

# ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	55448
ToLID	<b>1aCymNodo2</b>
Species	Cymodocea nodosa
Class	Magnoliopsida
Order	Alismatales

Genome Traits	Expected	Observed
Haploid size (bp)	187,263,864	359,377,510
Haploid Number	7 (source: direct)	18
Ploidy	4 (source: direct)	2
Sample Sex	Unknown	Unknown

## EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 6.7.Q52

The following metrics were automatically flagged as below EBP recommended standards or different from expected:

- . Observed Haploid size (bp) has >20% difference with Expected
- . Observed Haploid Number is different from Expected
- . Observed Ploidy is different from Expected

### Curator notes

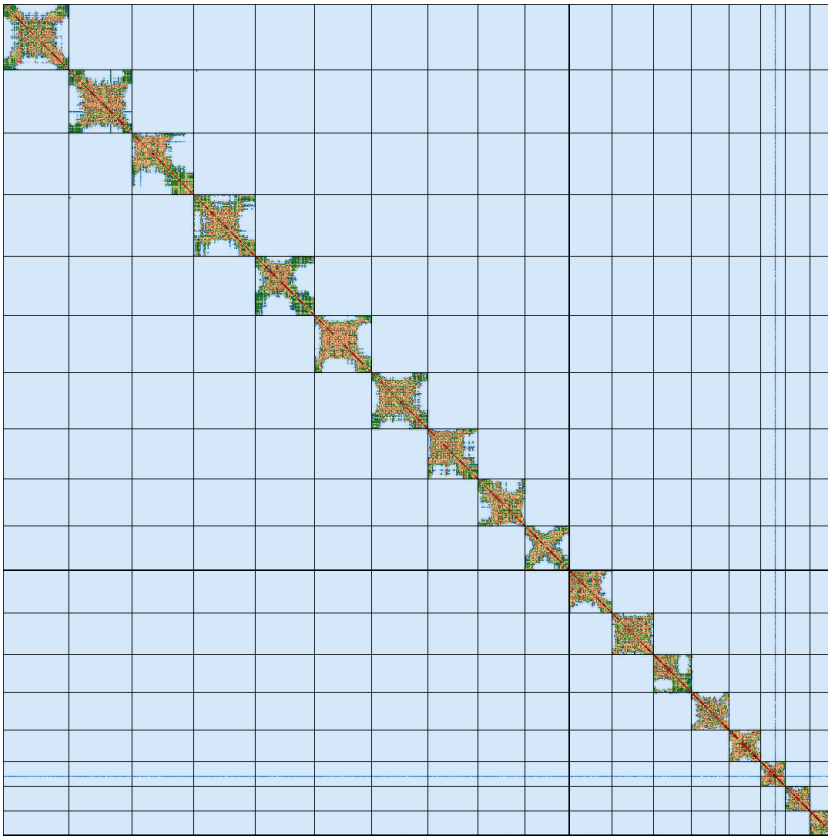
- . Interventions/Gb: 143
- . Contamination notes: "A low number of bacterial contigs were removed post-assembly"
- . Other observations: "23 haplotigs were removed "

# Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed
Total bp	360,243,928	359,377,510
GC %	33.22	33.23
Gaps/Gbp	113.81	133.56
Total gap bp	4,100	7,100
Scaffolds	31	23
Scaffold N50	20,283,553	24,187,662
Scaffold L50	7	7
Scaffold L90	15	15
Contigs	72	71
Contig N50	9,103,177	9,097,069
Contig L50	14	14
Contig L90	34	34
QV	52.5339	52.5849
Kmer compl.	92.1191	92.0497
BUSCO sing.	95.3%	95.7%
BUSCO dupl.	3.9%	3.5%
BUSCO frag.	0.0%	0.0%
BUSCO miss.	0.8%	0.8%

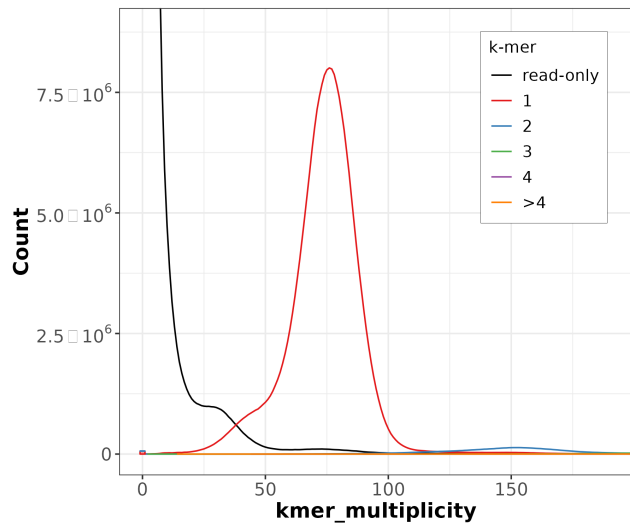
BUSCO: 5.4.3 (euk\_genome\_met, metaeuk) / Lineage: eukaryota\_odb10 (genomes:70, BUSCOs:255)

# HiC contact map of curated assembly

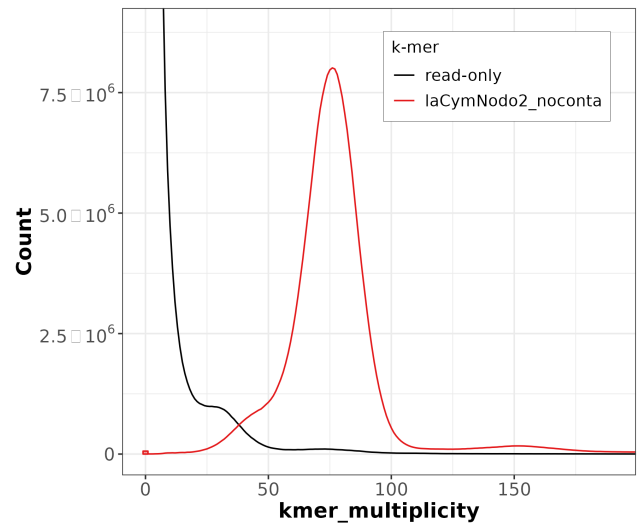


collapsed [\[LINK\]](#)

# K-mer spectra of curated assembly

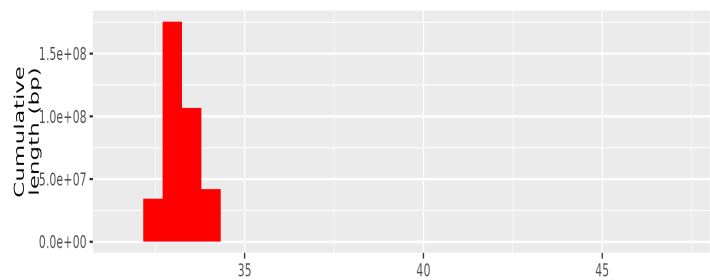


Distribution of k-mer counts per copy numbers found in asm

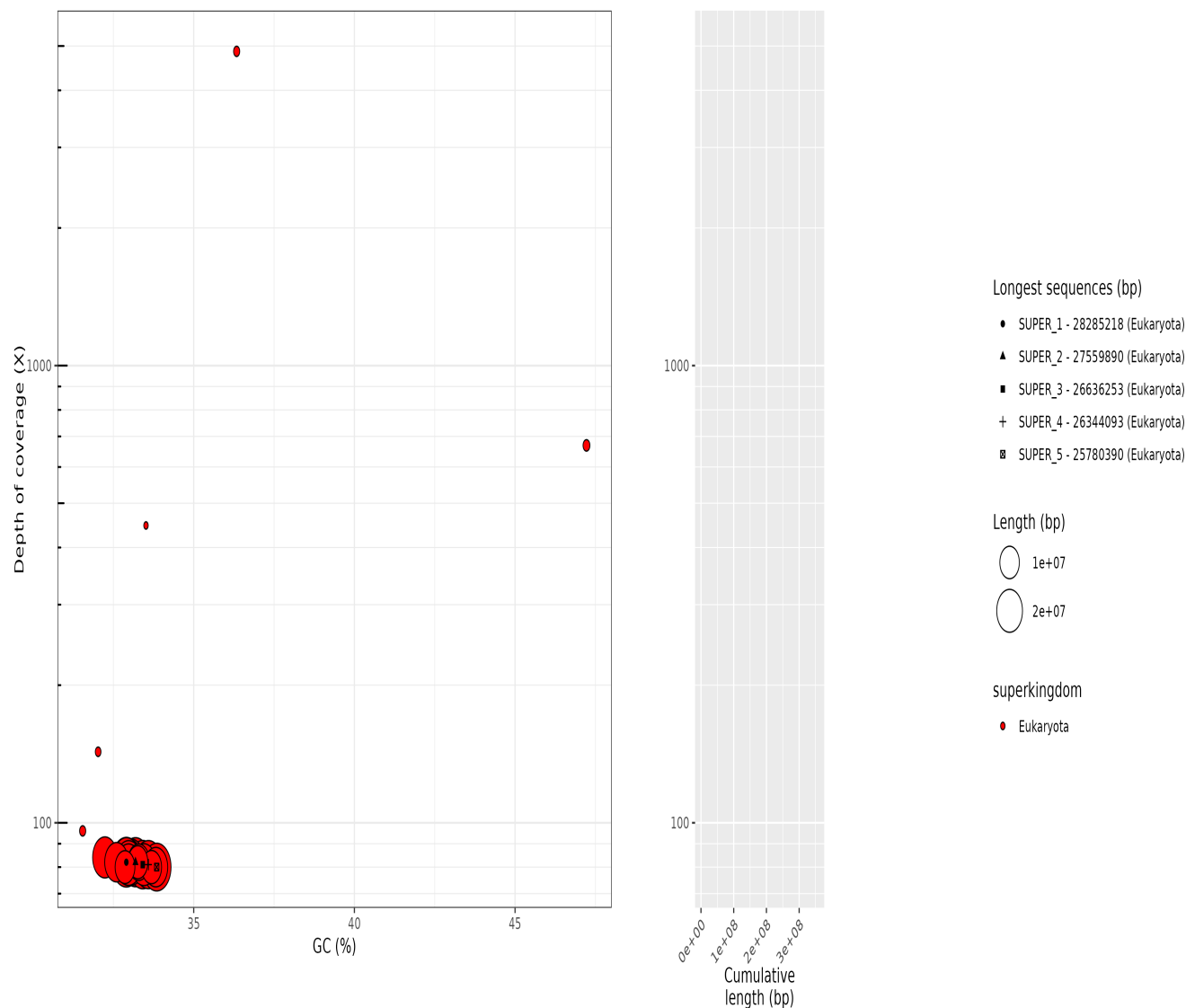


Distribution of k-mer counts coloured by their presence in reads/assemblies

# Post-curation contamination screening



TAPAs summary Graph



**collapsed.** Bubble plot circles are scaled by sequence length, positioned by coverage and GC proportion, and coloured by taxonomy. Histograms show total assembly length distribution on each axis.

## Data profile

Data	PACBIO Hifi	Arima
Coverage	40	100

## Assembly pipeline

- **Hifiasm**
  - |\_ *ver*: 0.19.5-r593
  - |\_ *key param*: NA
- **purge\_dups**
  - |\_ *ver*: 1.2.5
  - |\_ *key param*: NA
- **YaHS**
  - |\_ *ver*: 1.2
  - |\_ *key param*: NA

## Curation pipeline

- **PretextMap**
  - |\_ *ver*: 0.1.9
  - |\_ *key param*: NA
- **PretextView**
  - |\_ *ver*: 0.2.5
  - |\_ *key param*: NA

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