ERGA Assembly Report

v12.09.23_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

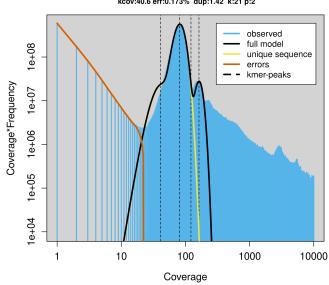
len:337,571,770bp uniq:74.6% aa:99.9% ab:0.125% kcov:40.6 err:0.173% dup:1.42 k:21 p:2

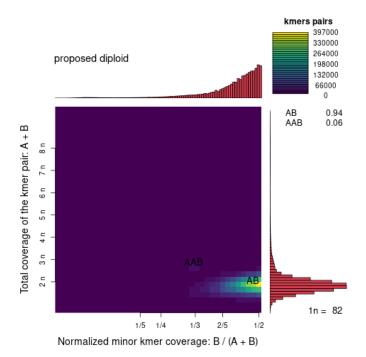
Ooserved observed full model unique sequence errors -- kmer-peaks

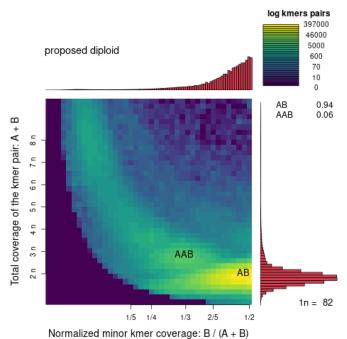
Coverage

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





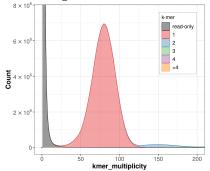


Genome assembly: contigging

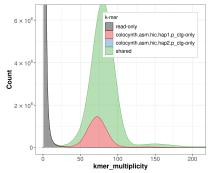
Metrics	Hifiasm hapl	Hifiasm hap2
Total bp	366,469,251	277,995,038
GC %	33.69	32.91
Gaps	0	0
Gaps/Gbp	0	0
Gaps bp	0	0
Scaffolds	95	104
Longest Scaf.	36,926,312	33,949,978
Scaffold auN	30,535,640.39	13,410,727.88
Scaffold N50	30,829,096	11,370,720
Scaffold L50	6	9
Scaffold L90	11	22
Contigs	95	104
Largest 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	65.7986
Kmer compl.	99.7435	82.4299
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)

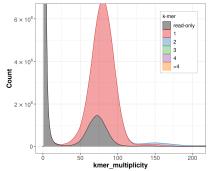
K-mer spectra: Hifiasm



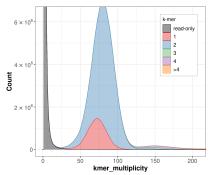
merqury.colocynth.asm.hic.hapl.p_ctg.spectra-cn.st.png



merqury.spectra-asm.st.png



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

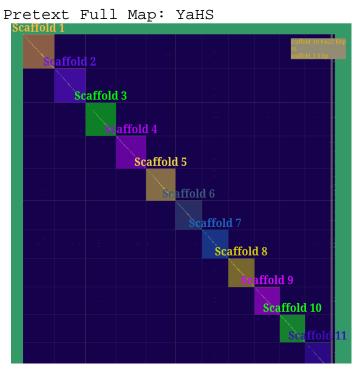


merqury.spectra-cn.st.png

Genome assembly: scaffolding

Metrics	YaHS hap1
Total bp	366,470,251
GC %	33.69
Gaps	5
Gaps/Gbp	13.64
Gaps bp	1,000
Scaffolds	93
Longest Scaf.	36,926,312
Scaffold auN	32,549,100.53
Scaffold N50	31,331,276
Scaffold L50	6
Scaffold L90	10
Contigs	98
Largest Cont.	36,926,312
Contig auN	30,453,043.08
Contig N50	30,829,096
Contig L50	6
Contig L90	11
QV	
Kmer compl.	99.7435
BUSCO sing.	95.9%
BUSCO dupl.	1.0%
BUSCO frag.	0.6%
BUSCO miss.	2.5%
	•

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



Screenshot.png

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Affiliation: International Center for Biosaline Agriculture (ICBA)

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