

Appendix

Supplementary Table 1. Mean bimonthly air temperature (°C) and accumulated bimonthly precipitation (mm) during 2015-2019 at each experimental location ^a.

Location	2015				2016				2017				2018				2019										
	M	Ju	Se	No	Jan	Ma	M	Jul	Se	No	Ja	M	M	Jul	Se	No	Ja	Mar.	M	Jul	Se	No	Ja	M	M	Jul	
Anyang	20.8	25.4	18.7				12.6	23.3	26.8				11.6	24.2	27.0	18.4			24.7	28.3	17.2				11.1	25.3	27.8
Fuping	21.8	26.0	16.6				12.5	22.4	27.8				11.5	22.7	27.6	17.3			12.1	23.2	28.17				12.4	22.8	26.5
Huangzhong	11.9	16.1					12.3	15.3					12.0	15.2						12.7	16.9				11.1		14.6
Qingyangu	17.7	21.6	13.0				17.8	23.2	13.9				18.7	22.3	13.6				9.7	18.5	22.11				10.1	17.2	21.5
Tongliao	19.3	23.6	13.8				20.5	24.7	18.6				20.8	24.9	13.9					21.2	25.5				20.4		24.0
Mean bimonthly air temperature (°C)																											
Anyang	15.2	13.0					15.93	13.51					15.11	13.43	15.28	13.53			15.18	13.93	15.30				15.15	13.43	15.9
Fuping	12.7	6.6	13.2				12.1	6.99	13.56				12.70	6.17	13.10	13.22			13.74.8	6.10	13.10				12.56	6.79	14.14
Huangzhong	15.7	18.3					15.18	18.8					15.17	18.31					15.22.6	18.1.4	15.2.7				15.75	18.16	15.4
Qingyangu	11.9	11.0					11.52	11.10					11.37	11.17					11.66.7	11.13	11.20				11.65	11.15	11.3
Tongliao	12.1	19.6					12.17	13.16					12.23	13.54					12.9.7	13.3.9	12.16.6				12.16	13.17	12.18
Accumulated bimonthly precipitation (mm)																											
Anyang	2.7	6.6	56.2				23.2	13.1					23.4	13.4					44.7	5.5	7.5				2.6	4.4	9.8
Fuping	12.5	8.8	4.6				7.4	3.5	2.3				8.9	1.2	8.4	0.4			9.7	8.7	1.7				4.4	2.6	4.4
Huangzhong	7.9	5.5	92.1				18.3	18.1.8					17.8	17.8.6					19.4.5	19.1.4	19.2.7				19.18	15.75	15.4
Qingyangu	9.5	1.1	3.6				9.9	6.9	2.6				7.1	6.9					66.7	9.1.0	1.4				6.1	4.8.7	7.7
Tongliao	12.4	19.6					12.22	13.10					12.48	13.30					9.7	12.3.9	12.16.6				12.0.4	13.4.6	12.8

^a The meteorological data were obtained from a weather station located on-site, a local Meteorological Administration nearby, or the National Meteorological Information Centre of China (<http://data.cma.cn/>).

Supplementary Table 2. Mean bimonthly air temperature and accumulated bimonthly precipitation for the long-term average (1981-2010) at each location. The meteorological data were obtained from the National Meteorological Information Centre of China (<http://data.cma.cn/>).

Locations	30-year average ^a					
	Jan.-Feb.	Mar.-Apr.	May-Jun.	Jul.-Aug.	Sep.-Oct.	Nov.-Dec.
Mean bimonthly air temperature (°C)						
Anyang	0.5	11.2	23.7	26.0	17.9	3.8
Fuping	0.9	11.3	22.5	25.7	16.9	3.4
Huangzhong	-6.5	2.7	11.5	14.7	7.2	-3.8
Qingyang	-2.9	8.4	19.2	22.3	13.2	-0.4
Tongliao	-10.5	4.4	19.4	23.6	12.5	-6.5
Accumulated bimonthly precipitation (mm)						
Anyang	13.1	45.4	125.3	286.4	96.9	20.6
Fuping	15.4	55.0	102.8	180.3	131.4	23.7
Huangzhong	8.9	46.9	157.6	206.3	110.9	10.0
Qingyang	9.2	46.5	101.6	212.9	111.3	14.1
Tongliao	2.8	24.2	101.5	187.7	43.1	8.4