

Table 1 Forty-eight collected non-heading Chinese cabbage germplasm resources

Ordinal	Code	Varieties name	Collection data	Origin
1	2017332064	Non-heading Chinese cabbage	20170831	Hangzhou Jiande
2	2017333083	Savoying pak-choi	20170919	Ningbo Ninghai
3	2017334089	Zhongjiaobai	20170929	Ningbo Fenghua
4	2018331414	Non-heading Chinese cabbage	20180831	Jiaxing Tongxiang
5	2018331433	Changgeng Non-heading Chinese cabbage	20180831	Jiaxing Tongxiang
6	2018331435	Changgeng Non-heading Chinese cabbage	20180831	Jiaxing Tongxiang
7	2018332060	Laobaicai	20180615	Lishui Jingning
8	2018332083	Zisong	20180615	Lishui Jingning
9	2018332235	Non-heading Chinese cabbage	20180829	Lishui Qingyuan
10	2018332414	Yuangeng Non-heading Chinese cabbage	20180829	Quzhou Kaihua
11	2018332425	Non-heading Chinese cabbage	20180829	Quzhou Kaihua
12	2018332459	Black Non-heading Chinese cabbage	20180829	Quzhou Kaihua
13	2018333252	Non-heading Chinese cabbage	20180816	Quzhou Qujiang
14	2018334168	Youdonger	20181121	Shaoxing Zhuji
15	2018335022	Siyueqing	20180820	Zhoushan Dinghai
16	p330127053	Lao Savoying pak-choi	20180806	Hangzhou Chunan
17	p330127054	Lao Non-heading Chinese cabbage	20180806	Hangzhou Chunan
18	p330127069	Dongdongqing	20170922	Hangzhou Chunan
19	p330226003	Zhong Non-heading Chinese cabbage	20171113	Ningbo Ninghai
20	p330683026	Youdonger	20180612	Shaoxing Shengzhou
21	p330683035	Gaojiaobai	20180620	Shaoxing Shengzhou
22	p330781019	Lanxi Gaojiaobai	20180702	Jinhua Lanxi
23	p330783003	Non-heading Chinese cabbage	20170606	Jinhua Dongyang
24	2018331442	Changgeng Non-heading Chinese cabbage	20180831	Jiaxing Tongxiang
25	p330111055	Changgeng Non-heading Chinese cabbage	20180530	Hangzhou Fuyang
26	p330127091	Sanyueqing	20180806	Hangzhou Chunan
27	p330424016	Black Non-heading Chinese cabbage	20180620	Jiaxing Haiyan
28	p330822007	Gaogan Non-heading Chinese cabbage	20180115	Qushan Changshan
29	p330822020	Changshan Savoying pak-choi	20180619	Qushan Changshan
30	p330483024	Changgeng Non-heading Chinese cabbage	20180801	Jiaxing Tongxiang
31	2018331282	Zhouwencai	20180930	Huzhou Changxing
32	2018331283	Longxucai	20180930	Huzhou Changxing
33	2018331272	Siyueqing	20180930	Huzhou Changxing
34	2018331273	Aijiaobai	20180930	Huzhou Changxing
35	2018331445	Changgeng Non-heading Chinese cabbage	20181026	Jiaxing Tongxiang
36	2018331464	Aijiao Non-heading Chinese cabbage	20181026	Jiaxing Tongxiang
37	2018335006	Heiyoutong	20180925	Zhoushan
38	p331125014	Shenzhuang Non-heading Chinese cabbage	20181130	Lishui Yunhe
39	p330824025	Savoying pak-choi	20181122	Quzhou Kaihua
40	2018334183	Pak-choi rape	20181113	Shaoxing Zhuji
41	2018332415	Can Non-heading Chinese cabbage	20180829	Quzhou Kaihua
42	2018334475	Yangshetou Non-heading Chinese cabbage	20181130	Hangzhou Linan
43	2018332079	Xiaobaye	20180615	Lishui Jingning
44	2019335015	Eryueqing	20190106	Zhoushan Shengsi
45	2019335013	Siyueman	20190106	Zhoushan Shengsi
46	2019333672	Non-heading Chinese cabbage	20190612	Taizhou Huangyan
47	p330502014	Xiuhujin	20190614	Huzhou Wuxing
48	2018331449	Chaozhoucai	20190618	Jiaxing Tongxiang