

Supporting Information

Potential Distribution of *Turpinia arguta* (Lindl.) Seem. in China under Climate Change Based on optimized MaxEnt model and Quality suitability regionalization analysis

1 The filtered GBIF samples (after time, uncertainty, and outlier filtering) and
40 field-collected samples of *T. arguta*

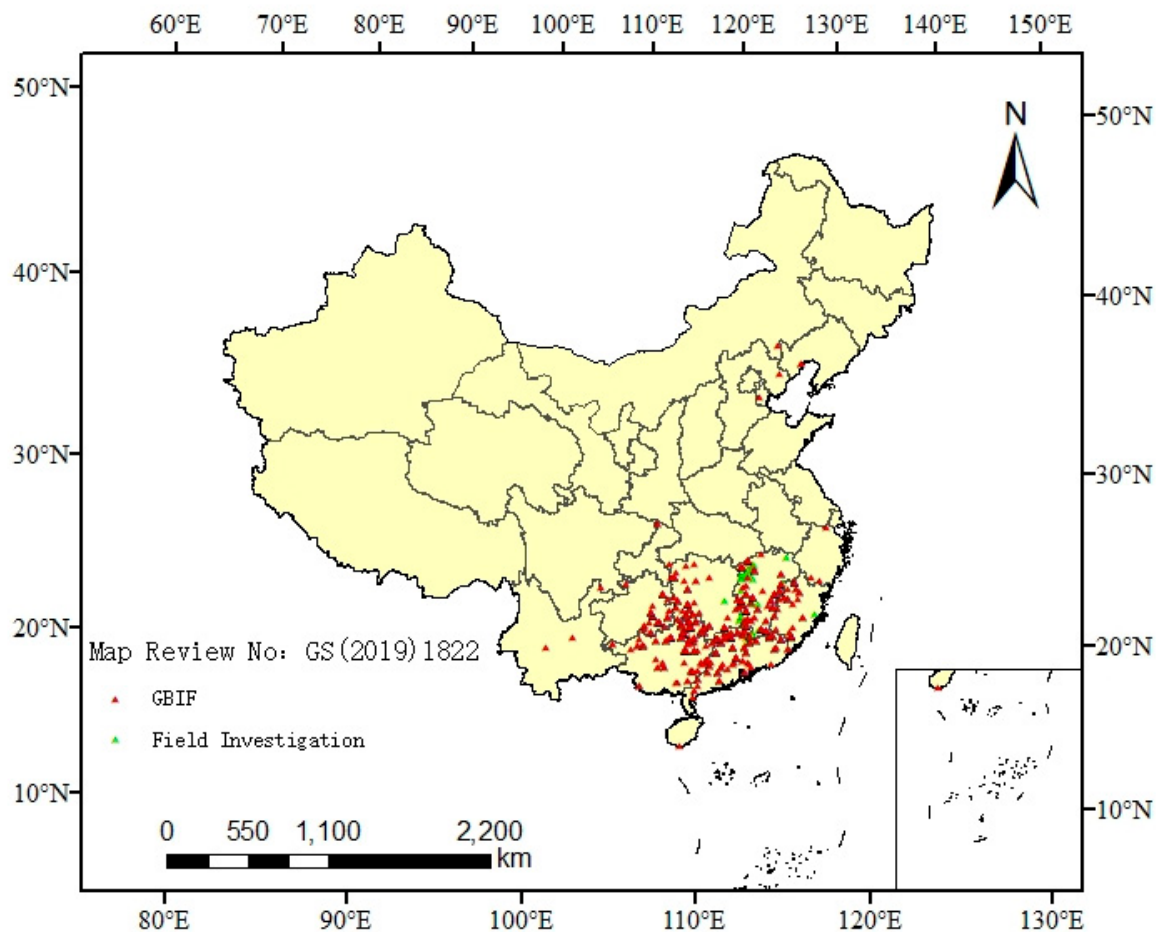


Figure S1. Geographic distribution map of *T. arguta* occurrence points

2 Sampling point informations

Table S1. Sampling point informations

No	Areas			Longitude	Latitude	ligustroflavone	rhoifolin
	Province	County	Township				
1	Jiangxi	Longnan	Jiulianshan	114.5744444	24.63083333	0.465 ± 0.040	0.181 ± 0.022
2	Jiangxi	Longnan	Yangcun	114.624375	24.631528	0.713 ± 0.094	0.192 ± 0.002
3	Jiangxi	Longnan	Anjishan	114.7966667	24.91666667	0.563 ± 0.064	0.137 ± 0.017
4	Jiangxi	Quannan	Taojiangyuan	114.5438889	24.72222222	0.528 ± 0.090	0.260 ± 0.061
5	Jiangxi	Quannan	Fenshui	114.2958333	24.72472222	0.523 ± 0.052	0.236 ± 0.034
6	Jiangxi	Quannan	Jinlong	114.5533333	24.75527778	0.504 ± 0.055	0.260 ± 0.038
7	Jiangxi	Anyuan	Xinshan	115.4127778	25.13833333	0.972 ± 0.069	0.152 ± 0.054
8	Jiangxi	Chongyi	Qiyunshan	114.02	25.89055556	0.167 ± 0.038	0.174 ± 0.067
9	Jiangxi	Chongyi	Chishui	113.998083	25.766367	0.208 ± 0.094	0.071 ± 0.037
10	Jiangxi	Chongyi	Yangling	114.3166667	25.62611111	0.391 ± 0.041	0.166 ± 0.021
11	Jiangxi	Dayu	Meiguangudao	114.2575	25.33388889	0.532 ± 0.061	0.228 ± 0.026
12	Jiangxi	Dayu	Zuobo	114.3683333	25.4075	0.318 ± 0.058	0.230 ± 0.061
13	Jiangxi	Shangyou	Wuzhifeng	114.1583333	26.02305556	0.393 ± 0.085	0.262 ± 0.038
14	Jiangxi	Shangyou	Guanggushan	114.5586111	25.79055556	0.226 ± 0.003	0.130 ± 0.003
15	Jiangxi	Xinfeng	Yigaolinchang	115.1475	25.05722222	0.238 ± 0.057	0.156 ± 0.110
16	Jiangxi	Taihe	Bixi	114.9277778	26.89388889	0.514 ± 0.243	0.293 ± 0.109
17	Jiangxi	Taihe	Baiyunshan	115.31516	26.699483	0.451 ± 0.108	0.202 ± 0.047
18	Jiangxi	Taihe	Yantou	114.8502778	26.75805556	0.388 ± 0.025	0.197 ± 0.020
19	Jiangxi	Yongxin	Biboyan	114.3058333	26.88444444	0.360 ± 0.065	0.407 ± 0.067
20	Jiangxi	Yongxin	Qubai	114.3127778	26.82555556	0.304 ± 0.099	0.185 ± 0.045
21	Jiangxi	Yifeng	Yuanqian	114.9422222	28.46444444	0.340 ± 0.059	0.177 ± 0.035
22	Jiangxi	Yifeng	Shuangfeng	114.8561111	28.32833333	0.543 ± 0.147	0.350 ± 0.140
23	Jiangxi	Yifeng	Jiaoxi	114.6263889	28.38972222	0.396 ± 0.070	0.208 ± 0.071
24	Jiangxi	Yifeng	Guanshan	114.5747222	28.57833333	0.527 ± 0.056	0.240 ± 0.036
25	Jiangxi	Yifeng	Taiyangling	114.4027778	28.45138889	0.457 ± 0.037	0.136 ± 0.001
26	Jiangxi	Yichun	Mingyueshan	114.3213889	27.61388889	0.444 ± 0.052	0.230 ± 0.027
27	Jiangxi	Wanli	jiaohu	114.3986111	28.25972222	0.335 ± 0.002	0.288 ± 0.002
28	Jiangxi	Fengxin	Suokou	115.0188889	28.61388889	0.525 ± 0.014	0.200 ± 0.007
29	Jiangxi	Tonggu	Hongsucun	114.62	28.6175	0.323 ± 0.034	0.209 ± 0.027
30	Jiangxi	Jingan	Pilu	115.3802778	29.04	0.529 ± 0.005	0.131 ± 0.001
31	Jiangxi	Jingan	Huxiaoxia	115.2677778	29.05472222	0.420 ± 0.007	0.072 ± 0.001
32	Jiangxi	Jingan	Gangbei	115.2238889	29.01722222	0.405 ± 0.031	0.144 ± 0.030
33	Jiangxi	Gaoan	Xiangcheng	115.1322222	28.25277778	0.359 ± 0.027	0.205 ± 0.014

34	Jiangxi	Wuyuan	Fuchun	117.6316667	29.31472222	0.432 ± 0.017	0.034 ± 0.008
35	Jiangxi	Xiushui	Huanggang	114.8741667	28.84694444	0.262 ± 0.019	0.282 ± 0.031
36	Jiangxi	Wuning	Shenwushan	115.3030556	29.10888889	0.436 ± 0.053	0.376 ± 0.063
37	Jiangxi	Zixi	Matoushan	117.2086111	27.83361111	0.141 ± 0.053	0.185 ± 0.031
38	Jiangxi	Lianping	Beitou	114.2986111	24.41277778	0.522 ± 0.149	0.226 ± 0.093
39	Jiangxi	Hengdong	Ganxi	113.0477778	27.08	0.313 ± 0.007	0.081 ± 0.005
40	Jiangxi	Putian	Shilongshan	119.0644444	25.6425	0.111 ± 0.001	0.062 ± 0.005

3 Environmental factor contribution rate and importance.

Table S2. Environmental factor contribution rate and importance.

Number	Environmental variable	Abbreviation	Contribution(%)	Importance(%)
1	Precipitation of Warmest Quarter	bio18	34.2	2.7
2	Precipitation in May	prec5	25.4	3.5
3	Precipitation in April	prec4	10.7	16.2
4	Average temperature in September	tmean9	2.9	1.4
5	Precipitation in September	prec9	2.1	12.8
6	Average temperature in October	tmean10	1.8	0.1
7	Annual Mean Temperature	bio1	1.7	4.1
8	Isothermality	bio3	1.7	0.2
9	Average temperature in July	tmean7	1.4	0
10	Average temperature in April	tmean4	1.3	0.3
11	Average temperature in June	tmean6	1.1	0
12	Annual Precipitation	bio12	1.1	1.5
13	Average temperature in August	tmean8	1	0.1
14	Mean diurnal temperature range	bio2	1	0.5
15	Temperature Annual Range	bio7	0.8	2.2
16	Aspect	aspect	0.8	0.7
17	Precipitation Seasonality	bio15	0.8	1.2
18	Precipitation of Driest Month	bio14	0.7	0.1
19	Precipitation in August	prec8	0.7	12.1
20	Average temperature in May	tmean5	0.7	0.2
21	Mean Temperature of Warmest Quarter	bio10	0.6	1
22	Precipitation in February	prec2	0.6	2.6
23	Vegetation type	zblx	0.6	3.7
24	Average temperature in November	tmean11	0.6	0.2
25	Precipitation in June	prec6	0.6	2.3
26	Precipitation of Driest Quarter	bio17	0.4	0.5
27	Slope	slope	0.4	0.7

28	Precipitation in March	prec3	0.4	4.9
29	Precipitation of Coldest Quarter	bio19	0.4	0.1
30	Soil Cation Exchange Capacity	tryljzjhl	0.4	0.8
31	Precipitation in July	prec7	0.4	6.1
32	Soil Subclass	trlx	0.3	0.6
33	Min Temperature of Coldest Month	bio06	0.3	0.5
34	Average temperature in February	tmean2	0.3	0
35	Soil Texture Classification (USDA)	trzdfl	0.2	1.1
36	Precipitation in November	prec1	0.2	2
37	Elevation	elev	0.2	4.5
38	Soil Available Water Content Class	tryxshldj	0.2	0.9
39	Soil Clay Content	trhntl	0.2	1
40	Average temperature in March	tmean3	0.2	0
41	Mean Temperature of Driest Quarter	bio9	0.2	1.3
42	Acidity and Alkalinity (pH)	tph	0.2	0.7
43	Precipitation in October	prec10	0.1	0
44	Precipitation in January	prec1	0.1	0.6
45	Soil Organic Carbon Content	tryjthl	0.1	0.4
46	Precipitation in December	prec12	0.1	0.8
47	Average temperature in December	tmean12	0	0
48	Temperature Seasonality	bio4	0	0.1
49	Max Temperature of Warmest Month	bio5	0	2
50	Soil sand content	trhsl	0	0.4
51	Average temperature in January	tmean1	0	0.1
52	Mean Temperature of Wettest Quarter	bio8	0	0.1
53	Precipitation of Wettest Quarter	bio16	0	0
54	Mean Temperature of Coldest Quarter	bio11	0	0
55	Precipitation of Wettest Month	bio13	0	0

4 HPLC chromatograms of sample (A) and mixed standards (B)

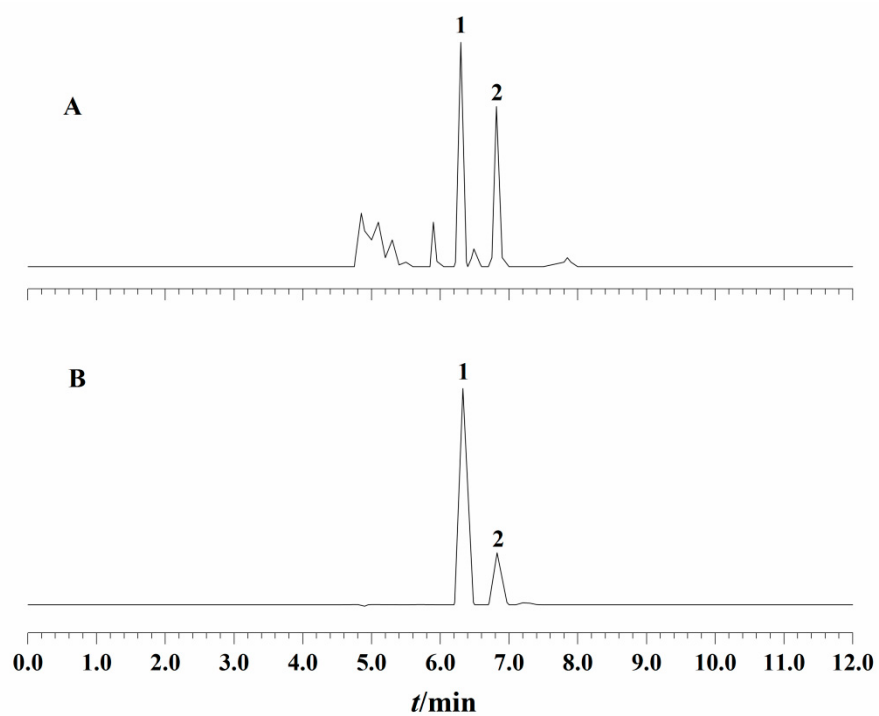


Figure S2. HPLC chromatograms of sample (A) and mixed standards (B).

1:ligustroflavone; 2:rhoifolin.