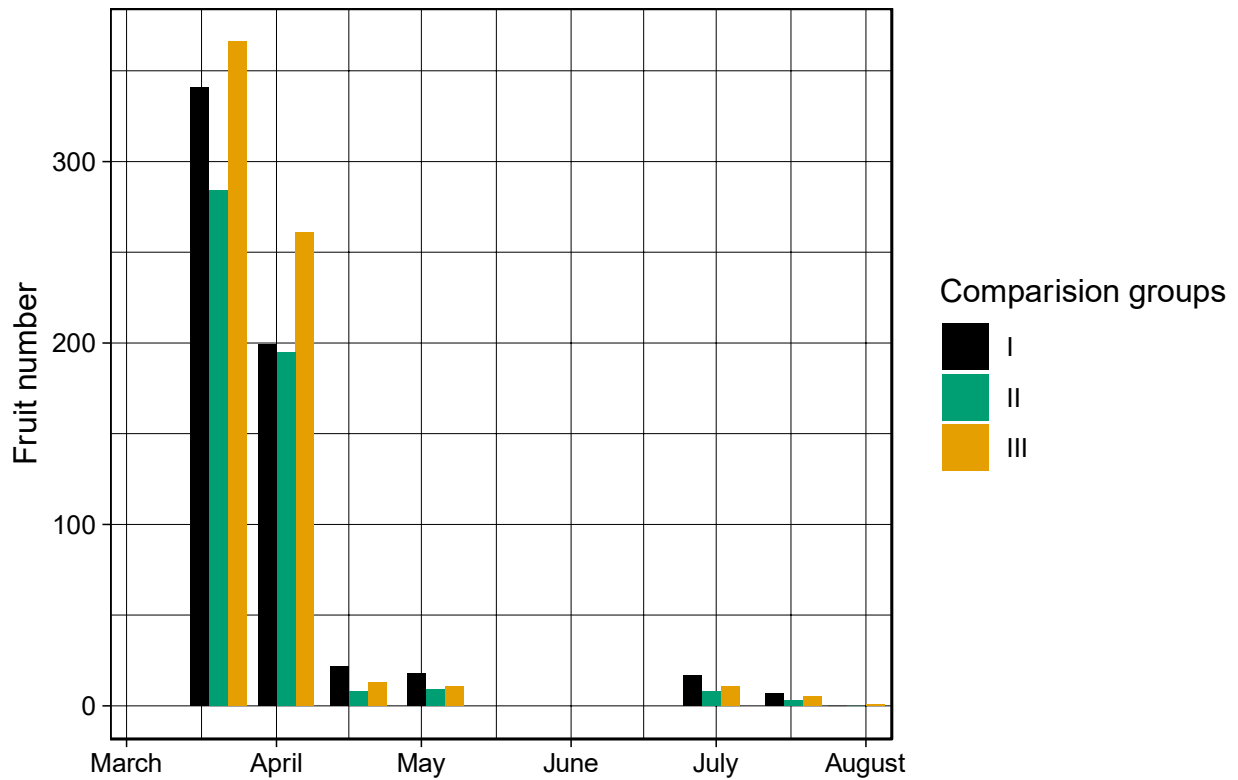


Fig. S3. Fruit numbers of *Cinnamomum kanehirae* during the manipulation experiment. (I) leafless inflorescence, (II) leafy inflorescence, (III) leafy inflorescence with IL being removed. The bars were juxtaposed to avoid overlapping. During the first survey (4th March), no fruit with diameter over 1 mm was observed and thus was not shown in this plot.

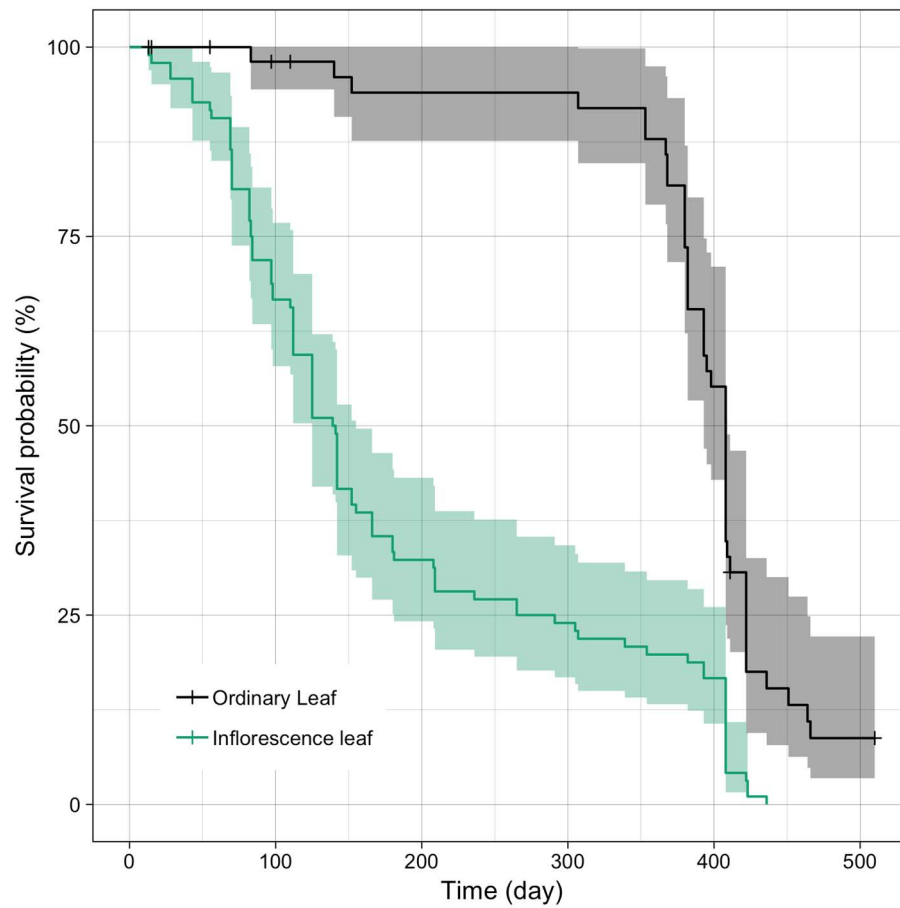


Fig. S4. Kaplan-Meier survival curves of leaves of *Cinnamomum kanehirae*. The colored envelopes represent 95% confidence intervals of estimates.

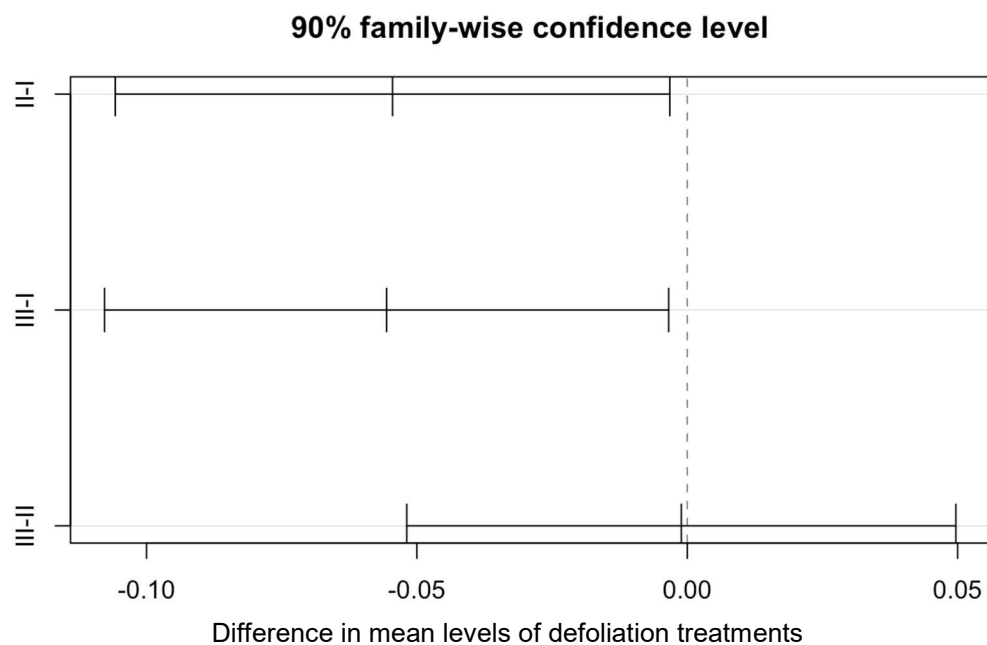


Fig. S5. Tukey's HSD multiple comparison of mean rates of fruit set between comparison groups. (I) leafless inflorescence, (II) leafy inflorescence, (III) leafy inflorescence with IL being removed.