

ERGA Assembly Report

v24.04.03_beta

Tags: ATLASea[INVALID TAG]

TxID	55715
ToLID	xbVenVerr6.1
Species	Venus verrucosa
Class	Bivalvia
Order	Venerida

Genome Traits	Expected	Observed
Haploid size (bp)	1,900,759,880	2,087,867,859
Haploid Number	19 (source: ancestor)	19
Ploidy	2 (source: ancestor)	2
Sample Sex	unknown	unknown

EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 7.8.Q47

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

- . Kmer completeness value is less than 90 for collapsed
- . BUSCO single copy value is less than 90% for collapsed
- . Assembly length loss > 3% for collapsed

Curator notes

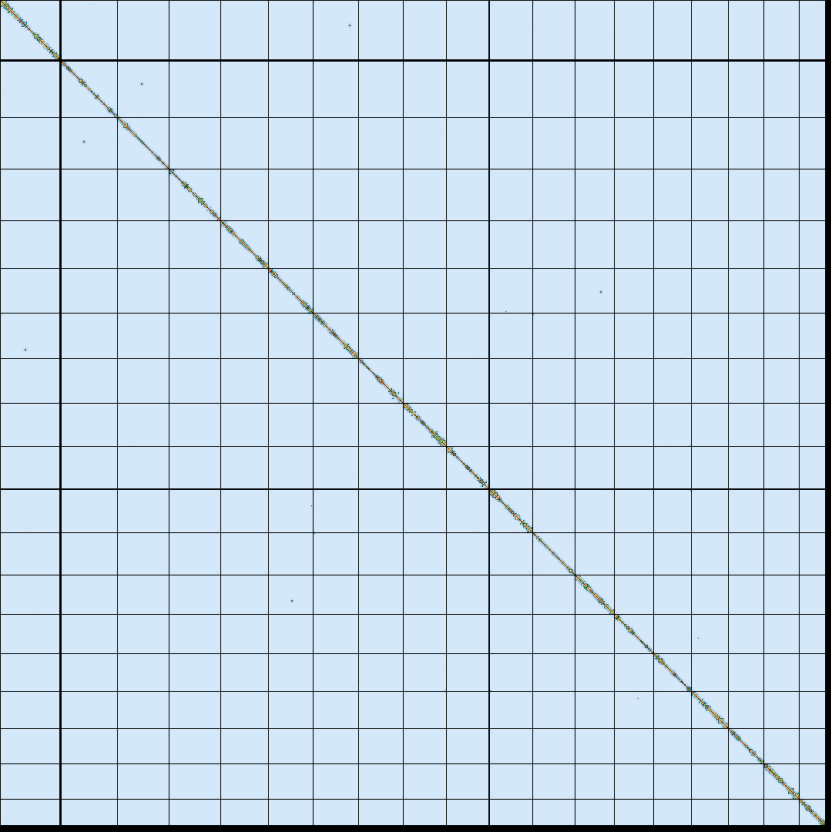
- . Interventions/Gb: 277
- . Contamination notes: "One contig was tagged Contaminant during the manual curation"
- . Other observations: "Remove numerous haplotypic duplications during the manual curation"

Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed
Total bp	2,211,205,762	2,087,867,859
GC %	35.25	35.24
Gaps/Gbp	130.25	128.84
Total gap bp	28,800	31,400
Scaffolds	221	177
Scaffold N50	112,710,031	108,501,084
Scaffold L50	9	9
Scaffold L90	17	17
Contigs	509	446
Contig N50	14,062,000	15,529,060
Contig L50	45	42
Contig L90	143	134
QV	47.11	47.1299
Kmer compl.	66.1492	63.6095
BUSCO sing.	77.2%	79.6%
BUSCO dupl.	4.8%	2.0%
BUSCO frag.	4.4%	4.4%
BUSCO miss.	13.6%	14.0%

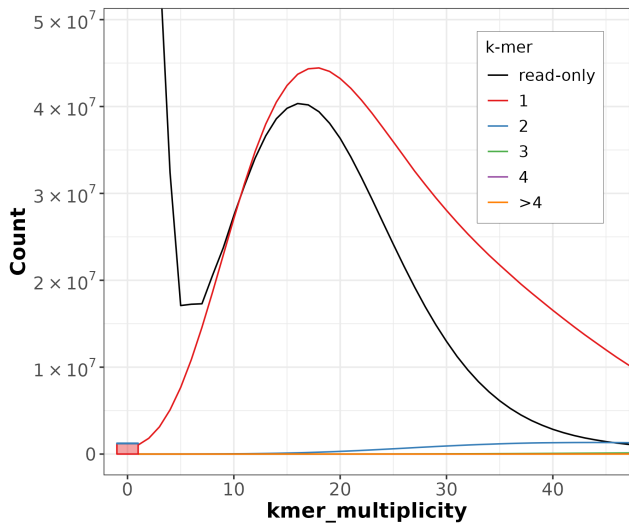
BUSCO 5.4.3 Lineage: mollusca_odb10 (genomes:7, BUSCOs:5295)

HiC contact map of curated assembly

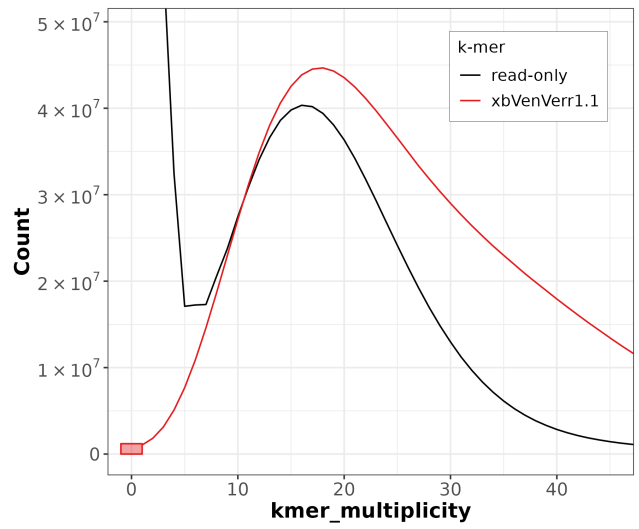


collapsed [\[LINK\]](#)

K-mer spectra of curated assembly

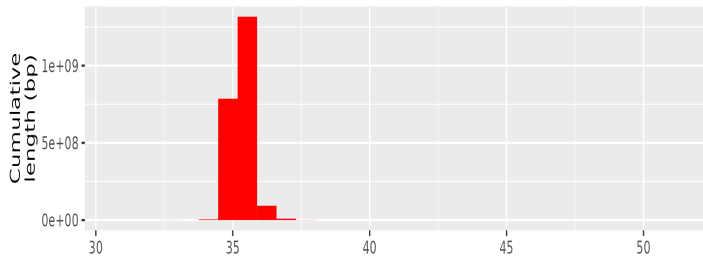


Distribution of k-mer counts per copy numbers found in asm

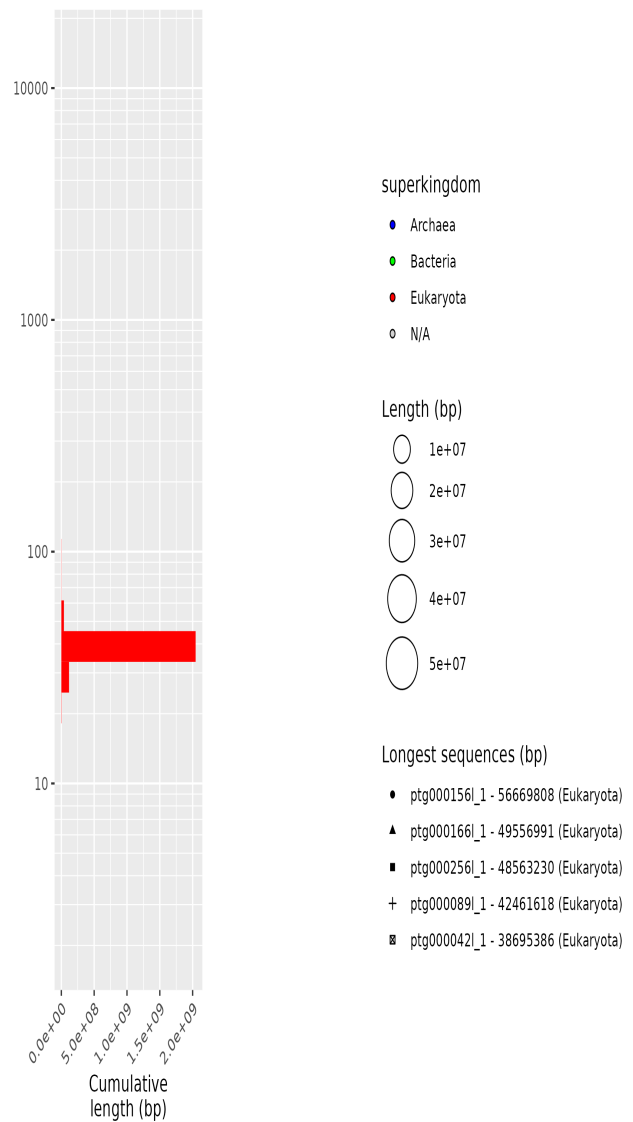
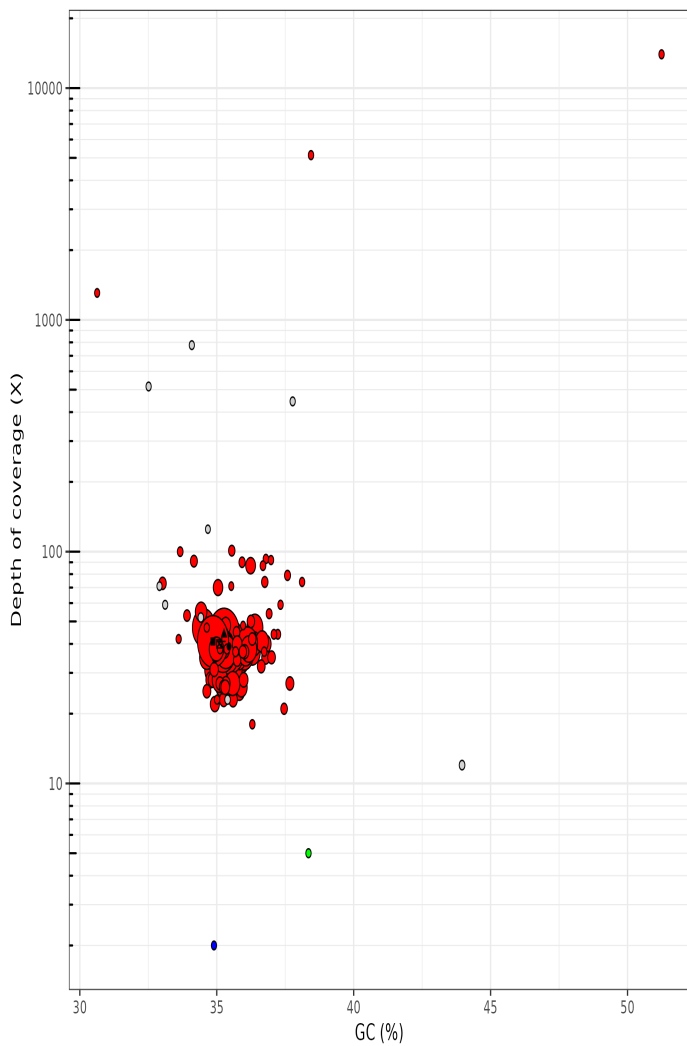


Distribution of k-mer counts coloured by their presence in reads/assemblies

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
Coverage	42X

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

- **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

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