Supporting Information

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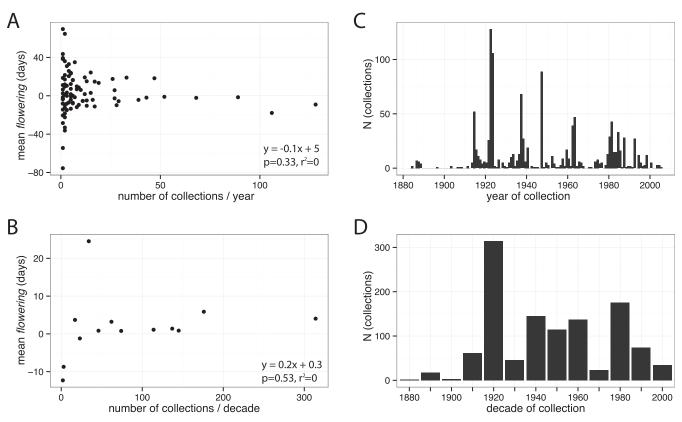


Fig. S1. Day of collection deviation from the species mean (*flowering*) averaged by year (*A*) and by decade (*B*) shows no significant relationship with number of collections. This means that, even though collection intensity varies by year (*C*) and by decade (*D*), this variation does not bias *flowering*. Collections are highest in the 1920s, when several prolific early plant hunters exhaustively sampled the area, and decline in recent decades.

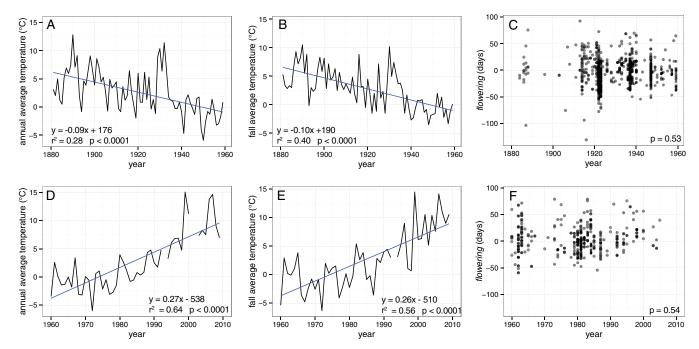


Fig. 52. During periods of significant cooling and warming, day of collection deviation (*flowering*) did not change over year even though it did significantly respond to average annual temperatures, fall temperatures, and elevation. Average annual temperature deviation (*A*) and average fall temperature deviation (*B*) for the period 1881–1959 decreased, whereas average annual temperature deviation (*D*) and average fall temperature deviation (*E*) for the period 1960–2009 increased. Flowering time (*C* and *F*) shows no directional change over year during these periods (1881–1959, *P* = 0.43; 1960–2009, *P* = 0.54). For each period, the generic model (Table 1) *flowering~annual.temp+fall.temp+elevation* is significant, and coefficients are similar in size and direction (1884–1959, *flowering, -2.75annual.temp, +2.83fall.temp, +0.012elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.temp, +2.15fall.temp, +0.017elevation; r*² = 0.09, *P* < 0.0001; 1960–2009, *flowering, -1.46annual.t*

Table S1.	Month of flowering responds significantly to average			
annual temperatures, fall temperatures, and elevation				

Parameter	Estimate	SE	P value
Intercept	0.11	0.74	0.88
annual.temp	-2.10	0.22	<2 x 10 ⁻¹⁶
fall.temp	3.16	0.28	<2 x 10 ⁻¹⁶
elevation	0.015	0.002	<2 x 10 ⁻¹⁶

The model flowering.month~annual.temp+fall.temp+elevation was tested for this larger data set of coarser temporal scale by considering month of collection rather than day of collection as our metric for flowering time (adjusted $r^2 = 0.09$). The 1,147 collections with day of collection were converted to month of collection (i.e., every collection recorded as being made in June was coded as June 15, or day 165), and an additional 1,199 collections for which only information about month of collection could be recovered were added to the dataset. As with flowering, flowering.month is expressed as deviation from the species mean, and in day units.

Table S2. Annual and fall warming tested against Lijiang weather station data for the past 57 y

Parameter	Estimate	SE	P value
Intercept	9.72	51.8	0.85
annual.temp _{-LWS}	-0.10	0.37	0.02
fall.temp _{-LWS}	0.66	0.21	0.002
Elevation	0.017	0.003	5.00 x 10 ⁻⁹

Annual and fall warming remain significant, and similar in sign to the generic model, when tested against local scale temperature data from the Lijiang weather station (LWS), available for the past 57 y (adjusted $r^2 = 0.08$). Here, we used average daily LWS temperatures to compute seasonal and annual temperature averages as in the generic analysis, and tested for change in *flowering* of the 460 specimens collected in 1952–2009. Precipitation measures added to the model, including total previous year precipitation and total spring precipitation, were not significant.

Table S3. Generic model with collection time as weighted mean

Parameter	Estimate	SE	P value
Intercept annual.temp fall.temp	2.04 -2.30 2.57	0.85 0.53 0.56	0.02 0.00004 0.00001

The generic model remains significant when collection time is treated as a weighted mean (adjusted $r^2 = 0.21$). To avoid problems with inflated significance values due to multiple collections within years, we tested the generic model against the annual mean *flowering*, weighted by annual number of collections.

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