**Table S2: Sequenced *Ustilago maydis* strains.**

|  |  |  |
| --- | --- | --- |
| **Number** | **Strain name** | **Place of origin** |
| 1 | Um\_100 | Yangzhou, Jiangsu ,China |
| 2 | Um\_101 | Yangzhou, Jiangsu ,China |
| 3 | Um\_120 | Beijing, Beijing, China |
| 4 | Um\_121 | Beijing, Beijing, China |
| 5 | Um\_142 | Chengdu, Sichuan, China |
| 6 | Um\_143 | Chengdu, Sichuan, China |
| 7 | Um\_149 | Gongzhuling, Jilin, China |
| 8 | Um\_150 | Gongzhuling, Jilin, China |
| 9 | Um\_107 | Hohhot, Inner Mongolia, China |
| 10 | Um\_110 | Hohhot, Inner Mongolia, China |
| 11 | Um\_111 | Handan, Heibei, China |
| 12 | Um\_112 | Handan, Heibei, China |
| 13 | Um\_113 | Zhenzhou, Heinan, China |
| 14 | Um\_114 | Zhenzhou, Heinan, China |
| 15 | Um\_128 | Shenyang, Liaoning, China |
| 16 | Um\_130 | Shenyang, Liaoning, China |
| 17 | Um\_131 | Shenyang, Liaoning, China |
| 18 | Um\_134 | Yangling, Shaanxi, China |
| 19 | Um\_135 | Yangling, Shaanxi, China |
| 20 | Um\_157 | Taian, Shandong, China |
| 21 | Um\_158 | Taian, Shandong, China |
| 22 | Um\_159 | Taian, Shandong, China |
| 23 | Um\_45 | Germany |
| 24 | Um\_48 | Germany |
| 25 | Um\_52 | Luxembourg |
| 26 | Um\_55 | Luxembourg |
| 27 | Um\_57 | Belarus |
| 28 | Um\_58 | Belarus |