

Supplementary material 1. Sample information

Sample number	WA^a (%)	DDT^b (min)	DS^c (min)	DOS^d (BU)	Way of collecting	Locations
1	59.9	3.0	3.0	181	supermarket	Hebei
2	57.5	3.0	2.1	231	rural mill	Henan
3	66.5	9.5	19.0	17	supermarket	Henan
4	58.4	1.9	6.9	100	supermarket	Henan
5	60.1	3.7	2.3	174	supermarket	Henan
6	58.2	7.6	9.1	96	supermarket	Sichuan
7	58.4	5.4	6.9	113	supermarket	Sichuan
8	63.4	3.8	4.9	109	supermarket	Chongqing
9	56.2	3.2	2.5	188	rural mill	Sichuan
10	60.5	8.6	13.4	151	supermarket	Sichuan
11	60.0	5.0	5.7	76	supermarket	Sichuan
12	59.0	3.0	4.2	60	supermarket	Sichuan
13	57.6	6.7	7.3	81	supermarket	Sichuan
14	57.6	8.3	11.0	154	supermarket	Zhejiang
15	62.3	2.8	2.0	195	supermarket	Zhejiang
16	59.9	2.2	6.6	77	supermarket	Guangdong
17	58.8	5.2	5.2	126	supermarket	Chongqing
18	59.3	4.2	7.9	95	supermarket	Chongqing
19	56.6	3.2	10.6	54	supermarket	Sichuan
20	62.8	2.4	8.0	65	supermarket	Sichuan
21	58.4	2.5	7.8	64	rural mill	Sichuan
22	59.7	3.0	1.6	208	rural mill	Henan
23	58.5	2.7	2.1	205	rural mill	Inner Mongol
24	59.6	2.8	4.3	132	supermarket	Inner Mongol
25	58.8	3.2	2.8	163	supermarket	Inner Mongol
26	55.6	1.5	5.8	85	supermarket	Inner Mongol

27	54.6	1.2	0.8	174	rural mill	Inner Mongol
28	59.0	3.3	2.2	195	supermarket	Chongqing
29	57.6	4.7	7.3	113	supermarket	Chongqing
30	58.2	7.0	5.6	161	supermarket	Chongqing
31	59.7	1.8	2.7	139	supermarket	Henan
32	58.3	4.3	4.0	159	supermarket	Henan
33	61.4	2.5	9.2	75	supermarket	Anhui
34	54.7	1.8	3.3	119	supermarket	Henan
35	56.3	3.0	3.4	137	supermarket	Sichuan
36	58.2	3.5	4.5	112	supermarket	Sichuan
37	60.4	3.9	2.4	175	rural mill	Sichuan
38	63.4	1.4	0.7	232	supermarket	Sichuan
39	60.2	1.9	1.3	193	supermarket	Sichuan
40	58.8	3.5	5.0	147	rural mill	Sichuan
41	60.8	3.7	2.6	173	rural mill	Sichuan
42	60.9	3.5	2.2	141	rural mill	Hebei
43	57.8	1.9	3.9	166	rural mill	Hebei
44	57.9	3.9	5.7	76	supermarket	Hebei
45	59.6	2.7	2.2	150	supermarket	Guizhou
46	62.7	3.5	2.4	199	supermarket	Jilin
47	61.5	3.5	2.1	194	rural mill	Inner Mongol
48	63.6	2.5	1.4	264	supermarket	Inner Mongol
49	62.1	3.2	2.1	180	supermarket	Inner Mongol
50	59.5	2.7	3.1	221	supermarket	Guizhou
51	55.1	3.4	3.2	145	supermarket	Sichuan
52	52.5	3.3	4.3	206	rural mill	Sichuan
53	61.5	5.2	4.4	172	supermarket	Sichuan
54	65.4	4.0	3.9	164	supermarket	Shandong

55	61.05	4.4	3.8	180	supermarket	Shandong
56	60.1	3.4	2.2	163	rural mill	Shandong
57	58.9	1.4	4.6	100	supermarket	Shandong
58	61.05	3.4	3.5	195	supermarket	Henan
59	64.1	4.4	7.0	132	rural mill	Henan
60	63.5	1.4	1.5	158	supermarket	Chongqing
61	65.2	2.2	1.9	208	rural mill	Guizhou
62	64.5	3.0.	3.9	179	supermarket	Jiangsu
63	59.4	4.9	4.1	157	supermarket	Jiangsu
64	59.8	4.2	3.7	184	supermarket	Chongqing
65	58.4	3.8	3.7	176	supermarket	Jiangsu
66	61.7	3.4	4.2	197	rural mill	Hebei
67	56.7	5.2	8.3	137	rural mill	Shandong
68	59.4	5.4	5.2	156	rural mill	Anhui
69	61.1	3.6	2.8	162	supermarket	Jiangsu
70	63.8	5.4	2.6	191	supermarket	Guizhou
71	62.2	3.2	2.9	207	supermarket	Jiangsu
72	59.3	5.6	6.9	132	supermarket	Hebei
73	63.4	4.2	5.1	106	supermarket	Anhui
74	58.2	6.0	8.4	114	rural mill	Hebei
75	61.4	2.6	4.7	146	rural mill	Hebei
76	60.8	2.6	2.9	190	supermarket	Jiangsu
77	62.8	2.2	3.6	191	supermarket	Jiangsu
78	61.5	4.0	6.0	106	rural mill	Anhui
79	59.9	4.2	4.4	164	supermarket	Anhui
80	60.3	4.6	4.3	164.5	supermarket	Jiangsu
81	59.6	4.8	4.1	126	supermarket	Shandong
82	59.8	5.2	4.6	134	rural mill	Anhui

83	60.7	7.0	80	74	supermarket	Hebei
84	59.5	4.6	4.4	158	supermarket	Shandong
85	58.9	4.0	4.4	205	supermarket	Hebei
86	60.3	0.8	2.2	93	rural mill	Anhui
87	63.0	4.8	4.6	150	rural mill	Hebei
88	61.1	7.2	16.2	38	rural mill	Anhui
89	63.6	4.6	5.5	141	rural mill	Hebei
90	62.6	2.6	3.9	188	rural mill	Shandong
91	60.2	5.0	5.3	131	supermarket	Anhui
92	58.9	3.8	5.3	148	supermarket	Shandong
93	60.7	5.4	3.1	141	rural mill	Chongqing
94	63.5	3.6	4.5	177	rural mill	Anhui
95	64.0	5.4	6.9	84	supermarket	Shandong
96	65.2	6.0	3.8	155	rural mill	Jiangsu

^aWA, water absorption; ^bDDT, dough development time; ^cDS, dough stability; ^dDOS, degree of softening.