附表1 从短穗竹采样地点经纬度提取的气候数据

Appendix table 1 Climate data extracted from latitude and longitude of the sampled sites of *Brachystachyum densiflorum*

Sample	Population	Longitude (°E)	Latitude (°N)	Bio1	Bio10	Bio11	Bio12	Bio13	Bio14	Bio15	Bio16	Bio17	Bio18	Bio19	Bio2	Bio3	Bio4	Bio5	Bio6	Bio7	Bio8	Bio9
12040	AHGD	119.4011	30.9003	15.80833340	26.53333282	4.533333302	1220	198	32	50.96058273	498	127	495	143	8.266666412	25.67287636	894.3124390	31.60000038	-0.600000024	32.20000076	24.21666718	6.633333206
12041	AHGD	119.3391	30.8479	15.59166622	26.18333244	4.483333111	1244	200	33	49.88211823	504	130	494	146	8.416666985	26.13871574	881.3982544	31.29999924	-0.899999976	32.20000076	23.85000038	6.533333302
12048	AHGD	119.2622	30.6995	15.72083282	26.23333359	4.633333206	1275	207	34	49.42464447	517	132	494	150	8.258333206	25.80729294	877.1168213	31.39999962	-0.600000024	32.00000000	23.95000076	6.683333397
12050	AHGD	119.2428	30.7687	15.79583359	26.36666679	4.666666508	1255	205	33	50.05082321	512	129	492	145	8.225000381	25.70312500	881.0852051	31.50000000	-0.500000000	32.00000000	24.04999924	6.733333111
12051	AHGD	119.1466	30.7519	15.72916698	26.33333206	4.533333302	1267	205	33	49.21348190	514	132	490	147	8.475000381	26.31987572	884.8817139	31.50000000	-0.699999988	32.20000076	24.01666641	6.599999905
12053	AHGD	119.1686	30.7116	15.74583340	26.31666565	4.583333015	1274	206	34	49.15116501	516	132	491	149	8.341666222	25.98649979	881.7839966	31.50000000	-0.600000024	32.09999847	24.00000000	6.650000095
12056	AHGD	119.1708	30.7891	15.76249981	26.33333397	4.583333492	1257	205	33	49.46453094	511	130	489	146	7.991666794	25.13102722	883.0245361	31.39999962	-0.400000006	31.79999924	24.03333282	6.683333397
12059	AHGD	119.2115	30.9448	15.87500000	26.60000038	4.599999905	1208	195	32	49.30416489	489	128	477	141	8.250000000	25.54179573	894.4818115	31.70000076	-0.600000024	32.29999924	24.28333282	6.699999809
12063	AHGD	119.2585	30.9278	15.80416679	26.51666641	4.533333302	1211	195	32	49.45672989	490	128	479	142	8.191666603	25.43995857	893.8259277	31.50000000	-0.699999988	32.20000076	24.18333435	6.633333206
12065	AHYX	116.3525	30.8475	14.89166641	25.46666718	3.883333206	1530	267	31	56.14744568	659	134	659	134	8.716666222	27.41090202	878.0190430	30.50000000	-1.299999952	31.79999924	25.46666718	3.883333206
12074	AHYX	116.2825	30.8813	14.52083302	25.01666641	3.566666603	1517	261	31	55.83609009	651	133	651	133	8.658332825	27.31335449	870.8576050	30.00000000	-1.700000048	31.70000076	25.01666641	3.566666603
12077	AHYX	116.2406	30.9171	13.93750000	24.35000038	3.083333254	1523	260	31	55.91870499	656	134	656	134	8.608333588	27.41507339	863.6000977	29.20000076	-2.200000048	31.40000153	24.35000038	3.083333254
12079	AHYX	116.1017	31.0654	13.25416660	23.58333397	2.400000095	1504	245	31	55.90260696	655	133	655	133	8.324999809	26.68269157	858.9117432	28.39999962	-2.799999952	31.19999886	23.58333397	2.400000095
12080	AHYX	116.3548	30.8516	14.89166641	25.43333435	3.900000095	1521	265	31	56.01321030	653	133	653	133	8.733333588	27.46331215	875.7745972	30.50000000	-1.299999952	31.79999924	25.43333435	3.900000095
12084	AHYX	116.2196	30.9519	13.96666622	24.36666679	3.100000143	1513	256	31	55.75383377	652	133	652	133	8.650000572	27.46031761	862.7264404	29.29999924	-2.200000048	31.50000000	24.36666679	3.100000143
12087	AHYX	116.1774	30.9559	14.07083321	24.50000000	3.183333397	1503	253	31	55.83724213	649	133	649	133	8.641666412	27.43386269	864.3980103	29.39999962	-2.099999905	31.50000000	24.50000000	3.183333397
12090	AHHS	116.4765	31.4377	15.73750019	26.48333359	4.483333111	1276	184	28	49.98061752	529	121	529	121	9.058333397	27.61686897	892.8735962	31.70000076	-1.100000024	32.79999924	26.48333359	4.483333111
12092	AHHS	116.4821	31.427	15.72916698	26.48333359	4.483333111	1281	183	28	49.90797043	530	121	530	121	9.074999809	27.66768265	893.4699097	31.70000076	-1.100000024	32.79999924	26.48333359	4.483333111
12095	AHHS	116.3424	31.4118	15.90000057	26.68333435	4.549999714	1329	203	32	50.23246765	557	133	557	133	9.349999428	28.16265106	896.9975586	32.00000000	-1.200000048	33.20000076	26.68333435	4.549999714
12098	AHHS	116.4751	31.3257	14.99166679	25.58333397	4.000000000	1366	205	28	52.06966400	576	122	576	122	8.466667175	26.70872688	875.1696777	30.60000038	-1.100000024	31.70000076	25.58333397	4.000000000
12105	JSLY	119.499	31.2177	15.46249962	26.14999962	4.300000191	1152	185	31	50.88801575	476	124	476	134	8.008333206	25.10449219	886.6923218	31.10000038	-0.800000012	31.89999962	26.14999962	6.450000286
12108	JSLY	119.4373	31.2462	15.58749962	26.31666565	4.349999905	1141	182	31	49.96936417	466	123	466	132	8.158333778	25.41536903	891.9109497	31.29999924	-0.800000012	32.09999847	26.31666565	6.483333588
12110	JSLY	119.4892	31.269	15.26666641	25.93333244	4.083333492	1150	184	31	50.81145477	476	123	476	133	7.949999809	25.00000000	887.0772705	30.79999924	-1.000000000	31.79999924	25.93333244	6.233333111
12112	JSYX	119.8005	31.2747	15.85000038	26.66666794	4.583333492	1106	181	33	53.72935104	476	122	476	138	7.866666794	24.58333397	897.7218628	31.60000038	-0.400000006	32.00000000	26.66666794	6.799999714
12114	JSYX	119.7113	31.2797	15.66250038	26.38333321	4.466666698	1102	179	31	52.78942490	468	119	468	133	7.841666698	24.58202744	890.4368896	31.29999924	-0.600000024	31.89999962	26.38333321	6.683333397
12117	JSYX	119.7123	31.3141	15.49166679	26.18333244	4.333333492	1101	179	31	52.95930099	469	118	469	131	7.633333206	24.15611839	887.5677490	31.00000000	-0.600000024	31.60000038	26.18333244	6.533333302
12120	JSYX	119.8445	31.2546	15.91666698	26.70000076	4.650000095	1143	185	37	53.50419998	498	128	498	152	7.699999809	24.13792992	897.2086182	31.60000038	-0.300000012	31.89999962	26.70000076	11.750000000
12122	JSYX	119.8745	31.3205	15.86250019	26.66666603	4.616666794	1079	175	34	53.04386902	463	120	463	139	7.558333397	23.84332275	896.9218140	31.29999924	-0.400000006	31.69999886	26.66666603	11.733333590
12123	JSYX	119.8708	31.2178	15.78750038	26.46666718	4.599999905	1101	181	33	54.19209671	476	119	476	140	7.324999809	23.32802391	889.6171875	31.20000076	-0.200000003	31.40000153	26.46666718	11.716666220
12132	JSYX	119.8704	31.1876	15.69999981	26.33333397	4.566666603	1096	181	32	54.63258743	473	117	473	137	7.333333492	23.42918015	885.6020508	31.10000038	-0.200000003	31.30000114	26.33333397	11.633333210
12133	JSYX	119.7359	31.3788	15.78750038	26.61666679	4.516666889	1076	173	34	50.88619614	450	124	450	135	7.691666126	24.18762970	898.8050537	31.39999962	-0.400000006	31.79999924	26.61666679	6.699999809
12136	JSYX	119.7789	31.2532	15.65833282	26.43333244	4.449999809	1103	181	32	53.85558701	474	119	474	134	7.883333206	24.71264458	893.7379150	31.29999924	-0.600000024	31.89999962	26.43333244	6.666666508
12137	JSYX	119.7844	31.324	15.64166641	26.39999962	4.416666508	1094	177	32	53.30795670	470	119	470	134	7.633333206	24.07991600	894.1268921	31.20000076	-0.500000000	31.70000076	26.39999962	6.650000095
12125	ZJCX	119.8801	31.1483	15.25833321	25.85000038	4.199999809	1118	186	31	56.16527176	488	117	488	134	7.433333397	23.82478714	880.3894653	30.60000038	-0.600000024	31.20000076	25.85000038	11.199999810
12128	ZJCX	119.8797	31.1215	15.69166660	26.39999962	4.549999714	1111	186	31	56.08693314	484	116	484	135	7.633333206	24.23280334	888.6297607	31.20000076	-0.300000012	31.50000000	26.39999962	11.550000190
12130	ZJCX	119.8661	31.1004	15.66666698	26.41666603	4.483333111	1117	188	31	56.16132736	486	117	486	135	7.799999714	24.52830124	891.4960327	31.29999924	-0.500000000	31.79999924	26.41666603	11.500000000

附表2 19个气候因子相关性分析

Appendix table 2 Correlation analysis of 19 climate factors

	Bio1	Bio10	Bio11	Bio12	Bio13	Bio14	Bio15	Bio16	Bio17	Bio18	Bio19	Bio2	Bio3	Bio4	Bio5	Bio6	Bio7	Bio8
Bio10	0.9957																	
Bio11	0.9949	0.984																
Bio12	-0.773	-0.793	-0.756															
Bio13	-0.793	-0.815	-0.767	0.9549														
Bio14	0.3449	0.3225	0.3503	-0.313	-0.175													
Bio15	-0.592	-0.565	-0.572	0.2872	0.4496	-0.156												
Bio16	-0.835	-0.846	-0.819	0.9787	0.9613	-0.318	0.4688											
Bio17	-0.47	-0.508	-0.464	0.8012	0.7839	0.2035	-0.099	0.7142										
Bio18	-0.851	-0.853	-0.84	0.9549	0.9399	-0.359	0.5309	0.9933	0.6516									
Bio19	0.324	0.2703	0.3488	-0.18	-0.057	0.8824	-0.286	-0.243	0.3373	-0.319								
Bio2	-0.328	-0.336	-0.342	0.7562	0.58	-0.427	-0.199	0.6638	0.6618	0.6383	-0.294							
Bio3	-0.505	-0.516	-0.51	0.8687	0.7201	-0.456	-0.047	0.7959	0.7146	0.7725	-0.317	0.9779						
Bio4	0.8931	0.9293	0.8502	-0.8	-0.825	0.2532	-0.445	-0.817	-0.563	-0.793	0.0951	-0.334	-0.512					
Bio5	0.9838	0.9803	0.9728	-0.68	-0.735	0.2765	-0.657	-0.761	-0.379	-0.78	0.2745	-0.163	-0.354	0.8841				
Bio6	0.9247	0.9167	0.9387	-0.855	-0.794	0.4251	-0.37	-0.872	-0.599	-0.882	0.3863	-0.627	-0.75	0.7957	0.8494			
Bio7	0.5112	0.5162	0.4705	-0.042	-0.234	-0.094	-0.698	-0.168	0.1535	-0.191	-0.042	0.5976	0.4172	0.5103	0.65	0.151		
Bio8	0.3913	0.4555	0.3626	-0.551	-0.549	-0.116	0.2097	-0.436	-0.717	-0.348	-0.458	-0.339	-0.41	0.6126	0.358	0.4111	0.0786	
Bio9	0.6035	0.602	0.6206	-0.77	-0.651	0.462	0.0687	-0.702	-0.641	-0.687	0.3826	-0.788	-0.838	0.5379	0.4766	0.7761	-0.225	0.4273

附表3 短穗竹分布位置筛选

Appendix table 3 Screening of the distribution of *Brachystachyum densiflorum*

No.	Species	Longitude (°E)	Latitude (°N)	Locality
1	*Brachystachyum densiflorum*	116.10171	31.06538	Riverside, Baojia, Yuexi County,Anqing City, Anhui Province
2	*Brachystachyum densiflorum*	116.17741	30.95594	Heping Village,Yuexi County,Anqing City, Anhui Province
3	*Brachystachyum densiflorum*	116.21958	30.95190	Banzhu Village,Laibang Town, Yuexi County,Anqing City, Anhui Province
4	*Brachystachyum densiflorum*	116.24063	30.91715	Qingtan, Yuexi County, Anqing City, Anhui Province
5	*Brachystachyum densiflorum*	116.24713	30.93667	Shichong, Laibang Village, Yuexi County, Anqing City, Anhui Province
6	*Brachystachyum densiflorum*	116.27466	30.89595	Zhuwu, Lianyun Township,Yuexi County, Anqing City, Anhui Province
7	*Brachystachyum densiflorum*	116.28255	30.88129	Changsheng Village, Lianyun Township, Yuexi County, Anqing City, Anhui Province
8	*Brachystachyum densiflorum*	116.34244	31.41181	Yuerjie Town, Huoshan County, Liuan City, Anhui Province
9	*Brachystachyum densiflorum*	116.35252	30.84748	Dabieshan Martyrs Cemetery, Tiantang Township, Yuexi County, Anqing City, Anhui Province
10	*Brachystachyum densiflorum*	116.35475	30.85156	Road from Baojia to Hongshan, Yuexi County, Anqing City, Anhui Province
11	*Brachystachyum densiflorum*	116.37830	30.85594	Zhongxing Alley, Tiantang Town, Yuexi County,Anqing City,Anhui Province
12	*Brachystachyum densiflorum*	116.45329	31.39237	Yuerjie Town, Huoshan County, Liuan City, Anhui Province
13	*Brachystachyum densiflorum*	116.47506	31.32572	Siguchong, Yuerjie Town, Huoshan County, Liuan City, Anhui Province
14	*Brachystachyum densiflorum*	116.47649	31.43766	Huashizui Village, Danjiamiao Town, Huoshan County, Liuan City, Anhui Province
15	*Brachystachyum densiflorum*	116.47832	31.40469	Baifuan Village, Yuerjie Town, Huoshan County, Liuan City, Anhui Province
16	*Brachystachyum densiflorum*	116.48207	31.42703	Shanwanghe, Yuerjie Town, Huoshan County, Liuan City, Anhui Province
17	*Brachystachyum densiflorum*	116.48679	31.32955	Road from Yuerjie to Siguchong, Huoshan County, Liuan City, Anhui Province
18	*Brachystachyum densiflorum*	117.96098	29.90626	Qiaotou, Yuting Town, Yi County, Huangshan City, Anhui Province
19	*Brachystachyum densiflorum*	119.14662	30.75194	Jinyang Village, Yangtan Township,Guangde,Xuancheng City, Anhui Province
20	*Brachystachyum densiflorum*	119.16861	30.71156	Yuewan Village, Yangtan Twonship,Guangde,Xuancheng City, Anhui Province
21	*Brachystachyum densiflorum*	119.17076	30.78908	Dushu Village,Yangtan Twonship,Guangde,Xuancheng City, Anhui Province
22	*Brachystachyum densiflorum*	119.17367	30.72585	Sanhe Village, Yangtan Twonship,Guangde,Xuancheng City, Anhui Province
23	*Brachystachyum densiflorum*	119.18028	30.71557	Dushu Middle School, Yangtan Twonship,Guangde,Xuancheng City, Anhui Province
24	*Brachystachyum densiflorum*	119.21149	30.94481	Su Village, Shijie Town, Guangde, Xuancheng City, Anhui Province
25	*Brachystachyum densiflorum*	119.22326	30.94826	Xiangsheng Village, Shijie Town, Guangde, Xuancheng City, Anhui Province
26	*Brachystachyum densiflorum*	119.23578	30.74192	Daliu Village, Sihe Township, Guangde, Xuancheng City, Anhui Province
27	*Brachystachyum densiflorum*	119.24278	30.76866	Qiancheng Village, Baidian Town, Guangde, Xuancheng City,Anhui Province
28	*Brachystachyum densiflorum*	119.24753	30.74460	Yujiaba, Baidian Town, Guangde, Xuancheng City,Anhui Province
29	*Brachystachyum densiflorum*	119.25444	30.77231	Government of Baidian Town, Guangde, Xuancheng City,Anhui Province
30	*Brachystachyum densiflorum*	119.25850	30.92781	Dongxing Village, Shijie Town, Guangde, Xuancheng City,Anhui Province
31	*Brachystachyum densiflorum*	119.26223	30.69946	Fuling Village, Sihe Township, Guangde, Xuancheng City,Anhui Province
32	*Brachystachyum densiflorum*	119.30130	30.98318	Zhenruan Village, Shijie Town, Guangde, Xuancheng City,Anhui Province
33	*Brachystachyum densiflorum*	119.31221	30.92314	Huagu Village, Shijie Town, Guangde, Xuancheng City,Anhui Province
34	*Brachystachyum densiflorum*	119.33911	30.84794	Shixianglou Village, Baidian Town, Guangde, Xuancheng City,Anhui Province
35	*Brachystachyum densiflorum*	119.40111	30.90033	Tuanshan, Taozhou Town, Guangde, Xuancheng City, Anhui Province
36	*Brachystachyum densiflorum*	119.41913	31.41460	Dashishan, Liyang, Changzhou City, Jiangsu Province
37	*Brachystachyum densiflorum*	119.43728	31.24621	Nanzhu Village, Daibu Town, Liyang, Changzhou City, Jiangsu Province
38	*Brachystachyum densiflorum*	119.48919	31.26904	Longtan Forestry Farm, Liyang, Changzhou City, Jiangsu Province
39	*Brachystachyum densiflorum*	119.49151	31.42210	Qingfengshan, Liyang, Changzhou City, Jiangsu Province
40	*Brachystachyum densiflorum*	119.49875	31.31596	Dainan Village, Daibu Town, Liyang, Changzhou City, Jiangsu Province
41	*Brachystachyum densiflorum*	119.49904	31.21772	Heluogang, Hengjian Town, Liyang, Changzhou City, Jiangsu Province
42	*Brachystachyum densiflorum*	119.71134	31.27971	Furong Village,Zhangzhu Town, Yixing, Wuxi City, Jiangsu Province
43	*Brachystachyum densiflorum*	119.71225	31.31412	Guijing Village, Yixing, Wuxi City, Jiangsu Province
44	*Brachystachyum densiflorum*	119.73589	31.37883	Jianbei Village, Hufu Town, Yixing, Wuxi City, Jiangsu Province

附表 3 （续）

Appendix table 3 (continued)

No.	Species	Longitude (◦)	Latitude (◦)	Locality
45	*Brachystachyum densiflorum*	119.77894	31.25317	Zhanggongdong,Hufu Town, Yixing, Wuxi City, Jiangsu Province
46	*Brachystachyum densiflorum*	119.78443	31.32403	Meiyuan Village, Yixing, Wuxi City, Jiangsu Province
47	*Brachystachyum densiflorum*	119.80051	31.27473	Jiangli Village, Dingshu Town, Yixing, Wuxi City, Jiangsu Province
48	*Brachystachyum densiflorum*	119.80345	31.33395	Longbeishan Forest Park, Yixing, Wuxi City, Jiangsu Province
49	*Brachystachyum densiflorum*	119.83161	31.34296	Miaogan, Hufu Town, Yixing, Wuxi City,Jiangsu Province
50	*Brachystachyum densiflorum*	119.84448	31.25460	Nanzhong Village, Yicheng, Yixing, Wuxi City,Jiangsu Province
51	*Brachystachyum densiflorum*	119.86611	31.10038	Liuwu, Shuikou Township, Changxing County, Huzhou City, Zhejiang Province
52	*Brachystachyum densiflorum*	119.87045	31.18765	Shangba Village, Dingshu Town, Yixing, Wuxi City,Jiangsu Province
53	*Brachystachyum densiflorum*	119.87077	31.21778	Fudong Village,Yixing, Wuxi City,Jiangsu Province
54	*Brachystachyum densiflorum*	119.87449	31.32049	Linjia Village, Dingshu Town, Yixing, Wuxi City,Jiangsu Province
55	*Brachystachyum densiflorum*	119.87722	31.10442	Chenqiling Village, Shuikou Township, Changxing County, Huzhou City, Zhejiang Province
56	*Brachystachyum densiflorum*	119.87970	31.12146	Longshan Village, Jiapu Town, Changxing County, Huzhou City, Zhejiang Province
57	*Brachystachyum densiflorum*	119.88013	31.14832	Beichuan Village, Jiapu Town, Changxing County, Huzhou City, Zhejiang Province
58	*Brachystachyum densiflorum*	119.94039	31.14168	Xiangshan Village, Jiapu Town, Changxing County, Huzhou City, Zhejiang Province
59*	*Brachystachyum densiflorum*	117.53830	25.00886	Huaan County, Zhangzhou City, Fujian Province
60*	*Brachystachyum densiflorum*	114.51374	30.51200	Hubei Academy of Forestry, Wuhan City, Hubei Province
61*	*Brachystachyum densiflorum*	114.57207	28.55193	Xihe, Huanggang Town, Yifeng County, Yichun City, Jiangxi Province
62*	*Brachystachyum densiflorum*	114.62854	28.51962	Lijiaping,Huanggang Town, Yifeng County, Yichun City, Jiangxi Province
63*	*Brachystachyum densiflorum*	115.10744	29.26235	Zhaili, Shimenlou Town, Wuning County, Jiujiang City, Jiangxi Province
64*	*Brachystachyum densiflorum*	115.45340	29.58835	Qingshan Forestry Farm, Ruichang, Jiujiang City, Jiangxi Province
65*	*Brachystachyum densiflorum*	118.76637	28.00567	Xitoushan, Baoxi Township, Longquan, Zhejiang Province
66*	*Brachystachyum densiflorum*	118.86145	32.05974	Sun Yat-sen Mausoleum, Nanjing City, Jiangsu Province
67*	*Brachystachyum densiflorum*	119.06219	32.15528	Baohuashan, Zhenjiang, Nanjing City, Jiangsu Province
68*	*Brachystachyum densiflorum*	119.44917	31.25010	Huanggangling, Daibu Town, Liyang, Changzhou City, Jiangsu Province
69*	*Brachystachyum densiflorum*	119.67473	31.30946	Shanjuan Village, Yixing, Wuxi City, Jiangsu Province
70*	*Brachystachyum densiflorum*	119.81859	28.21943	Liandufengyuan, Lishui City, Zhejiang Province
71*	*Brachystachyum densiflorum*	119.87486	30.08784	Xinlian Village, Fuyang District, Hangzhou City, Zhejiang Province
72*	*Brachystachyum densiflorum*	120.10722	30.24302	Feilaifeng, Xihu District, Hangzhou City, Zhejiang Province
73*	*Brachystachyum densiflorum*	120.11749	30.26585	Lingfeng Hill,Xihu District, Hangzhou City, Zhejiang Province
74*	*Brachystachyum densiflorum*	120.12464	30.25978	Hangzhou Botanical Garden, Xihu District, Hangzhou City, Zhejiang Province
75*	*Brachystachyum densiflorum*	120.15064	30.26722	Baoshi Hill, Xihu District, Hangzhou City, Zhejiang Province
76*	*Brachystachyum densiflorum*	120.23341	31.52977	Huishan, Binhu District, Wuxi City, Jiangsu Province
77*	*Brachystachyum densiflorum*	120.29155	31.53464	Huishan, Binhu District, Wuxi City, Jiangsu Province
78*	*Brachystachyum densiflorum*	122.39001	29.98963	Putuo Hill, Putuo District, Zhoushan City, Zhejiang Province
79*	*Brachystachyum densiflorum*	110.60000	30.20000	Wufeng Tujia Autonomous County, Hubei Province
80*	*Brachystachyum densiflorum*	111.27000	30.70000	Xiling District, Yichang City, Hubei Province
81*	*Brachystachyum densiflorum*	115.35000	28.87000	Jingan County, Jiangxi Province
82*	*Brachystachyum densiflorum*	116.52573	27.21845	Nanfeng County, Jiangxi Province
83*	*Brachystachyum densiflorum*	118.13000	30.30000	Huangshan City, Anhui Province
84*	*Brachystachyum densiflorum*	118.79000	32.05000	Nanjing City, Jiangsu Province
85*	*Brachystachyum densiflorum*	119.05000	27.62000	Qingyuan County, Zhejiang Province
86*	*Brachystachyum densiflorum*	119.13000	28.08000	Longquan, Zhejiang Province
87*	*Brachystachyum densiflorum*	119.17000	31.95000	Jurong, Jiangsu Province
88*	*Brachystachyum densiflorum*	119.27000	28.60000	Suichang County, Zhejiang Province

附表 3 （续）

Appendix table 3 (continued)

No.	Species	Longitude (◦)	Latitude (◦)	Locality
89*	*Brachystachyum densiflorum*	119.67000	29.80000	Tonglu County, Zhejiang Province
90*	*Brachystachyum densiflorum*	119.68000	30.63000	Anji County, Zhejiang Province
91*	*Brachystachyum densiflorum*	119.82000	31.35000	Yixing, Jiangsu Province
92*	*Brachystachyum densiflorum*	119.82000	31.37000	Yixing, Jiangsu Province
93*	*Brachystachyum densiflorum*	119.91000	28.45000	Lishui City, Zhejiang Province
94*	*Brachystachyum densiflorum*	120.05258	29.16551	Zhejiang Province
95*	*Brachystachyum densiflorum*	120.17000	30.27000	Hangzhou City,Zhejiang Province
96*	*Brachystachyum densiflorum*	120.17297	30.27398	Hangzhou City,Zhejiang Province
97*	*Brachystachyum densiflorum*	120.25000	33.78000	Sheyang County, Jiangsu Province
98*	*Brachystachyum densiflorum*	122.30000	29.95000	Putuo District, Zhoushan City, Zhejiang Province
99#	*Brachystachyum densiflorum*	119.66723	30.59700	Anji Bamboo Expo Park, Anji, Huzhou City, Zhejiang Province
100#	*Brachystachyum densiflorum*	119.60398	30.27218	Taihuyuan Town, Lin'an District, Hangzhou City, Zhejiang Province
101#	*Brachystachyum densiflorum*	118.29374	32.28648	Langya Hill, Langya District, Chuzhou City, Anhui Province
102#	*Brachystachyum densiflorum*	118.64335	30.25012	Jiaotou Village, Qiaotou Township, Jixi County, Xuancheng City, Anhui Province
103#	*Brachystachyum densiflorum*	121.12587	29.74195	Lizhou, Simingshan Town, Yuyao, Ningbo City, Zhejiang Province
104#	*Brachystachyum densiflorum*	119.77319	28.18750	Dashanfeng, Dagangtou Town,Liandu District, Lishui City, Zhejiang Province
105#	*Brachystachyum densiflorum*	119.06508	32.06474	Tangshan, Jiangning District, Nanjing City, Jiangsu Province
106#	*Brachystachyum densiflorum*	117.49942	27.34647	Shaowu, Nanping City, Fujian Province
107#	*Brachystachyum densiflorum*	117.18260	26.90566	Taining County, Sanming City, Fujian Province
108#	*Brachystachyum densiflorum*	118.23866	25.65596	Daiyunshan, Chishui Town, Dehua County, Quanzhou City, Fujian Province
109#	*Brachystachyum densiflorum*	119.50663	30.13691	Baima Village, Wanshi Town, Fuyang District, Hangzhou City, Zhejiang Province
110#	*Brachystachyum densiflorum*	119.91473	30.17875	Kengxi Village, Yinhu Street, Fuyang District, Hangzhou City, Zhejiang Province
111#	*Brachystachyum densiflorum*	116.80000	29.96667	Dahaoshan, Pengze County, Jiujiang City, Jiangxi Province
112#	*Brachystachyum densiflorum*	118.60218	32.05628	Laoshan, Pukou District, Nanjing City, Jiangsu Province
113#	*Brachystachyum densiflorum*	117.46667	30.00417	Guniujiang, Dayan Township, Shitai County, Chizhou City, Anhui Province
114#	*Brachystachyum densiflorum*	119.40480	30.91390	Hengshan National Forestry Park, Guangde, Xuancheng City, Anhui Province
115#	*Brachystachyum densiflorum*	120.14228	30.22178	Siyanjing, Xihu District, Hangzhou City, Zhejiang Province
116#	*Brachystachyum densiflorum*	117.16972	31.83472	Shushan National Forestry Park, Shushan District, Hefei City, Anhui Province
117#	*Brachystachyum densiflorum*	112.81638	31.10892	Dakou Forestry Farm, Zhongxiang, Jingmen City, Hubei Province
118#	*Brachystachyum densiflorum*	113.03257	31.41574	Qijia Village, Lvlin Town, Jingshan County, Hubei Province
119#	*Brachystachyum densiflorum*	108.98680	29.51180	Pingbaying National Forestry Park, Xianfeng County, Shi'en, Hubei Province
120#	*Brachystachyum densiflorum*	120.02457	30.66433	Shangqiang Village, Dixi Town, Wuxing District, Huzhou City, Zhejiang Province
121#	*Brachystachyum densiflorum*	118.18333	30.16667	Mount Huang, Huangshan City, Anhui Province
122#	*Brachystachyum densiflorum*	119.46660	29.21404	Zhizhe Temple, Jinhuashan, Lanxi, Jinhua City, Zhejiang Province
123#	*Brachystachyum densiflorum*	118.78550	32.11542	Mufu Hill, Gulou District, Nanjing City, Jiangsu Province
124#	*Brachystachyum densiflorum*	118.85989	32.07610	Zijin Hill, Xuanwu District, Nanjing City, Jiangsu Province
125#	*Brachystachyum densiflorum*	119.33254	31.72664	Shijiashan, Jintan District, Changzhou City, Jiangsu Province
126#	*Brachystachyum densiflorum*	119.48220	31.21807	Huijia Village, Liyang, Changzhou City, Jiangsu Province
127#	*Brachystachyum densiflorum*	119.50082	31.27310	Longtan Forestry Farm, Liyang, Changzhou City, Jiangsu Province
128#	*Brachystachyum densiflorum*	119.70464	31.22265	Longchi Hill, Yixing, Wuxi City, Jiangsu Province
129#	*Brachystachyum densiflorum*	119.74066	31.24854	Xiaoheigou, Yixing, Wuxi City, Jiangsu Province
130#	*Brachystachyum densiflorum*	117.73333	29.68333	Tongkuang District, Dexing, Shangrao City, Jiangxi Province
131#	*Brachystachyum densiflorum*	117.73333	28.16667	Yongpingkuangqu, Hekou Town, Qianshan County, Shangrao City, Jiangxi Province
132#	*Brachystachyum densiflorum*	119.19615	32.12957	Kongqing Hill, Baorong, Zhenjiang City, Jiangsu Province

附表 3 （续）

Appendix table 3 (continued)

No.	Species	Longitude (◦)	Latitude (◦)	Locality
133#	*Brachystachyum densiflorum*	119.25470	34.65050	Jiulong Bridge, Huaguoshan, Haizhou District, Lianyungang City, Jiangsu Province
134#	*Brachystachyum densiflorum*	117.75000	29.56667	Liugujian, Hecheng Township, Xiuning County, Huangshan City, Anhui Province
135#	*Brachystachyum densiflorum*	113.82741	28.97467	Mubu Hill, Nanjiang Town, Yueyang City, Hunan Province
136#	*Brachystachyum densiflorum*	118.56057	30.72310	Caicun Town, Jing County, Xuancheng City, Anhui Province
137#	*Brachystachyum densiflorum*	119.90775	30.60552	Mogan Hill, Deqing County, Huzhou City, Zhejiang Province
138#	*Brachystachyum densiflorum*	118.88207	32.10619	Jubao Hill, Xuanwu District, Nanjing City, Jiangsu Province
139#	*Brachystachyum densiflorum*	119.82257	28.89824	Niutou Hill, Wuyi County, Jinhua City, Zhejiang Province
140#	*Brachystachyum densiflorum*	118.16161	29.26142	Gutian Hill, Suzhuang Town, Kaihua County, Quzhou City, Zhejiang Province
141#	*Brachystachyum densiflorum*	119.06949	27.62543	Qingyuan County, Lishui City, Zhejiang Province
142#	*Brachystachyum densiflorum*	120.39901	31.28823	Qionglong Hill, Guangfu Town, Wuzhong District, Suzhou City, Jiangsu Province
143#	*Brachystachyum densiflorum*	118.14761	30.27865	Shilishan, Huangshan District, Huangshan City, Anhui Province
144#	*Brachystachyum densiflorum*	119.23333	31.98333	Xiashu Forest ecological Positioning Station, Jurong County, Jiangsu Province
145#	*Brachystachyum densiflorum*	119.48854	28.45506	Songyang County, Lishui City, Zhejiang Province
146#	*Brachystachyum densiflorum*	119.67712	31.30390	Zhuling Village, Zhangzhu Town, Yixing, Wuxi City, Jiangsu Province
147#	*Brachystachyum densiflorum*	120.63851	31.26826	Dongshan, Wuzhong District, Suzhou City, Jiangsu Province
148#	*Brachystachyum densiflorum*	119.49725	30.20635	Tianmu Mountains, Lin'an District, Hangzhou City, Zhejiang Province
149#	*Brachystachyum densiflorum*	116.47512	30.72245	Tianshu Mountain, Qianshan, Anqing City, Anhui Province
150#	*Brachystachyum densiflorum*	118.49223	32.73797	Tieshan Temple, Yangying Township, Xuyi County, Huaian City, Jiangsu Province
151#	*Brachystachyum densiflorum*	120.58863	31.24408	Shangfang Hill, Huqiu District, Suzhou City, Jiangsu Province
152#	*Brachystachyum densiflorum*	119.01667	31.60000	Wuxiang Temple Forestry Park, Lishui District, Nanjing City, Jiangsu Province
153#	*Brachystachyum densiflorum*	118.55000	32.96667	Tieshan Temple, Yangying Township, Xuyi County, Huaian City, Jiangsu Province
154#	*Brachystachyum densiflorum*	120.05455	28.89420	Yongkang, Jinhua City, Zhejiang Province
155#	*Brachystachyum densiflorum*	119.23806	32.60944	Youizshan National Forestry Park, Gaochun District, Nanjing City, Jiangsu Province
156#	*Brachystachyum densiflorum*	121.38107	29.94727	Dayin, Yuyao, Ningbo City, Zhejiang Province
157#	*Brachystachyum densiflorum*	118.78592	32.00887	Yuhuatai Martyrs Memorial Park, Yuhuatai District, Nanjing City, Jiangsu Province
158#	*Brachystachyum densiflorum*	120.70000	27.55000	Yucangshan Scenic Spot, Qiaodun Town, Cangnan County, Wenzhou City, Zhejiang Province
159#	*Brachystachyum densiflorum*	119.47285	28.05177	Yunhe Terraced Fields National Wetland Park, Yunhe County, Lishui City, Zhejiang Province
160#	*Brachystachyum densiflorum*	119.65254	29.13424	North Hill, Chisong Town, Jindong Distrct, Jinhua City,Zhejiang Province
161#	*Brachystachyum densiflorum*	119.21612	27.93928	Fengyang Mountain, Longquan, Lishui City, Zhejiang Province
162#	*Brachystachyum densiflorum*	118.23333	29.33333	Gutian Mountain, Suzhuang Town, Kaihua County, Quzhou City, Zhejiang Province
163#	*Brachystachyum densiflorum*	120.30691	28.47262	Dayang Hill, Jinyun County, Lishui City, Zhejiang Province
164#	*Brachystachyum densiflorum*	119.73152	30.23981	Longtang Hill, Lin'an District, Hangzhou City, Zhejiang Province
165#	*Brachystachyum densiflorum*	120.45651	29.06010	Panan County, Jinhua City, Zhejiang Province
166#	*Brachystachyum densiflorum*	119.36667	28.33333	Ruoliaoxian Nature Reserve, Fengping Township, Songyang County, Lishui City, Zhejiang Province
167#	*Brachystachyum densiflorum*	121.01355	29.14951	Tiantai County, Taizhou City, Zhejiang Province
168#	*Brachystachyum densiflorum*	120.10293	29.69687	Wuxie Scenic Area, Wuxie Town, Zhuji, Shaoxing City, Zhejiang Province
169#	*Brachystachyum densiflorum*	120.75422	28.84754	Yong'an River, Xianju County, Zhejiang Province
170#	*Brachystachyum densiflorum*	120.91057	29.50554	Xinchang County, Shaoxing City, Zhejiang Province
171#	*Brachystachyum densiflorum*	119.04304	30.13598	Qingliang Hill, Lin'an District, Hangzhou City, Zhejiang Province
172#	*Brachystachyum densiflorum*	118.60965	32.10147	Maozi Hill, Pukou District, Nanjing City, Jiangsu Province
173#	*Brachystachyum densiflorum*	118.75020	31.90500	Niushou Hill, Jiangning District, Nanjing City, Jiangsu Province
174#	*Brachystachyum densiflorum*	118.97637	32.16387	Qixia Hill, Qixia District, Nanjing City, Jiangsu Province

Note: Information of localities 1-58 was from field investigation; *information of locality 59 was from National Specimen Information Infrastructure (NSII), information of localities 60-78 was from Chinese Virtual Herbarium (CVH), and information for localities 79-98 was from Global Biodiversity Information Facility (GBIF); # information of localities 99-174 was from literature that can be downloaded from China National Knowledge Infrastructure (CNKI) and references corresponding to these localities were listed as follows:

Locality No.	Reference title
99#	Study on chemical composition of culm and stem of 28 species of bamboo
100#	Relationship between nutrients of sheath blades and taste quality of bamboo shoots across 22 bamboo species from 6 genera
101#	Bamboo species and distribution in the east Anhui Province
102#	Bamboo species and distribution in Jixi County of Anhui Province
103#	Bamboo species and distribution in Jixi County of Anhui Province
104#	Current Situation and Countermeasure of Flower Industry in Zhejiang
105#	Eco-geographical distribution, biological characters of Brachystachyum Keng and its conservation
106#	Economic Bamboo Resources in Fujian Province
107#	A Study on the Flora of Bambusoideae and Its Development in Fujian Province
108#	Mechanism of drought resistance and the bamboo shoots law of special bamboo in Fujian Province
109#	Current Status of Bamboo Diversity and Strategies for Its Conservation and Utilization in Fuyang
110#	Current Status of Bamboo Diversity and Strategies for Its Conservation and Utilization in Fuyang
111#	Investigation of rare and endangered plants in Dahao Mountain Jiangxi
112#	Comparing the Effectiveness of Birdwatching to Line Transect for Biodiversity Surveys:A Case Study of Laoshan, Nanjing
113#	Investigation and evaluation of wild ornamental plant resources in Guniujiang
114#	The Current preservation Status and Construction Countermeasures of the National Forest Tree Germplasm Resource Bank in Guangde County
115#	Report on the species of Poaceae in Hangzhou
116#	Investigation and Research on the Resources of Hefei Shushan Forest Park
117#	Study on the flora of vascular plant and wild plant resources of South Dahong Mountain
118#	Study on the flora of vascular plant and wild plant resources of South Dahong Mountain
119#	Study on the Flora of Seed Plants in Hubei Pingbaying National Forest Park
120#	An old-growth community dominated by *Cinnamomum camphora* in Daixi Town of Huzhou City, China
121#	Vegetation of Mount Huang
122#	Landscape design of Sage Temple Scenic Spot in Jinhua Mountain based on health tourism
123#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
124#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
125#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
126#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
127#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
128#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
129#	Diversity, distribution, and conservation of rare and endangered plant species in Jiangsu Province
130#	The vegetation of Dexing Copper Mine Field in Jiangxi and their influences on environment
131#	Analysis of Vegetation Characteristics and Succession Patterns in Yongping Mining Area, Jiangxi Province
132#	Studies on community types and species diversity of secondary broad-leaved forests in Kongqing Mountain
133#	An investigation on Bamboo Species in Yuntai Mountain Scenery District of Lianyungang,Jiangsu Province
134#	The sustainable utilization and evaluation of plant resources in Liuqujian Nature Reserve
135#	The Floristic Phytogeography of Spermatophyte Flora in Luoxiao Range
136#	Effects of simulated nitrogen deposition on vegetation diversity and nutrient characteristics of Phyllostachys heterocycla cv. pubescens underforest vegetation
137#	Flora of Woody Plant in Mogan Mountain of Zhejiang Province
138#	Study on the niche of dominant population inJubaoshan Forest Park in Nanjing
139#	The floristic analysis of seed plant in Mt. Niutou National Forest
140#	Status and analysis of rare and endangered plant resources in Gutianshan of Qianjiangyuan National Park, East China
141#	Resources and classification of wild timber tree species in Qingyuan County
142#	Research on the evaluation of aromatic plant resources and the construction of health care landscape in Qionglongshan Forest Park
143#	Study of vegetation on Mt. Shili in Anhui Province
144#	Studies on structure and dynamics characteristics of *Quercus variabilis* population
145#	Analysis and development suggestions of forest biodiversity protection in Songyang County
146#	A study of the conservation planning for the rare and risk plant species in Jiangsu, Zhejiang and Anhui Provinces
147#	Investigation on wild plants resources and analysis of landscape utilization value in East Mountain of Tai Lake
148#	Research on the planning and design of Tianmushan rare Botanical Garden
149#	Investigation and research on vegetation and seed plant diversity of Tianzhu Mountain
150#	An investigation of vascular plants resources in Tieshansi National Forest Park
151#	Application of microhabitat construction method in the design of birds exhibition area of city zoo-a case study on the reconstruction design of bird exhibition area of Shnagfangshan Zoo in Suzhou
152#	Community characteristics of *Quercus acutissima* forest in Wuxiang Temple Forest Park
153#	Studies on flora of Tieshan Temple Nature Protection Area, Xuyi and plant resources
154#	Woody Plant Resources in Yongkang
155#	Community Characteristics of *Cunninghamia lanceolata* Plantation at Mt. Youzi National Forest Park
156#	Exploitation and utilization of bamboo resources in Yuyao of Zhejiang
157#	A study on spatial structure and scenic beauty estimation of plant landscape in Yuhuatai Martyrs Memorial Park
158#	Research on the optimization of forest plant landscape in Yucangshan Scenic Area
159#	Analysis of landscape forest resources in Yunhe Terrace National Wetland Park
160#	The plant resources of the Bei Mountain in Zhejiang Province and their development and utilization
161#	A floristic statistics and analyses of seed plants of Fengyangshan Nature Reserve in Zhejiang Province
162#	Spermatophyta flora of Gutianshan Nature Reserve in Zhejiang
163#	Resources of rare and precious plants of Lishui Ecological Demonstrative Area in Zhejiang Province
164#	A study on the floristic character of Mt. Longtangshan,Zhejiang Province
165#	Analysis on characteristics of Pan'an seed plants flora in Zhejiang Province
166#	The rare and endangered plants of Ruoliaoxian Nature Reserve and their basic characteristics
167#	Floristic analysis on seed plants of Tiantai County in Zhejiang Province
168#	Typical Plant Community Evaluation of Wuxie Scenic Spot in Zhejiang
169#	Current situation and management strategy of bamboo resources in Yong'an River Basin in Xianju County of Zhejiang Province
170#	Wild ornamental plant resources in Xinchang, Zhejiang
171#	Multi-dimensional diversity pattern and assembly mechanism of endangered plant communities in Zhejiang Qingliangfeng Reserve
172#	The natural distribution and characteristics of the rare and endangered plants in Jiangsu, China
173#	The natural distribution and characteristics of the rare and endangered plants in Jiangsu, China
174#	The natural distribution and characteristics of the rare and endangered plants in Jiangsu, China

附表4 要素类型与正则化乘数

Appendix table 4 The feature combinations and the regularization multipliers

FC	RM	Delta.AICc	AICc	tune.args	auc.train	cbi.train	auc.diff.avg	auc.diff.sd	auc.val.avg	auc.val.sd	cbi.val.avg	cbi.val.sd	or.10p.avg	or.10p.sd	or.mtp.avg	or.mtp.sd	w.AIC	ncoef
LQ	1	0	2137.5076	fc.LQ_rm.1	0.9187896	0.92	0.218968481	0.154620213	0.70460665	0.1644653	0.5815	0.0294901	0.0984615	0.0492948	0.0096154	0.0192308	0.9999308	9
LQ	2	19.1592173	2156.6668	fc.LQ_rm.2	0.9111361	0.906	0.216189803	0.14990684	0.702437465	0.1601654	0.53325	0.2049038	0.0884615	0.0474934	0.0096154	0.0192308	6.91E-05	8
LQH	3	32.0816429	2169.5892	fc.LQH_rm.3	0.9125995	0.924	0.208504495	0.134887324	0.710005106	0.1464621	0.54575	0.1143864	0.0784615	0.0536774	0.01	0.02	1.08E-07	12
LQH	4	39.77289319	2177.2805	fc.LQH_rm.4	0.9092688	0.91	0.21180646	0.141179297	0.702071582	0.1546972	0.46175	0.1969896	0.0784615	0.0536774	0	0	2.31E-09	11
LQH	5	40.65321414	2178.1608	fc.LQH_rm.5	0.9075124	0.905	0.215303461	0.146157523	0.696569649	0.1590545	0.56	0.2208212	0.0684615	0.065627	0	0	1.49E-09	10
LQ	3	47.41359264	2184.9212	fc.LQ_rm.3	0.9040866	0.898	0.211728731	0.139905497	0.701620996	0.1506335	0.526	0.1508111	0.0884615	0.0474934	0.0096154	0.0192308	5.06E-11	9
LQH	2	50.73454913	2188.2421	fc.LQH_rm.2	0.9194995	0.937	0.209129381	0.13652723	0.714575126	0.145314	0.44375	0.2844203	0.0984615	0.0369231	0.01	0.02	9.62E-12	19
LQ	4	54.44056456	2191.9481	fc.LQ_rm.4	0.8998361	0.893	0.210382558	0.141385969	0.698996217	0.1516278	0.4815	0.2242209	0.0884615	0.0474934	0.0096154	0.0192308	1.51E-12	7
LQ	5	58.97688877	2196.4845	fc.LQ_rm.5	0.8984589	0.889	0.213443637	0.146772463	0.694393113	0.1566887	0.55175	0.1223966	0.0784615	0.0536774	0.0096154	0.0192308	1.56E-13	7
H	3	69.11969461	2206.6273	fc.H_rm.3	0.918951	0.951	0.132238551	0.079656293	0.788403328	0.0693501	0.50775	0.2736937	0.0692308	0.0501516	0	0	9.79E-16	23
H	5	81.38206562	2218.8896	fc.H_rm.5	0.9125609	0.968	0.130741864	0.08608497	0.797121376	0.0940214	0.4595	0.3273708	0.0592308	0.0395138	0	0	2.13E-18	13
H	2	92.54191547	2230.0495	fc.H_rm.2	0.9212649	0.959	0.141335454	0.076465782	0.782638986	0.067267	0.57775	0.2748362	0.0692308	0.0501516	0.01	0.02	8.03E-21	33
H	4	96.81341865	2234.321	fc.H_rm.4	0.9156926	0.935	0.123591319	0.091112338	0.794147277	0.0787682	0.5115	0.3045056	0.0592308	0.0395138	0	0	9.49E-22	24
H	1	130.971882	2268.4795	fc.H_rm.1	0.9272134	0.977	0.140795385	0.057232408	0.789858503	0.0515729	0.65525	0.3137912	0.0884615	0.0662492	0.02	0.023094	3.63E-29	33
LQH	1	139.0239976	2276.5316	fc.LQH_rm.1	0.9295688	0.98	0.159020345	0.039733088	0.772427024	0.0420703	0.54775	0.232216	0.1184615	0.0301999	0.0292308	0.0369658	6.48E-31	44
L	5	1018.296362	3155.8039	fc.L_rm.5	0.8824678	0.956	0.224554945	0.147011115	0.669459782	0.1520988	0.3945	0.2455884	0.1069231	0.1377732	0.02	0.04	7.58E-222	5
L	4	1085.873541	3223.3811	fc.L_rm.4	0.8832797	0.951	0.227924746	0.146359755	0.667164176	0.1516969	0.39475	0.3110995	0.1069231	0.1377732	0.02	0.04	1.61E-236	6
L	3	1181.006197	3318.5138	fc.L_rm.3	0.8868361	0.956	0.235853509	0.152365044	0.662257068	0.155921	0.38925	0.2872402	0.1169231	0.1285697	0.02	0.04	3.53E-257	6
L	2	1267.184625	3404.6922	fc.L_rm.2	0.8890748	0.964	0.245327879	0.164231437	0.65543191	0.1655004	0.415	0.2557251	0.1169231	0.1285697	0.02	0.04	6.83E-276	7
L	1	1332.485951	3469.9935	fc.L_rm.1	0.8900856	0.965	0.254307125	0.177284074	0.648107427	0.1772799	0.359	0.27506	0.1269231	0.1219791	0.02	0.04	4.51E-290	7

附表5 分子方差分析

Appendix table 5 Analysis of molecular variance (AMOVA)

	Df	Sum Sq	Mean Sq	Sigma	Rate (%)
Between population	5	35446.78	7089.3566	17.22669	0.45
Between samples within population	30	206754.72	6891.8240	3064.57018	79.71
Within samples	36	27456.61	762.6836	762.6836	19.84
Total	71	269658.11	3798.0016	3844.48046	100.00

Current levels of gene flow in *Brachystachyum densiflorum*

	Source of migration					
Recipient of migration	AHGD	AHYX	AHHS	JSLY	JSYX	ZJCX
AHGD	0.8889	0.0221	0.0222	0.0222	0.0222	0.0223
AHYX	0.0256	0.8721	0.0255	0.0258	0.0255	0.0255
AHHS	0.0337	0.0337	0.8330	0.0331	0.0330	0.0335
JSLY	0.0369	0.0370	0.0370	0.8149	0.0371	0.0370
JSYX	0.0208	0.0212	0.0210	0.0207	0.8951	0.0213
ZJCX	0.0370	0.0367	0.0371	0.0374	0.0368	0.8149

附表6 地理和气候、气候、地理3组数据对短穗竹遗传结构影响对比

Appendix table 6 Comparison of the effects on the genetic structure of *Brachystachyum densiflorum* of three data sets: climate and geography, climate, geography

Factor	Df	R^2	R_{adj}^2
Climate	8	0.23332	0.00616
Geography	2	0.06196	0.00511
Climate + Geography	10	0.29137	0.00792
Climate | Geography	8		0.00281
Geography | Climate	2		0.00176

Individual climate: (0.00281/0.00792)*100=35.48%

Individual geography: (0.00176/0.00792)*100=22.22%

Climate & Geography: ((0.00792–0.00281–0.00176)/0.00792)*100=42.30%

Loadings of climate factors in RDA1 and RDA2 axes

Factor	RDA1	RDA2
Bio6	0.77989635	0.4557206
Bio2	0.75512569	0.1686344
Bio19	0.65903421	0.4171224
Bio11	0.6462801	0.6344097
Bio17	0.42329286	0.4828083
Bio15	0.32196423	0.5488604
Bio7	0.0990923	0.6700309
Bio8	0.02995758	0.4290794

Stepwise screening of independent factors using the *ordistep* function

Factor	Df	AIC	F	Pr (>F)	R_{adj}^2
Bio6	1	333.04	1.1008	0.005	0.0029
Bio19	1	333.91	1.0506	0.045	0.0044

附表7 适应性位点冗余分析和偏冗余分析

Appendix table 7 Redundancy analysis and partial redundancy analysis of adaptive loci

	BayeScan SNPs 98	RDA SNPs 170	LFMM SNPs 349	All outlier SNPs 544
Combined fractions				
F-temperature	0.044***	0.048***	0.005^{ns}	0.025***
F-precipitation	0.019***	0.020***	0.005***	0.012***
Individual fractions				
F-temperature | precipitation	0.037***	0.040***	0.006^{ns}	0.022***
F-precipitation | temperature	0.011***	0.013***	0.006**	0.009***
Total explained	0.056***	0.060***	0.013**	0.034***
Total confounded	0.008	0.007	0.001	0.003
Total unexplained	0.944	0.940	0.987	0.966
Total	1.000	1.000	1.000	1.000

数据为调整后的R^2值。 * P<0.01; *** P<0.001; ns 表示不显著

The data are the adjusted R^2 value. * P<0.01; *** P<0.001; ns indicates insignificance

附表8 8个气候因子及其重要性参数
Appendix table 8 Eight climate factors and their importance parameters

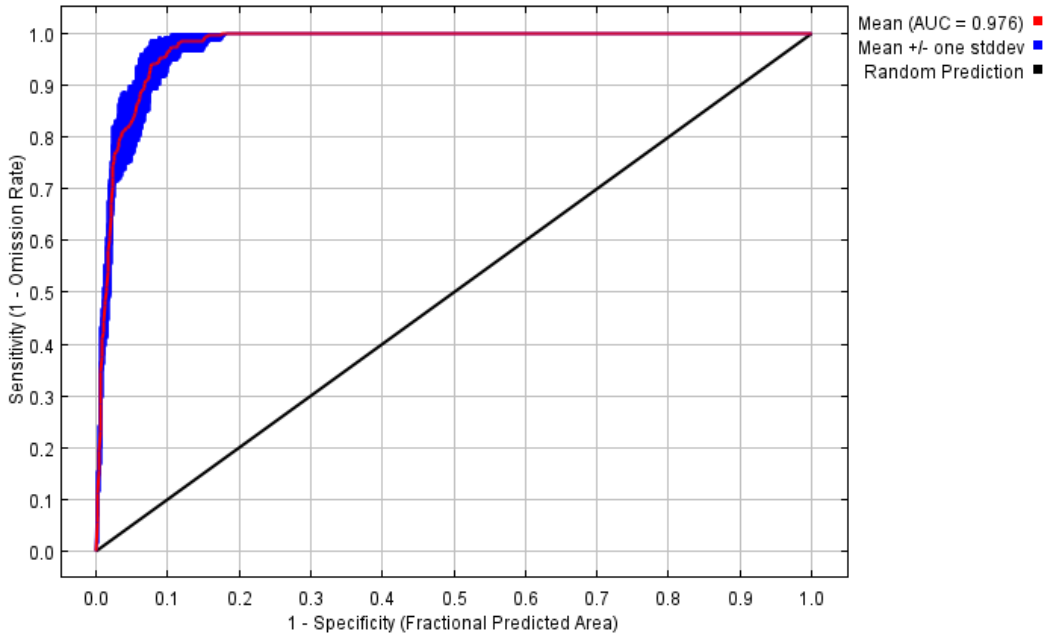
Factor	Contribution rate (%)	Important values (%)
Bio6	55.7	62
Bio15	25.2	2.9
Bio11	6.9	13.5
Bio19	6.6	18.5
Bio8	3.1	1.5
Bio17	1.8	0.6
Bio2	0.6	0.9
Bio7	0.1	0.1

附表9 不同时期短穗竹的潜在分布面积
Appendix table 9 The potential distribution area of *Brachystachyum densiflorum* under different periods

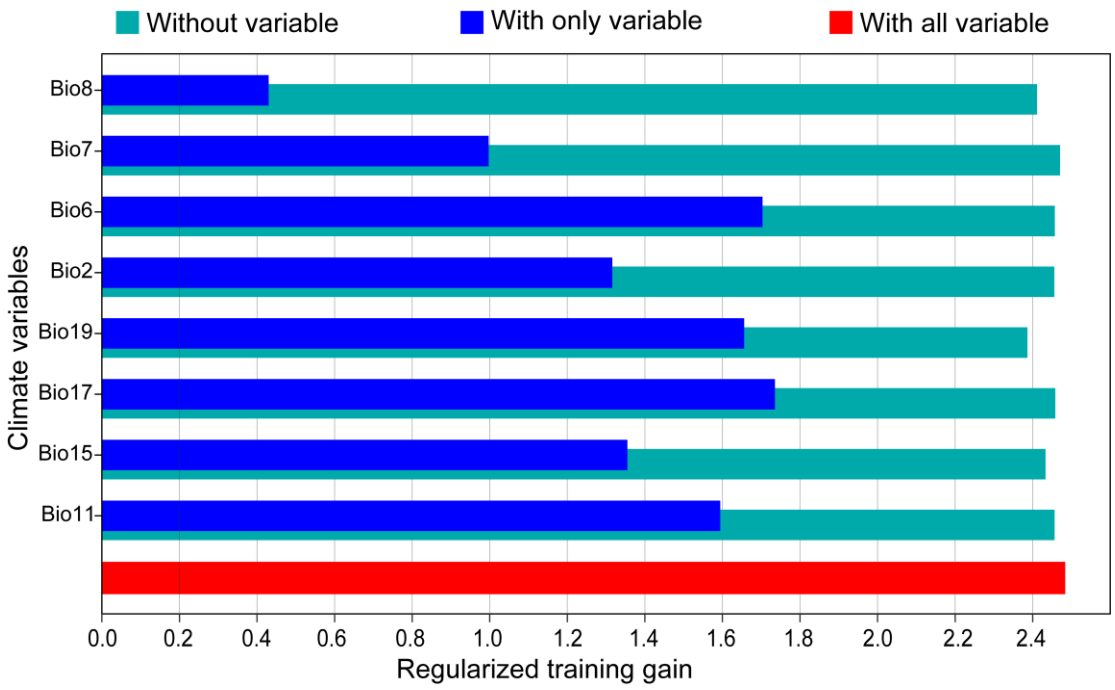
Area（×10^4 km^2）	Last Glacial Maximum	Mid Holocene	Current	2021-2040		2041-2060		2061-2080	
				SSP 1-2.6	SSP 5-8.5	SSP 1-2.6	SSP 5-8.5	SSP 1-2.6	SSP 5-8.5
Unsuitable areas	949.38	934.01	858.47	857.50	854.82	857.77	842.80	856.11	897.80
Low suitable areas	4.15	10.60	44.37	50.45	52.43	51.63	71.15	59.41	38.23
Medium suitable areas	3.33	8.34	37.83	31.38	32.79	31.64	30.47	30.64	18.49
High suitable areas	3.15	7.04	19.33	20.67	19.95	18.95	15.58	13.84	5.48
Suitable area	10.62	25.99	101.53	102.50	105.18	102.23	117.20	103.89	62.20



附图1 SNP转换与颠换统计
Appendix figure 1 Transition and transversion statistics of SNP



附图2 MaxEnt模型中的ROC预测
Appendix figure 2 Prediction of the ROC in the MaxEnt model



附图3 气候变量对短穗竹潜在分布模型的Jackknife检验得分
Appendix figure 3 Jackknife test scores of climate variables on potential distribution model of *Brachystachyum densiflorum*