

**Straw incorporation increases crop yield and soil organic carbon sequestration but varies under different natural conditions and farming practices in China: a system analysis**

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**Table S1: The collected 68 publications used in this meta-analysis.**

No	Reference	Region	Coordinate	Duration (years)	MAT	MAP	Soil texture	Initial SOC (g kg <sup>-1</sup> )	Land use	Crop type	Crop frequency	Straw type	STC	NF	Yield
1	(Aiziguli-Mulati et al., 2012)	NWC	108.8° N, 35.13° E	5	13	600	Loam	10.21	U	W, M	D	Maize	0.62	330	Na
2-1	(Bi et al., 2009)	SC	116.17° N, 28.35° E	26	18.1	1727	Silt Loam	16.2	P	R	D	Rice	Na	140	Y
2-2	(Bi et al., 2009)	SC	116.17° N, 28.35° E	26	18.1	1727	Silt Loam	16.2	P	R	D	Rice	Na	140	Y
3	(Cai et al., 2011)	NWC	106.5° N, 34.25° E	10	10.5	538.2	loam	6.59	U	M	S	Maize	4.44	239	Y
4-1	(Cao et al., 1995)	SC	120.72° N, 31.59° E	3	16.7	1241	Clay	20.83	P-U	W, R	D	Rice	0.95	120	Y
4-2	(Cao et al., 1995)	SC	120.72° N, 31.59° E	3	16.7	1241	Clay	20.83	P-U	W, R	D	Rice	1.89	120	Y
5	(Chen et al., 2010)	SC	120.71° N, 31.56° E	12	16.7	1241	Clay	12.76	P-U	W, R	D	Rice-Wheat	0.92	300	Na
6-1	(Chen et al., 2009)	SC	113.15° N, 29.37° E	19	17.01	1568	Sandy loam	11.3	P	R	T	Rice	Na	0	Na
6-2	(Chen et al., 2009)	SC	112.56° N, 28.27° E	19	17.2	1553	Sandy loam	17.1	P	R	T	Rice	Na	0	Na
6-3	(Chen et al., 2009)	SC	112.16° N, 28.54° E	19	16.7	1681	Loam	19.4	P	R	T	Rice	Na	0	Na
7-1	(Dong et al., 2012)	NWC	102.6° N, 38.09° E	20	7.7	150	Loam	9.49	U	W, M	D	Wheat-Maize	3.53	0	Na
7-2	(Dong et al., 2012)	NWC	102.6° N, 38.09° E	20	7.7	150	Loam	9.49	U	W, M	D	Wheat-Maize	1.77	188	Na
8	(Dong et al., 2013)	NEC	124.24° N, 43.32° E	5	5.8	577	Clay	11.69	U	M	S	Maize	1.26	252	Na
9-1	(Fang et al., 2003)	NWC	110.12° N, 35.34° E	10	11.5	553	Silt Loam	6.38	U	W	S	Maize	1.26	165	Y
9-2	(Fang et al., 2003)	NWC	110.12° N, 35.34° E	10	11.5	553	Silt Loam	6.38	U	W	S	Wheat	2.52	165	Y
10-1	(Gao et al., 2012)	NC	115.05° N, 35.69° E	6	14.52	627.5	Sandy loam	8.93	U	W, M	D	Wheat-Maize	Na	450	Na
10-2	(Gao et al., 2012)	NC	115.05° N, 35.69° E	6	14.52	627.5	Sandy loam	8.93	U	W, M	D	Wheat	Na	450	Na
10-3	(Gao et al., 2012)	NC	115.05° N, 35.69° E	6	14.52	627.5	Sandy loam	8.93	U	W, M	D	Maize	Na	450	Na
11-1	(Gao et al., 2000)	SC	120.65° N, 31.86° E	12	15.2	1039.3	Clay	11.43	P-U	W, R	D	Rice-Wheat	3.52	338	Na
11-2	(Gao et al., 2000)	SC	120.65° N, 31.86° E	12	15.2	1039.3	Clay	11.43	P-U	W, R	D	Rice-Wheat	3.2	338	Na
12	(Gao, 2013)	NEC	126.37° N, 45.57° E	3	5	500	loam	12.65	U	M	S	Maize	3	0	Na
13	(Gao et al., 2011)	NEC	126.48° N, 43.97° E	16	5.6	562.8	Clay	13.14	U	M	S	Maize	Na	112	Y
14	(Gu et al., 2004)	NWC	108.08° N, 34.3° E	12	13	632	Silt Loam	6.4	U	W, M	D	Maize	2	312	Y
15-1	(Guan et al., 2014)	NWC	104.61° N, 35.57° E	11	6.4	390.9	Silt Loam	6.97	U	W	S	Multiple	Na	63	Na

15-2	(Guan et al., 2014)	NWC	104.61° N, 35.57° E	11	6.4	390.9	Silt Loam	6.97	U	W	S	Multiple	Na	63	Na
15-3	(Guan et al., 2014)	NWC	104.61° N, 35.57° E	11	6.4	390.9	Silt Loam	6.97	U	W	S	Multiple	Na	63	Na
15-4	(Guan et al., 2014)	NWC	104.61° N, 35.57° E	11	6.4	390.9	Silt Loam	6.97	U	W	S	Multiple	Na	63	Na
16-1	(Guo et al., 2003)	NC	115.23° N, 37.94° E	10	12	488	Loam	5.05	U	W, M	D	Wheat	1.53	150	Y
16-2	(Guo et al., 2003)	NC	115.23° N, 37.94° E	10	12	488	Loam	5.05	U	W, M	D	Wheat	1.87	150	Y
17	(Han et al., 2010)	NC	114.71° N, 37.9° E	7	12.5	480.7	Loam	9.3	U	W, M	D	Maize	Na	439	Na
18	(Hao et al., 2013)	NEC	126.92° N, 47.45° E	8	1.5	550	Clay	27.54	U	M	S	Multiple	4.81	150	Na
19	(He and Ni, 1996)	SC	119.18° N, 29.04° E	4	17.1	1602.6	Clay	23.2	P-U	W, R	T	Rice	2.2	414	Y
20	(Hou et al., 2004)	NEC	121.78° N, 42.15° E	4	8.1	502	Clay	20.8	U	M	S	Maize	3.33	375	Na
21	(Huang, 1984)	NC	116.8° N, 35.51° E	5	13.6	733	Clay	6.38	U	W, M	D	Wheat	3.08	318	Y
22-1	(Kong and He, 2003)	SC	116.94° N, 28.23° E	13	17.6	1788.8	Clay	3.72	U	R	D	Rice	1.26	88	Na
22-2	(Kong and He, 2003)	SC	116.94° N, 28.23° E	13	17.6	1788.8	Clay	3.72	U	R	D	Multiple	3.15	88	Na
23	(Li et al., 1999); (Li et al., 2007)	NC	115.72° N, 37.73° E	19	13	550	Clay	6.27	U	W, M	D	Wheat	0.6	0	Y
24-1	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	0	Na
24-2	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	360	Na
24-3	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	450	Na
24-4	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	540	Na
24-5	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	630	Na
24-6	(Li et al., 2014)	NC	116.56° N, 33.17° E	5	14.8	821	Clay	8.26	U	W, M	D	Wheat-Maize	4.1	720	Na
25	(Li et al., 2009)	SC	111.5° N, 28.92° E	6	16.8	1230	Loam	7.89	P-U	R, M	D	Rice	2.12	280	Y
26-1	(Li et al., 2006)	SC	113.15° N, 29.37° E	18	17.01	1568	Sandy loam	19.44	P-U	R	T	Rice	Na	0	Na
26-2	(Li et al., 2006)	SC	112.56° N, 28.27° E	18	17.2	1553	Sandy loam	17.05	P-U	R, M	T	Rice-Wheat	Na	0	Na
26-3	(Li et al., 2006)	SC	113.16° N, 27.72° E	18	17.6	1525	Clay	23.2	P-U	R	T	Rice	Na	0	Na
26-4	(Li et al., 2006)	SC	112.16° N, 28.54° E	18	16.7	1681	Clay	23.61	P-U	R, M	T	Rice-Wheat	Na	0	Na
26-5	(Li et al., 2006)	SC	112.16° N, 28.54° E	18	16.7	1419	Clay	32.08	P-U	R	T	Rice	Na	0	Na
27-1	(Li et al., 2015b)	NWC	108.6° N, 34.6° E	4	12.9	527	Clay	10.57	U	W, M	D	Wheat-Maize	Na	407	Na

27-2	(Li et al., 2015b)	NWC	108.6° N, 34.6° E	4	12.9	527	Clay	10.57	U	W, M	D	Wheat	Na	407	Na
27-3	(Li et al., 2015b)	NWC	108.6° N, 34.6° E	4	12.5	527	Clay	10.57	U	W, M	D	Maize	Na	407	Na
27-4	(Li et al., 2015b)	NWC	108.6° N, 34.6° E	4	12.5	527	Clay	10.57	U	W, M	D	Maize	Na	407	Na
28	(Li et al., 2015a)	NC	113.67° N, 34.79° E	24	14.4	640	Sandy loam	6.15	U	W, M	D	Wheat-Maize	Na	142	Na
29-1	(Liao et al., 1998)	SC	120.22° N, 33.43° E	5	15.7	1050	Clay	20.19	P-U	W, R	D	Rice	0.95	240	Y
29-2	(Liao et al., 1998)	SC	120.22° N, 33.43° E	5	15.7	1050	Clay	20.01	P-U	W, R	D	Rice	1.89	240	Y
29-3	(Liao et al., 2009)	SC	113.34° N, 28.62° E	27	17	1385	Silt Loam	20.13	P	R	D	Rice	0.71	230	Y
29-4	(Liao et al., 2009)	SC	113.34° N, 28.62° E	27	17	1385	Silt Loam	20.13	P	R	D	Rice	0.71	230	Y
30-1	(Lin et al., 1997)	SC	120.27° N, 30.27° E	3	14.8	1270	Clay	25.34	P-U	W, R	T	Rice	2.68	415	Y
30-2	(Lin et al., 1997)	SC	120.27° N, 30.27° E	3	14.8	1270	Clay	25.34	P-U	W, R	T	Rice-Wheat	2.76	415	Y
31	(Liu et al., 2013)	NWC	107.5° N, 35.27° E	30	9.8	540	Loam	6.2	U	W, M	S	Wheat-Maize	2.45	90	Na
32-1	(Liu et al., 2017)	SC	120.2° N, 30.3° E	4	16	1550	Clay	9.11	U	R	S	Wheat	Na	303	Y
32-2	(Liu et al., 2017)	SC	120.2° N, 30.3° E	4	16	1550	Clay	11.37	U	R	S	Wheat	Na	303	Y
33-1	(Liu et al., 2014)	SC	111.5° N, 28.92° E	21	17.2	1450	Clay	15	P	R	D	Rice	2.14	218	Y
33-2	(Liu et al., 2014)	SC	111.52° N, 29.24° E	21	17.2	1450	Clay	8.16	P-U	R, M	D	Rice	1.87	137	Y
33-3	(Liu et al., 2014)	SC	111.52° N, 29.24° E	21	17.2	1450	Clay	6.09	U	R	D	Rice	1.87	310	Na
34-1	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.31	0	Na
34-2	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.47	0	Na
34-3	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.85	0	Na
34-4	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	1.07	248	Na
34-5	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	1.79	248	Na
34-6	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	3.07	248	Na
34-7	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	2.05	248	Na
34-8	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	3.31	248	Na
34-9	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	6	6.5	450	Silt Loam	9.8	U	M	S	Maize	4.66	248	Na
34-10	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.31	0	Y
34-11	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.47	0	Y
34-12	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	0.85	0	Y
34-13	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	1.07	248	Y
34-14	2	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	1.79	248	Y
34-15	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	3.07	248	Y

34-16	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	2.05	248	Y
34-17	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	3.31	248	Y
34-18	(Lou et al., 2011)	NEC	119.47° N, 41.67° E	11	6.5	450	Silt Loam	9.8	U	M	S	Maize	4.66	248	Y
35	(Ma et al., 2008)	SC	120.26° N, 31.28° E	25	15.7	1094	Loam	14.04	P-U	W, R	D	Rice-Wheat	1.33	225	Na
36	(Ma et al., 1994)	SC	117.48° N, 32.95° E	4	15.5	1050	Clay	8.7	P-U	W, R	D	Rice	2.54	374	Na
37	(Mu, 2012)	NWC	106.42° N, 35.4° E	9	9.4	600	Loam	7.03	U	M	S	Maize	4.36	150	Y
38	(Pan et al., 2006)	SC	120.79° N, 31.1° E	17	16	1100	Loam	16.14	P-U	R	D	Rice	0.76	428	Y
39	(Peng, 2006)	NEC	126.48° N, 43.97° E	15	5.6	562.8	Clay	13.24	U	R, M	S	Maize	1.58	113	Y
40-1	(Shi et al., 2017a)	NC	113.1° N, 37.97° E	24	7.3	454.7	Loam	14.21	U	M	S	Maize	1.26	150	Y
40-2	(Shi et al., 2017a)	NC	113.1° N, 37.97° E	24	7.3	454.7	Loam	14.79	U	M	S	Maize	1.26	150	Y
41	(Shi et al., 2017b)	NC	115.02° N, 36.87° E	15	13.2	556	Loam	4.1	U	W, M	D	Wheat-Maize	Na	Na	Na
42	(Song et al., 2007)	NC	116.25° N, 40.21° E	12	12	592	Loam	7.43	U	W, M	D	Maize	1.34	300	Y
43-1	(Su et al., 2012)	NWC	100.35° N, 39.4° E	4	7.6	116.8	Silt Loam	3.7	U	M	S	Wheat	1.4	Na	Na
43-2	(Su et al., 2012)	NWC	100.35° N, 39.4° E	4	7.6	116.8	Silt Loam	3.7	U	M	S	Wheat	1.4	Na	Na
44-1	(Liao et al., 1998)	NWC	108.08° N, 34.3° E	25	13	632	Silt Loam	8.1	U	W, M	D	Maize	1.17	206	Na
44-2	(Liao et al., 1998)	NWC	108.08° N, 34.3° E	25	13	632	Silt Loam	8.1	U	W, M	D	Maize	2.33	206	Na
44-3	(Liao et al., 1998)	NWC	108.08° N, 34.3° E	25	13	632	Silt Loam	8.1	U	W, M	D	Maize	4.41	206	Na
45	(Sun et al., 2003)	NC	116.25° N, 40.21° E	12	12	592	Loam	7.14	U	W, M	D	Maize	1.34	300	Na
46-1	(Sun et al., 2007)	SC	120.68° N, 31.46° E	16	15.5	1038	Clay	19.78	P-U	W, R	D	Rice	0.95	180	Na
46-2	(Sun et al., 2007)	SC	120.68° N, 31.46° E	16	15.5	1038	Clay	19.78	P-U	W, R	D	Rice	1.89	180	Na
46-3	(Sun et al., 2007)	SC	116.15° N, 28.32° E	24	17.6	1795	Clay	16.19	P-U	R	D	Rice	1.89	204	Na
47-1	(Tan et al., 2007)	NC	111.64° N, 36.15° E	13	7.3	455	Loam	13	U	W	S	W	Na	Na	Y
47-2	(Tan et al., 2007)	NC	111.64° N, 36.15° E	13	7.3	454.7	Loam	13	U	W	S	W	Na	Na	Y
47-3	(Tan et al., 2007)	NC	115.23° N, 38° E	13	13	550	Clay	14	U	W, M	D	W	Na	Na	Y
47-4	(Tan et al., 2007)	NC	115.23° N, 38° E	13	13	550	Clay	14	U	W, M	D	W	Na	Na	Y
48-1	(Gao et al., 2006)	NWC	108.08° N, 34.3° E	25	12.9	632	Silt Loam	8.12	U	W, M	D	Maize	1.17	207	Y
48-2	(Gao et al., 2006)	NWC	108.08° N, 34.3° E	25	12.9	632	Silt Loam	8.12	U	W, M	D	Maize	2.33	207	Y
48-3	(Gao et al., 2006)	NWC	108.08° N, 34.3° E	25	12.9	632	Silt Loam	8.12	U	W, M	D	Maize	4.65	207	Y
49-1	(Wang et al., 1994)	SC	121.4° N, 30.9° E	15	17.6	1173.4	Clay	18.36	P-U	W, R	D	Rice-Wheat	1.24	0	Na
49-2	(Wang et al., 1994)	SC	121.4° N, 30.9° E	15	17.6	1173.4	Clay	18.36	P-U	W, R	D	Rice-Wheat	1.24	360	Na

50-1	(Wang et al., 2005)	SC	106.28° N, 30.02° E	8	18.4	1105.5	Sandy loam	14.79	P	R	S	Rice	3.14	0	Y
50-2	(Wang et al., 2005)	SC	106.28° N, 30.02° E	8	18.4	1105.5	Sandy loam	14.79	P	R	S	Rice	3.14	150	Y
50-3	(Wang et al., 2005)	SC	106.28° N, 30.02° E	8	18.4	1105.5	Sandy loam	14.79	P	R	S	Rice	3.14	150	Y
50-4	(Wang et al., 2005)	SC	106.28° N, 30.02° E	8	18.4	1105.5	Sandy loam	14.79	P	R	S	Rice	3.14	150	Y
50-5	(Wang et al., 2005)	SC	106.28° N, 30.02° E	8	18.4	1105.5	Sandy loam	14.79	P	R	S	Rice	3.14	150	Y
51	(Wang et al., 2003)	SC	120.22° N, 33.43° E	4	16	1100	Clay	15.92	P-U	W, R	D	Rice-Wheat	1.53	249	Y
52-1	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
52-2	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
52-3	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
52-4	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
52-5	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
52-6	(Wang et al., 2012)	NWC	109.59° N, 34.68° E	9	13	600	Loam	7.25	U	W, M	D	Wheat-Maize	Na	407	Na
53	(Wang et al., 2015)	SC	119.07° N, 26.74° E	32	19.5	1350	Loam	12.5	P	R	S	Rice	2.57	104	Y
54-1	(Wu et al., 2000)	SC	118.89° N, 28.98° E	15	17.3	1384	Loam	14.17	P-U	W, R	T	Rice	1.89	120	Y
54-2	(Wu et al., 2000)	SC	118.89° N, 28.98° E	10	17.3	1384	Clay	14.3	P-U	W, R	T	Rice	1.89	120	Y
54-3	(Wu et al., 2000)	SC	118.89° N, 28.98° E	3	17.3	1384	Clay	17	P-U	W, R	T	Rice	1.89	120	Y
55	(Xu et al., 2006b)	SC	111.88° N, 26.77° E	10	17.8	1250	Clay	7.9	U	W, M	D	Wheat-Maize	Na	300	Na
56-1	(Xu et al., 2006a)	NEC	126.48° N, 43.97° E	10	5.5	575	Clay	12.96	U	W, M	S	Wheat-Maize	Na	300	Na
56-2	(Xu et al., 2006a)	NWC	87.59° N, 43.83° E	10	6.7	205	Silt Loam	8.8	U	W, M	S	Maize	Na	300	Na
56-3	(Xu et al., 2006a)	NWC	111.52° N, 39.45° E	10	9.1	584	Loam	6.91	U	W, M	D	Wheat-Maize	Na	300	Na
56-4	(Xu et al., 2006a)	SC	111.88° N, 26.77° E	10	17.8	1250	Clay	10.21	U	W, M	D	Wheat-Maize	Na	300	Na
56-5	(Xu et al., 2006a)	NC	116.34° N, 39.97° E	10	12	592	Loam	7.96	U	W, M	D	Wheat-Maize	Na	300	Na
56-6	(Xu et al., 2006a)	NC	112.99° N, 34.92° E	10	14.5	603	Sandy loam	6.8	U	W, M	D	Wheat-Maize	Na	300	Na
57-1	(Xu, 2011)	SC	120.07° N, 30.11° E	13	16	1550	Clay	16.82	P-U	W, R	D	Rice-Wheat	1.23	0	Y
57-2	(Xu, 2011)	SC	120.07° N, 30.11° E	13	16	1550	Clay	16.82	P-U	W, R	D	Rice-Wheat	1.23	270	Y

58	(Xu et al., 2013)	SC	122.85° N, 26.8° E	15	17.8	1471	Loam	9.7	P	R	D	Rice	0.76	0	Na
59	(Yan et al., 2004)	NEC	123.58° N, 41.83° E	12	8	716.2	Loam	8.59	U	M	S	Maize	0.56	270	Y
60-1	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	1.63	U	W	D	Wheat	Na	0	Na
60-2	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	1.63	U	W	D	Wheat	Na	75	Na
60-3	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	1.63	U	W	D	Rice	Na	0	Na
60-4	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	1.63	U	W	D	Rice- Wheat	Na	0	Na
60-5	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Clay	3.25	U	W	D	Wheat	Na	0	Na
60-6	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Clay	3.25	U	W	D	Wheat	Na	75	Na
60-7	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Clay	3.25	U	W	D	Rice	Na	0	Na
60-8	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Clay	3.25	U	W	D	Rice- Wheat	Na	0	Na
60-9	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	2.27	U	W	D	Wheat	Na	0	Na
60-10	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	2.27	U	W	D	Wheat	Na	75	Na
60-11	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	2.27	U	W	D	Rice	Na	0	Na
60-12	(Yu et al., 2010)	SC	111.88° N, 26.77° E	25	17.8	1250	Sandy loam	2.27	U	W	D	Rice- Wheat	Na	0	Na
61	(Zeng and Liu, 1999)	SC	111.88° N, 26.77° E	16	17.8	1250	Clay	3.26	U	W	D	Wheat	Na	159	Na
62-1	(Zhang et al., 2007)	NC	119.56° N, 39.92° E	8	11	630	Loam	9.9	U	W, M	D	Wheat	1.8	475	Na
62-2	(Zhang et al., 2007)	NC	119.56° N, 39.92° E	8	11	630	Loam	9.9	U	W, M	D	Maize	1.87	475	Na
63-1	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	19	5.7	368.2	Loam	10.62	U	W	S	Wheat	1.14	129	Y
63-2	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	19	5.7	368.2	Loam	10.62	U	W	S	Wheat	2.17	129	Y
63-3	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	19	5.7	368.2	Loam	10.62	U	W	S	Wheat	1.09	129	Y
63-4	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	19	5.7	368.2	Loam	10.62	U	W	S	Wheat	1.95	129	Y
63-5	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	15	5.7	368.2	Loam	10.62	U	W	S	Wheat	2.25	129	Y
63-6	(Zhang et al., 2012)	NWC	102.1° N, 36.62° E	15	5.7	368.2	Loam	10.62	U	W	S	Wheat	2.15	129	Y
64-1	(Zhang, 1998)	NEC	127.54° N, 50.23° E	15	0.9	525	Loam	25.81	U	W	S	Wheat	0.68	0	Y
64-2	(Zhang, 1998)	NEC	127.54° N, 50.23° E	15	0.9	525	Loam	19.49	U	W	S	Wheat	0.68	38	Y
64-3	(Zhang, 1998)	NEC	127.54° N, 50.23° E	15	0.9	525	Loam	20.83	U	W	S	Wheat	0.68	75	Y
64-4	(Zhang, 1998)	NEC	127.54° N, 50.23° E	15	0.9	525	Loam	25.81	U	W	S	Wheat	0.68	150	Y
65	(Zhang et al., 2009)	SC	111.87° N, 26.75° E	16	17.8	1431	Clay	8.58	U	W, M	D	Wheat- Maize	0.82	300	Y
66-1	(Zhang et al., 2010); (Jiang et al., 2014)	NEC	126.48° N, 43.97° E	15	4.5	525	Clay	12.96	U	M	S	Maize	0.93	165	Na

66-2	(Zhang et al., 2010); (Jiang et al., 2014)	NWC	87.59° N, 43.83° E	15	7.7	310	Silt Loam	8.8	U	W, M	S	Maize	1.47	217	Na
66-3	(Zhang et al., 2010); (Jiang et al., 2014)	NC	116.34° N, 39.97° E	15	11	600	Loam	7.1	U	W, M	D	Wheat	1	150	Na
66-4	(Zhang et al., 2010); (Jiang et al., 2014)	NC	112.99° N, 34.92° E	15	14.3	632	Sandy loam	6.8	U	W, M	D	Wheat	1.32	170	Na
67-1	(Zhou et al., 2004)	NC	112.77° N, 37.54° E	10	7.3	454.7	Loam	15.72	U	M	S	Maize	1.26	150	Y
67-2	(Zhou et al., 2004)	NC	112.77° N, 37.54° E	10	7.3	454.7	Loam	15.72	U	M	S	Maize	1.26	150	Y
67-3	(Zhou et al., 2004)	NC	112.77° N, 37.54° E	10	7.3	454.7	Loam	15.72	U	M	S	Maize	1.26	150	Y
67-4	(Zhou et al., 2004)	NC	112.77° N, 37.54° E	10	7.3	454.7	Loam	15.72	U	M	S	Maize	1.26	150	Y
68-1	(Zhou and Wang, 2003)	NWC	88.38° N, 44.92° E	9	6.9	153	Silt Loam	4.47	U	W	S	Wheat	0.29	150	Y
68-2	(Zhou and Wang, 2003)	NWC	88.38° N, 44.92° E	9	6.9	153	Silt Loam	4.47	U	W	S	Wheat	0.57	150	Y
68-3	(Zhou and Wang, 2003)	NWC	88.38° N, 44.92° E	15	6.9	153	Silt Loam	4.47	U	W	S	Wheat	0.21	150	Y
68-4	(Zhou and Wang, 2003)	NWC	88.38° N, 44.92° E	20	6.9	153	Silt Loam	4.47	U	W	S	Wheat	0.57	150	Y

Region: NEC: Northeast China; NC: North China; NWC: Northwest China; SC: South China;

MAT: Mean annual temperature (°C);

MAP: Mean annual precipitation (mm);

Land use: U: Upland soils; P: Paddy soils; P-U: Paddy-Upland soils;

Crop type: W: wheat; M: maize; R: rice;

Crop frequency (season yr<sup>-1</sup>): S: single cropping; D: double cropping; T: triple cropping;

STC: Straw-C input rate (Mg C ha<sup>-1</sup> yr<sup>-1</sup>);

NF: N fertilizer input rate (kg N ha<sup>-1</sup> yr<sup>-1</sup>);

Y: yes; Na: no;



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