|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplementary table 2. Optimizing the parameters of the DBG2OLC pipeline for assembing the dumicola genome. The parameters marked in yellow were used for downstream analyses. | | | | | | | | | | |  |  |  |  |  |  |
|  |  | **Experiment 1** | **Experiment 3** | **Experiment 2** | **Experiment 3** | **Experiment 4** | **Experiment 5** | **Experiment 6** | **Experiment 7** | **Experiment 8** | | **Experiment 9** | **Experiment 10** | **Experiment 11** |  |  |
| **Pretreatment** | **Filter contig** | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 |  |  |
| **Assembling parameter** | **AdaptiveTh** | 0.001 | 0.005 | 0.005 | 0.005 | 0.001 | 0.005 | 0.005 | 0.005 | 0.005 | | 0.001 | 0.001 | 0.001 |  |  |
| **KmerCovTh** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | | 5 | 5 | 2 |  |  |
| **MinOverlap** | 20 | 20 | 20 | 20 | 20 | 10 | 30 | 20 | 20 | | 30 | 30 | 20 |  |  |
| **RemoveChimera** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | | 1 | 0 | 0 |  |  |
| **Summary of assembly** | **Number** | 19,962 | 17,383 | 17,383 | 20,662 | 16,532 | 19,879 | 16,902 | 26,739 | 17,998 | | 16,742 | 16,795 | 45,348 |  |  |
| **N50** | 209,265 | 245,898 | 245,898 | 203,964 | 258,273 | 232,895 | 241,657 | 250,594 | 237,955 | | 244,059 | 267,114 | 182,284 |  |  |
| **Sum** | 2,577,284,754 | 2,640,127,987 | 2,640,127,987 | 2,600,335,148 | 2,627,256,631 | 2,699,483,844 | 2,605,335,736 | 3,127,707,751 | 2,650,323,568 | | 2,601,013,993 | 2,728,680,662 | 3,667,890,036 |  |  |
| **Minimum** | 2,898 | 2,528 | 2,528 | 1,047 | 3,419 | 1,990 | 2,227 | 361 | 3,275 | | 4,097 | 344 | 617 |  |  |
| **Maximum** | 1,705,019 | 1,572,211 | 1,572,211 | 1,572,174 | 1,768,453 | 1,694,653 | 1,540,276 | 1,889,408 | 1,475,709 | | 1,633,583 | 1,682,986 | 1,806,902 |  |  |