

Table S1 Year of release and pedigree of seven weak-winter-type and six semi-winter-type wheat cultivars planted in the Yangtze River basin, China.

| Type ^a | Cultivar | Year of release | Pedigree |
|-------------------|---------------|-----------------|--|
| Weak-winter | Annong 1124 | 2016 | 02P67/Annong 95081-8 |
| | Sumai 188 | 2012 | Selection from Yangfumai 2 |
| | Yangmai 23 | 2013 | Yangmai 16/Yangfu 93-11 |
| | Yangmai 20 | 2010 | Yangmai 10/Yangmai 9 |
| | Ningmai 13 | 2006 | Selection from Ningmai 9 |
| | Haomai 1 | 2013 | W 4062/Zhengnong 11 |
| | Yangmai 16 | 2004 | Yang 91F138×Yang 90-30 |
| Semi-winter | Zhengmai 9023 | 2003 | {(Xiaoyan 6×Xinong 65)×[83(2)3-3×84(14)43]}F3×Shan 213 |
| | Emai 596 | 2009 | Zhengmai 9023/Emai 12/Fengyou 7 |
| | Annong 0711 | 2014 | Yannong 19/Annong 0016 |
| | Emai 580 | 2012 | Taigu genic male sterile/957565 |
| | Huaimai 35 | 2013 | Zhoumai 13/Xinmai 9 |
| | Jimai 22 | 2006 | 935024/935106 |

^a Weak-winter and semi-winter types of cultivars were bred in the southern and northern Yangtze River basin, respectively.