Supplementary Material

# Supplementary Figures and Tables

## Supplementary Figures



**Supplementary Figure 1** Markers distribution of integrated Linkage groups

## Supplementary Tables

**Supplementary table 1.** Measurement data of hue angle and pericarp color.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Samples | pericarp color | hue angle | Samples | pericarp color | hue angle |
| Female | 2  | 45.85  | 66  | \* | \* |
| Male | 0  | 81.68  | 67  | 0 | 86.47  |
| 1  | 3  | 48.64  | 68  | 0 | 83.54  |
| 2  | 3  | 39.74  | 69  | \* | \* |
| 3  | 3  | 46.17  | 70  | 3  | 48.03  |
| 4  | 3  | 73.99  | 71  | 0  | 80.79  |
| 5  | 0  | 83.16  | 72  | 3  | 51.36  |
| 6  | 0  | 81.25  | 73  | 3  | 36.95  |
| 7  | 0  | 81.11  | 74  | 2  | 52.33  |
| 8  | 0  | 89.03  | 75  | \* | \* |
| 9  | 0  | 81.98  | 76  | 1  | 78.09  |
| 10  | 3  | 54.00  | 77  | 1  | 68.18  |
| 11  | 3  | 48.40  | 78  | 3  | 44.37  |
| 12  | 2  | 64.78  | 79  | 0  | 80.96  |
| 13  | 3  | 51.24  | 80  | 0  | 80.88  |
| 14  | 3  | 82.44  | 81  | 1  | 60.17  |
| 15  | 2  | 63.37  | 82  | 1 | 55.02  |
| 16  | 3  | 87.04  | 83  | 3  | 44.58  |
| 17  | 0  | 84.16  | 84  | 2  | 34.61  |
| 18  | 0  | 72.65  | 85  | 3  | 39.91  |
| 19  | 3  | 82.30  | 86  | 0  | 80.57  |
| 20  | 0  | 86.49  | 87  | 3  | 54.55  |
| 21  | \* | \* | 88  | 0 | 78.36  |
| 22  | 0  | 54.76  | 89  | 0 | 83.78  |
| 23  | 3  | 42.85  | 90  | 3 | 51.65  |
| 24  | 3  | 57.25  | 91  | 3  | 48.22  |
| 25  | 0  | 89.87  | 92  | 3  | 40.98  |
| 26  | 3  | 38.18  | 93  | 0 | 73.60  |
| 27  | 0  | 85.66  | 94  | 3 | 44.37  |
| 28  | 3  | 42.29  | 95  | 3 | 35.28  |
| 29  | \* | \* | 96  | 0 | 82.15  |
| 30  | 3  | 43.39  | 97  | \* | \* |
| 31  | 3  | 34.06  | 98  | 0 | 77.36  |
| 32  | 3  | 43.18  | 99  | 0 | 75.78  |
| 33  | 2  | 66.97  | 100  | \* | \* |
| 34  | \* | \* | 101  | \* | \* |
| 35  | 0  | 69.32  | 102  | \* | \* |
| 36  | 0  | 78.73  | 103  | \* | \* |
| 37  | 1  | 64.44  | 104  | \* | \* |
| 38  | \* | \* | 105  | \* | \* |
| 39  | 0  | 55.45  | 106  | 3 | 53.41  |
| 40  | \* | \* | 107  | \* | \* |
| 41  | 2  | 75.27  | 108  | 2 | 77.88  |
| 42  | 2  | 54.93  | 109  | 0 | 77.90  |
| 43  | \* | \* | 110  | 0 | 73.08  |
| 44  | 0  | 78.14  | 111  | 3  | 54.61  |
| 45  | 3  | 49.25  | 112  | 0  | 69.36  |
| 46  | 3  | 44.30  | 113  | 3  | 40.71  |
| 47  | 2  | 59.79  | 114  | 3  | 46.81  |
| 48  | 0 | 81.60  | 115  | 3  | 59.47  |
| 49  | 3  | 56.58  | 116  | 3  | 53.10  |
| 50  | \* | \* | 117  | 0  | 84.50  |
| 51  | 0  | 85.81  | 118  | \* | \* |
| 52  | 3  | 45.28  | 119  | 3  | 57.40  |
| 53  | 2  | 64.89  | 120  | 1  | 78.80  |
| 54  | \* | \* | 121  | 0  | 70.28  |
| 55  | 3  | 62.98  | 122  | 1  | 84.80  |
| 56  | \* | \* | 123  | 3  | 40.56  |
| 57  | 3 | 67.69  | 124  | 3  | 83.02  |
| 58  | \* | \* | 125  | 0  | 69.99  |
| 59  | \* | \* | 126  | 3  | 45.92  |
| 60  | 1  | 77.68  | 127  | 3  | 46.72  |
| 61  | 3  | 48.83  | 128  | 0  | 79.46  |
| 62  | 1  | 56.78  | 129  | 3  | 41.52  |
| 63  | 3  | 39.28  | 130  | 0  | 81.14  |
| 64  | 3  | 55.05  | 131  | 3  | 51.01  |
| 65  | 3  | 62.31  |  |  |  |

Note: ‘\*’ indicates that hue angle or pericarp color has not been measured, due to there is no fruit.