

Supplementary Table S1. List of the most relevant references on MAS breeding

| <i>Character</i> | <i>Species</i> | <i>References</i> | <i>DOI</i> |
|---|----------------|-----------------------------|-----------------------------------|
| <i>Phenological traits related to fruit production</i> | Apricot | Campoy et al., 2011 | 10.1007/s11105-010-0242-9 |
| | Peach | Dirlewanger et al., 2006 | 10.1007/s11295-006-0053-1 |
| | Kaki | Akagi et al., 2014 | 10.2503/jjshs1.CH-109 |
| | Ginco | Liao et al., 2009 | 10.1007/S10681-009-9913-8 |
| | Kiwifruit | De Mori et al., 2022 | 10.3233/JBR-211530 |
| | Mulberry | Atsumi et al., 2019 | 10.1007/S10681-019-2511-5 |
| | Papaya | Vashistha et al., 2016 | 10.5376/MPB.2016.07.0028 |
| | Pistacio | Şahin et al., 2022 | 10.1007/s11033-022-07285-5 |
| <i>Skin color</i> | Apple | Moriya et al., 2017 | 10.1007/s10681-017-1864-x |
| | Apple | Chagne et al., 2016 | 10.1007/s11295-016-1025-8 |
| | Peach | Breto et al., 2017 | 10.1007/s10681-016-1812-1 |
| | Strawberry | Labadie et al., 2022 | 10.3389/fpls.2022.869655 |
| <i>Flesh color</i> | Cherry | Stegmeir et al., 2015 | 10.1007/s11032-015-0337-y |
| | Papaya | Blas et al., 2010 | 10.1104/pp.109.152298 |
| | Peach | Adamy et al., 2013 | 10.1007/s11105-013-0628-6 |
| <i>Fruit size and weight</i> | Sweet cherry | De Franceschi et al., 2013 | 10.1007/s11032-013-9872-6 |
| | Grapevine | Ban et al., 2016 | 10.1007/s10681-016-1737-8 |
| | Japanese plum | Salazar et al., 2020 | 10.1016/j.postharvbio.2020.111292 |
| <i>Seedlessness</i> | Citrus | Chavez et al., 2011 | 10.21273/HORTSCI.46.5.693 |
| | Citrus | JinPing et al., 2009 | 10.1016/j.scienta.2009.03.006 |
| | Grapevine | Wang 1997 | |
| | Grapevine | Lahogue et al. 1998 | 10.1007/s001220050976 |
| | Grapevine | Mejía and Hinrichsen 2003 | 10.17660/ActaHortic.2003.603.74 |
| | Grapevine | Cabezas et al., 2006 | 10.1139/g06-122 |
| | Grapevine | Royo et al., 2018 | 10.1104/pp.18.00259 |
| | Grapevine | Wang et al., 2022 | 10.1016/j.jia.2022.07.047 |
| <i>Firmness, crispness, texture</i> | Apple | Costa et al., 2010 | 10.1093/jxb/erq130 |
| | Apple | Migicovsky et al., 2021 | 10.3389/fgene.2021.671300 |
| | Apple | Longhi et al., 2013 | 10.1007/s11032-013-9912-2 |
| | Grapevine | Ban et al., 2016 | 10.1007/s10681-016-1737-8 |
| | Sweet cherry | Font i Forcada et al., 2013 | 10.1007/s11295-012-0553-0 |
| <i>Pulp acidity and pH</i> | Apple | Chagne et al., 2019 | 10.1038/s41438-018-0114-2 |
| | Apricot | Salazar et al., 2013 | 10.1007/s11105-013-0625-9 |
| | Cranberry | Fong et al., 2020 | 10.1007/s11295-020-01432-4 |
| | Cranberry | Fong et al., 2021 | 10.1007/s11295-020-01482-8 |
| | Grapevine | Ban et al., 2016 | 10.1007/s10681-016-1737-8 |
| | Peach | Wang et al., 2016 | 10.1007/s10681-016-1709-z |
| | Peach | Eduardo et al., 2014 | 10.1007/s11295-014-0789-y |
| <i>VOCs</i> | Strawberry | Noh et al., 2017 | 10.3233/JBR-160145 |
| <i>Harvesting date, maturity date, ethylene, ripening</i> | Apple | Larsen et al., 2019 | 10.3835/plantgenome2018.12.0104 |
| | Peach | Nunez-Lillo et al., 2015 | 10.1007/s11295-015-0911-9 |
| | Raspberry | Graham et al., 2009 | 10.1007/s00122-009-0969-6 |