

**Table S1** Information on the AVTO lines described by the World Vegetable Center

| AVTO | Other name | Parentage                                           | <i>Ty</i> -genes <sup>z</sup>                             |
|------|------------|-----------------------------------------------------|-----------------------------------------------------------|
| 1314 | CLN3212C   | CLN1621E x G6-12-9-2                                | <i>ty</i> -5                                              |
| 1315 | CLN3241Q   | CLN3149 x NC03220X-20-21-1-18-30                    | <i>Ty</i> -1 / <i>Ty</i> -3 , <i>Ty</i> -2                |
| 1429 | FMTT1733D  | CLN3022F2-154-45-8-18-21-6 x CLN2866-237-5-17-20-22 | <i>Ty</i> -3 , <i>Ty</i> -2                               |
| 1701 | CLN3736D   | CLN3150A-5 x CLN3241F1-34-28-2-14-4-4               | <i>Ty</i> -1 / <i>Ty</i> -3 , <i>Ty</i> -2 , <i>ty</i> -5 |
| 1919 | CLN3938K-8 | CLN3641F1-8-11-14-4-25 x T.Star-29-7-4-16           | <i>Ty</i> -1 / <i>Ty</i> -3                               |
| 1920 | CLN4032C-8 | CLN3682F1-10-3-4-27-3-8 x T.Star-1-28-21-5-27       | <i>Ty</i> -1 / <i>Ty</i> -3                               |
| 1954 | CLN3940C   | CLN3241H-27 x T.Star-29-7-4-16                      | <i>Ty</i> -1 / <i>Ty</i> -3 , <i>Ty</i> -2                |

<sup>z</sup> Described combinations of *Ty*-genes by World Vegetable Center. *Ty*-1 / *Ty*-3 indicates either *Ty*-1 or *Ty*-3 .