ERGA Assembly Report

v13.09.23_beta

Tags: ERGA-Satellite

| ToLID | ddCitColo1 | |
|----------------|-----------------------|--|
| Species | Citrullus colocynthis | |
| Class | Magnoliopsida | |
| Order | Cucurbitales | |
| Haploid Number | 12 (source: direct) | |
| Ploidy | 2 | |
| Sex | NA | |

Data profile

| Data | Coverage | |
|-------------|----------|--|
| PacBio-HiFi | 85x | |
| HiC | 120x | |

Pipeline summary

| Tool | Version | |
|-------------|-------------|--|
| GenomeScope | 2.0 | |
| Smudgeplot | 0.2.5 | |
| Hifiasm | 0.18.9-r527 | |
| YaHS | 1.2a.1 | |

Genome profiling

| Estimated Haploid Length | 337,117,689 |
|--------------------------|-------------|
| Heterozygosity rate | 0.114815% |
| Kmer coverage | 40.59 |
| Proposed ploidy | 2 |

GenomeScope Profile

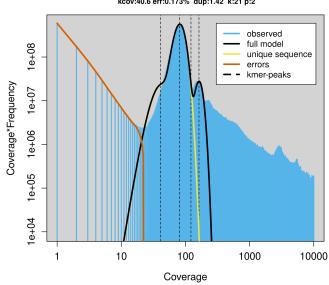
len:337,571,770bp uniq:74.6% aa:99.9% ab:0.125% kcov:40.6 err:0.173% dup:1.42 k:21 p:2

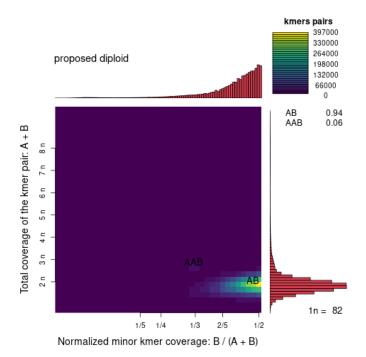
Ooserved observed full model unique sequence errors -- kmer-peaks

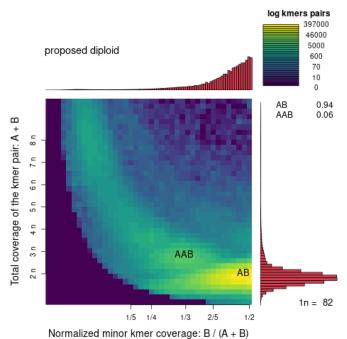
Coverage

GenomeScope Profile

len:337,571,770bp uniq:74.6% aa:99.9% ab:0.125% kcov:40.6 err:0.173% dup:1.42 k:21 p:2





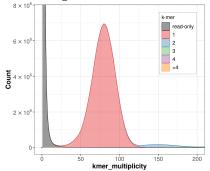


Genome assembly: contigging

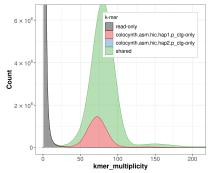
| Metrics | Hifiasm hapl | Hifiasm hap2 |
|---------------|-----------------|-----------------|
| Total bp | 366,469,251 | 277,995,038 |
| GC % | 33.69 | 32.91 |
| Gaps | 0 | 0 |
| Gaps/Gbp | 0 | 0 |
| Gaps bp | 0 | 0 |
| Scaffolds | 95 | 104 |
| Longest Scaf. | 36,926,312 | 33,949,978 |
| Scaffold auN | 30,535,640.39 | 13,410,727.88 |
| Scaffold N50 | 30,829,096 | 11,370,720 |
| Scaffold L50 | 6 | 9 |
| Scaffold L90 | 11 | 22 |
| Contigs | 95 | 104 |
| Largest Cont. | 36,926,312 | 33,949,978 |
| Contig auN | 30,535,640.39 | 13,410,727.88 |
| Contig N50 | 30,829,096 | 11,370,720 |
| Contig L50 | 6 | 9 |
| Contig L90 | 11 | 22 |
| QV | 66.6406 | |
| Kmer compl. | 99.7435 | |
| BUSCO sing. | 95.9% | 88.3% |
| BUSCO dupl. | 1.0% | 1.2% |
| BUSCO frag. | 0.5% | 0.6% |
| BUSCO miss. | 2.6% | 9.9% |

Lineage: eudicotyledons_odb10 (genomes:31, BUSCOs:2326)

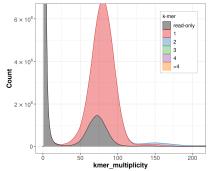
K-mer spectra: Hifiasm



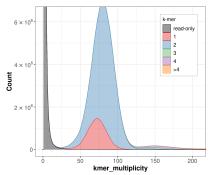
merqury.colocynth.asm.hic.hapl.p_ctg.spectra-cn.st.png



merqury.spectra-asm.st.png



merqury.colocynth.asm.hic.hap2.p_ctg.spectra-cn.st.png

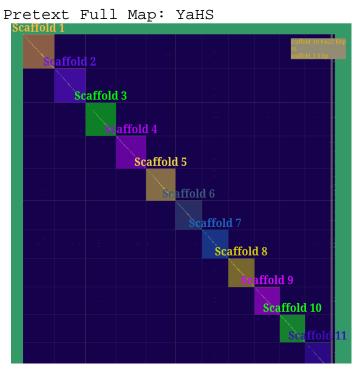


merqury.spectra-cn.st.png

Genome assembly: scaffolding

| Metrics | YaHS hap1 | YaHS hap2 |
|---------------|---------------|---------------|
| Total bp | 366,470,251 | 277,998,838 |
| GC % | 33.69 | 32.91 |
| Gaps | 5 | 19 |
| Gaps/Gbp | 13.64 | 68.35 |
| Gaps bp | 1,000 | 3,800 |
| Scaffolds | 93 | 87 |
| Longest Scaf. | 36,926,312 | 33,949,978 |
| Scaffold auN | 32,549,100.53 | 23,796,417 |
| Scaffold N50 | 31,331,276 | 25,970,831 |
| Scaffold L50 | 6 | 5 |
| Scaffold L90 | 10 | 11 |
| Contigs | 98 | 106 |
| Largest Cont. | 36,926,312 | 33,949,978 |
| Contig auN | 30,453,043.08 | 13,194,836.73 |
| Contig N50 | 30,829,096 | 11,042,140 |
| Contig L50 | 6 | 9 |
| Contig L90 | 11 | 23 |
| QV | 66.6406 | 65.7986 |
| Kmer compl. | 99.7435 | 82.4299 |
| BUSCO sing. | 95.9% | 88.3% |
| BUSCO dupl. | 1.0% | 1.1% |
| BUSCO frag. | 0.6% | 0.6% |
| BUSCO miss. | 2.5% | 10.0% |

Lineage: eudicotyledons_odb10 (genomes:31, BUSCOs:2326)



Screenshot.png

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Date and time: 2023-09-14 18:28:01 CEST