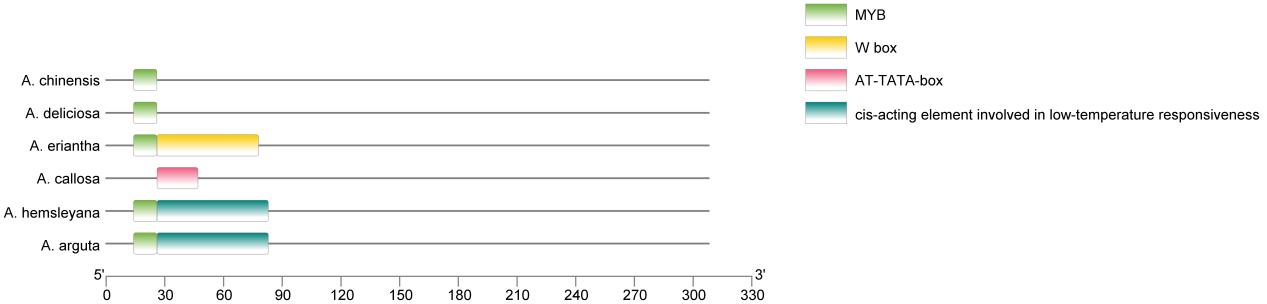
**Table S1.** Selected mature *A. chinensis chinensis* and *A. chinensis deliciosa* individuals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Number** | **Sample name** | **Location** | **Species** | **Sex** | **Source of materials** |
| 1 | 03099 | 12-12-19C | *A. chinensis chinensis* | female | Wild material；--- |
| 2 | 04001 | 12-12-17I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 3 | 03192 | 12-12-16B | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 4 | 03126 | 12-12-14F | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 5 | 03123 | 12-12-12B | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 6 | 03118 | 12-12-10C | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 7 | 03112 | 12-12-8I | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 8 | 03111 | 12-12-7H | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 9 | 03109 | 12-12-6E | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 10 | 03109 | 12-12-6A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 11 | 03102 | 12-12-4J | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 12 | 03101 | 12-12-3A | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 13 | 03006 | 12-11-3A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 14 | 03006 | 12-11-3C | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 15 | 03124 | 12-11-4A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 16 | 03107 | 12-11-6D | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 17 | 03075 | 12-11-11D | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 18 | 03075 | 12-11-11H | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 19 | 03085 | 12-11-12B | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 20 | 03087 | 12-11-13A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 21 | 03090 | 12-11-14A | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 22 | 03091 | 12-11-15B | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 23 | 03091 | 12-11-15I | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 24 | 03056 | 12-11-17A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 25 | 04281 | 12-10-15D | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 26 | 04266 | 12-10-12H | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 27 | 04262 | 12-10-9I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 28 | 04081 | 12-10-9A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 29 | 04260 | 12-10-7A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 30 | 04257 | 12-10-5I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 31 | 04256 | 12-10-4F | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 32 | 04255 | 12-10-3A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 33 | 04216 | 12-9-3A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 34 | 04277 | 12-9-5A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 35 | 04229 | 12-9-6A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 36 | 04247 | 12-9-14A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 37 | 04247 | 12-9-14F | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 38 | 04250 | 12-9-16D | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 39 | 03058 | 12-9-17A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 40 | 04197 | 12-8-17B | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 41 | 04195 | 12-8-16C | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 42 | 04194 | 12-8-15I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 43 | 04193 | 12-8-14C | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 44 | 04191 | 12-8-12I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 45 | 04191 | 12-8-12B | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 46 | 04190 | 12-8-11D | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 47 | 04185 | 12-8-7I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 48 | 04181 | 12-8-5I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 49 | 04176 | 12-8-4E | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 50 | 04136 | 12-7-3C | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 51 | 04139 | 12-7-5D | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 52 | 04143 | 12-7-6A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 53 | 04144 | 12-7-7A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 54 | 04144 | 12-7-7F | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 55 | 04148 | 12-7-8E | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 56 | 04157 | 12-7-9E | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 57 | 04163 | 12-7-11I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 58 | 04165 | 12-7-13C | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 59 | 04166 | 12-7-14J | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 60 | 04168 | 12-7-16A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 61 | 03006 | 12-7-17A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 62 | 03057 | 12-6-17D | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 63 | 04126 | 12-6-16D | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 64 | 04119 | 12-6-13A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 65 | 04020 | 12-13-02I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 66 | 04036 | 12-13-08A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 67 | 04039 | 12-13-9H | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 68 | 04046 | 12-13-10A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 69 | 04056 | 12-13-11I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 70 | 04059 | 12-13-13D | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 71 | 04065 | 12-13-16B | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 72 | 04115 | 12-14-16A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 73 | 04113 | 12-14-14I | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 74 | 04105 | 12-14-13D | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 75 | 04105 | 12-14-13A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 76 | 04096 | 12-14-11I | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 77 | 04095 | 12-14-10H | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 78 | 04093 | 12-14-9H | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 79 | 04090 | 12-14-8B | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 80 | 04087 | 12-14-7F | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 81 | 03125 | 12-15-5H | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 82 | HNXX-CK-03037 | 12-04-03A | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 83 | HNXX-CK-03040 | 12-04-04B | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 84 | JXWL-CK-04006-OP13 | 12-04-05E | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 85 | JXWL-CK-04007-OP08 | 12-04-06A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 86 | JXXS-CK-04058-OP01 | 12-05-04A | *A. chinensis chinensis* | female | Wild material; Jiangxi Province, China |
| 87 | HNXX-CK-03024 | 12-05-04H | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 88 | JXXS-CK-04059-OP01 | 12-05-05B | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 89 | --- | 12-05-06A | *A. chinensis chinensis* | female | Wild material;--- |
| 90 | --- | 12-05-08J | *A. chinensis chinensis* | male | Wild material;--- |
| 91 | --- | 12-05-09C | *A. chinensis chinensis* | female | Wild material;--- |
| 92 | HNNX-CK-03095 | 12-05-09E | *A. chinensis chinensis* | male | Wild material; Henan Province, China |
| 93 | HNNX-CK-03086 | 12-05-10C | *A. chinensis chinensis* | female | Wild material; Henan Province, China |
| 94 | JXXS-CK-04079-OP04 | 12-05-14D | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 95 | JXXS-CK-04083-OP02 | 12-05-16A | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 96 | JXXS-CK-04085-OP03 | 12-05-17C | *A. chinensis chinensis* | male | Wild material; Jiangxi Province, China |
| 97 | WS-DA-49 | 14-07-18A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 98 | TJ-DA-88 | 14-08-01B | *A. chinensis deliciosa* | female | Wild material; Tongjiang County, Sichuan Province, China |
| 99 | Ckou-DA-18 | 14-08-02C | *A. chinensis deliciosa* | male | Wild material; Chengkou County ,Chongqing City, China |
| 100 | FD-DA-1 | 14-08-03A | *A. chinensis deliciosa* | male | Wild material; Fengdu County ,Chongqing City, China |
| 101 | WS-DA-2 | 14-09-04A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 102 | WS-DA-4 | 14-09-06A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 103 | TJ-DA-45 | 14-08-06A | *A. chinensis deliciosa* | female | Wild material; Tongjiang County, Sichuan Province, China |
| 104 | WS-DA-5 | 14-09-07A | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 105 | WS-DA-7♂ | 14-09-08A | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 106 | WS-DA-13 | 14-09-10B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 107 | WS-DA-15 | 14-09-12B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 108 | WS-DA-16 | 14-09-13C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 109 | TJ-DA-42♂ | 14-09-14C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 110 | WS-DA-27 | 14-08-17C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 111 | WS-DA-59 | 14-09-20C | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 112 | WS-DA-12 | 14-07-19B | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 113 | WS-DA-53 | 14-09-17B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 114 | WS-DA-56 | 14-09-19C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 115 | PZ-DA-06 | 14-10-20B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 116 | TJ-DA-60 | 14-16-17C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 117 | TJ-DA-24 | 14-14-20C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 118 | WS-DA-1 | 14-08-18B | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 119 | WS-DA-45 | 14-10-15A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 120 | WS-DA-42 | 14-10-13B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 121 | WS-DA-39 | 14-10-10A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 122 | TJ-DA-38 | 14-15-14A | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 123 | TJ-DA-58 | 14-16-14C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 124 | TJ-DA-39 | 14-15-15C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 125 | WS-DA-38 | 14-10-09A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 126 | WS-DA-32 | 14-10-04C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 127 | WS-DA-31 | 14-10-03C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 128 | TJ-DA-32 | 14-15-08A | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 129 | Emei03103 | 14-15-08B | *A. chinensis deliciosa* | male | Wild material; Mount Emei, Sichuan Province, China |
| 130 | TJ-DA-15♂ | 14-08-09C | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 131 | WS-DA-57 | 14-11-02B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 132 | WS-DA-60 | 14-11-05C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 133 | WS-DA-61 | 14-11-06A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 134 | WS-DA-64 | 14-11-09C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 135 | TJ-DA-31 | 14-15-06B | *A. chinensis deliciosa* | male | Wild material; Tongjiang County, Sichuan Province, China |
| 136 | WS-DA-66 | 14-11-10B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 137 | PZ-DA-0102 | 14-11-12A | *A. chinensis deliciosa* | female | Wild material; Pengzhou City, Sichuan Province, China |
| 138 | FD-DA-8♂ | 14-12-20B | *A. chinensis deliciosa* | male | Wild material; Fengdu County ,Chongqing City, China |
| 139 | Ckou-DA-7♂ | 14-15-20B | *A. chinensis deliciosa* | male | Wild material; Chengkou County ,Chongqing City, China |
| 140 | WL-DA-3 | 14-11-14B | *A. chinensis deliciosa* | female | Wild material; Wuling Mountain |
| 141 | WL-DA-4 | 14-11-16B | *A. chinensis deliciosa* | female | Wild material; Wuling Mountain |
| 142 | WS-DA-47 | 14-11-19A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 143 | WS-DA-54 | 14-01-20B | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 144 | WS-DA-63 | 14-02-17B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 145 | WS-DA-18 | 14-02-18C | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 146 | TJ-DD-19 | 14-03-15A | *A. chinensis deliciosa* | female | Wild material; Tongjiang County, Sichuan Province, China |
| 147 | FD-DA-4 | 14-03-17A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 148 | WS-DA-29 | 14-03-18A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 149 | WS-DA-51 | 14-03-19C | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 150 | FD-DA-1 | 14-03-20B | *A. chinensis deliciosa* | female | Wild material; Fengdu County ,Chongqing City, China |
| 151 | WS-DA-52 | 14-04-20C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 152 | FD-DA-5 | 14-04-18A | *A. chinensis deliciosa* | female | Wild material; Fengdu County ,Chongqing City, China |
| 153 | WS-DA-21 | 14-04-17B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 154 | WS-DA-11 | 14-04-14B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 155 | WC-DASeeding-0701 | 14-04-13B | *A. chinensis deliciosa* | female | Wild material;--- |
| 156 | XiXuan 2# | 14-04-07B | *A. chinensis deliciosa* | female | Wild material;--- |
| 157 | Emei03093 | 14-04-01C | *A. chinensis deliciosa* | female | Wild material; Mount Emei, Sichuan Province, China |
| 158 | Emei 1 | 14-05-01C | *A. chinensis deliciosa* | female | Wild material; Mount Emei, Sichuan Province, China |
| 159 | WS-DA-60 | 14-05-01B | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 160 | WS-DA-13 | 14-05-03C | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 161 | WS-DA-14 | 14-05-06A | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 162 | Hongmei | 14-05-13C | *A. chinensis deliciosa* | male | Cultivar |
| 163 | FD-DA-7 | 14-05-18A | *A. chinensis deliciosa* | female | Wild material; Fengdu County ,Chongqing City, China |
| 164 | WS-DA-40 | 14-05-19C | *A. chinensis deliciosa* | male | Wild material; Wushan mountains ,Chongqing City, China |
| 165 | WS-DA-40 | 14-05-19B | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 166 | FD-DA-3 | 14-05-20C | *A. chinensis deliciosa* | male | Wild material; Fengdu County ,Chongqing City, China |
| 167 | WS-DA-62 | 14-06-19C | *A. chinensis deliciosa* | female | Wild material; Wushan mountains ,Chongqing City, China |
| 168 | HNXX-DA-03035 | 14-06-08C | *A. chinensis deliciosa* | female | Wild material; Henan Province, China |
| 169 | TJ-DA-54 | 14-07-01C | *A. chinensis deliciosa* | female | Wild material; Tongjiang County, Sichuan Province, China |
| 170 | FD-DA-3 | 14-07-06C | *A. chinensis deliciosa* | female | Wild material; Fengdu County ,Chongqing City, China |

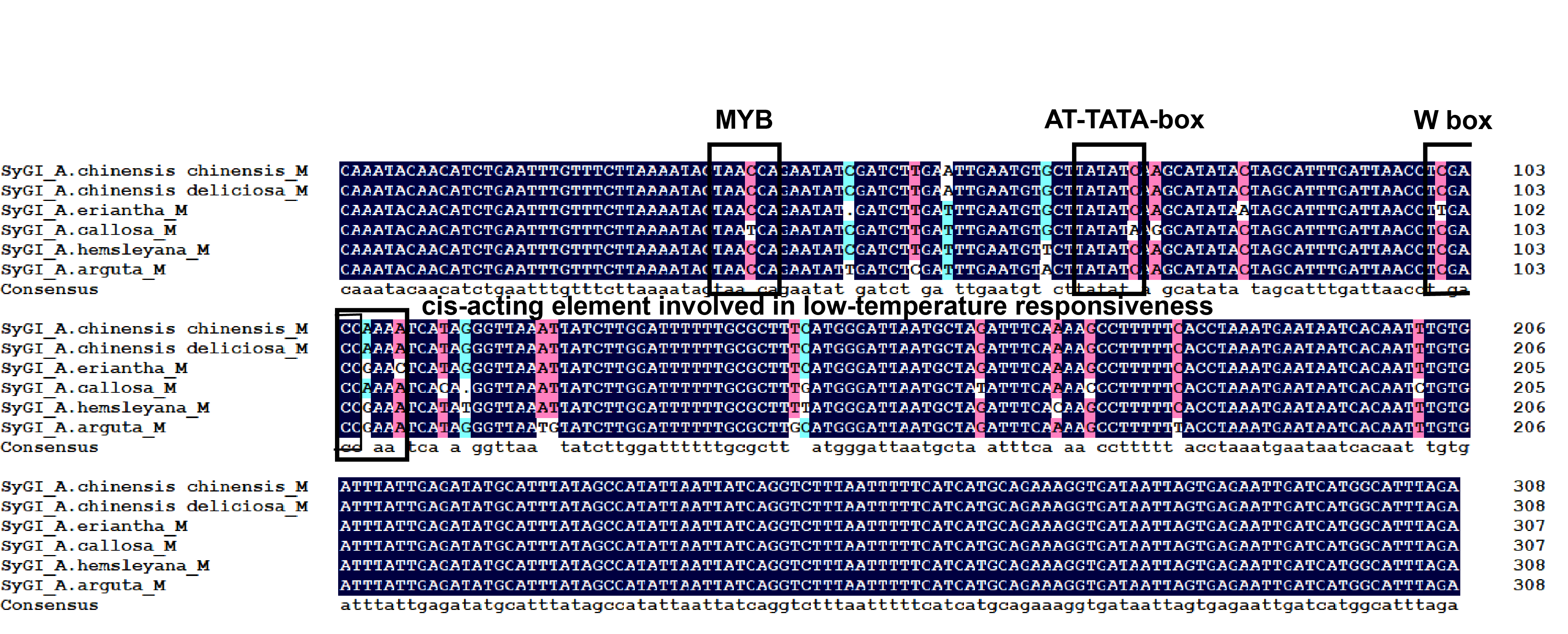
**Table S2**. Juvenile *A. chinensis chinensis* seedling materials.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Location** | **Sample name** | **Species** |
| 1 | 4-05-10B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 2 | 4-05-11B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 3 | 4-06-11A | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 4 | 4-06-11B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 5 | 4-06-12E | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 6 | 4-06-13B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 7 | 4-06-13C | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 8 | 4-06-13D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 9 | 4-06-14B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 10 | 4-06-14D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 11 | 4-06-15B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 12 | 4-06-15C | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 13 | 4-06-15D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 14 | 4-06-16A | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 15 | 4-06-16B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 16 | 4-06-16D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 17 | 4-06-16E | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 18 | 4-06-17B | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 19 | 4-06-17C | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 20 | 4-06-17D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 21 | 4-06-18E | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 22 | 4-06-23D | 1-09-06B\*3-17-19E | *A. chinensis chinensis* |
| 23 | 4-07-21D | 1-1-12B\*3-17-19E | *A. chinensis chinensis* |
| 24 | 4-07-21A | 1-1-12B\*3-17-19E | *A. chinensis chinensis* |
| 25 | 4-07-20C | 1-1-12B\*3-17-19E | *A. chinensis chinensis* |
| 26 | 4-07-18G | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 27 | 4-07-18F | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 28 | 4-07-18E | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 29 | 4-07-18C | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 30 | 4-07-18A | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 31 | 4-07-17D | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 32 | 4-07-17B | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |
| 33 | 4-07-17A | 20-07-06C\*3-17-17C | *A. chinensis chinensis* |

\*Location：We planted different species of kiwifruit in different sections of the orchard and numbered those sections. For example, "14-07-06C" means the third plant planted in row 7 and column 6 of Orchard 14. "12-04-05E" means the fifth plant located in row 4 and column 5 of Orchard 12.



**Figure S1 Comparison analysis of cis-acting elements of cloned *SyGI* Sequences in different *Actinidia* species**



**Figure S2 The SNPs caused differences in cis-acting elements between the candidate proximal regulatory sequence of the *SyGI* gene cloned from different *Actinidia* species**