

# ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	1656920
ToLID	<b>kaSymBrak</b>
Species	Symplegma brakenhielmi
Class	Ascidacea
Order	Stolidobranchia

Genome Traits	Expected	Observed
Haploid size (bp)	639,728,327	563,800,036
Haploid Number	16 (source: ancestor)	16
Ploidy	2 (source: ancestor)	2
Sample Sex	unknown	unknown

## EBP metrics summary and curation notes

Obtained EBP quality metric for pri: 6.7.Q41

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

- . Kmer completeness value is less than 90 for pri
- . Assembly length loss > 3% for pri
- . More than 1000 gaps/Gbp for pri

### Curator notes

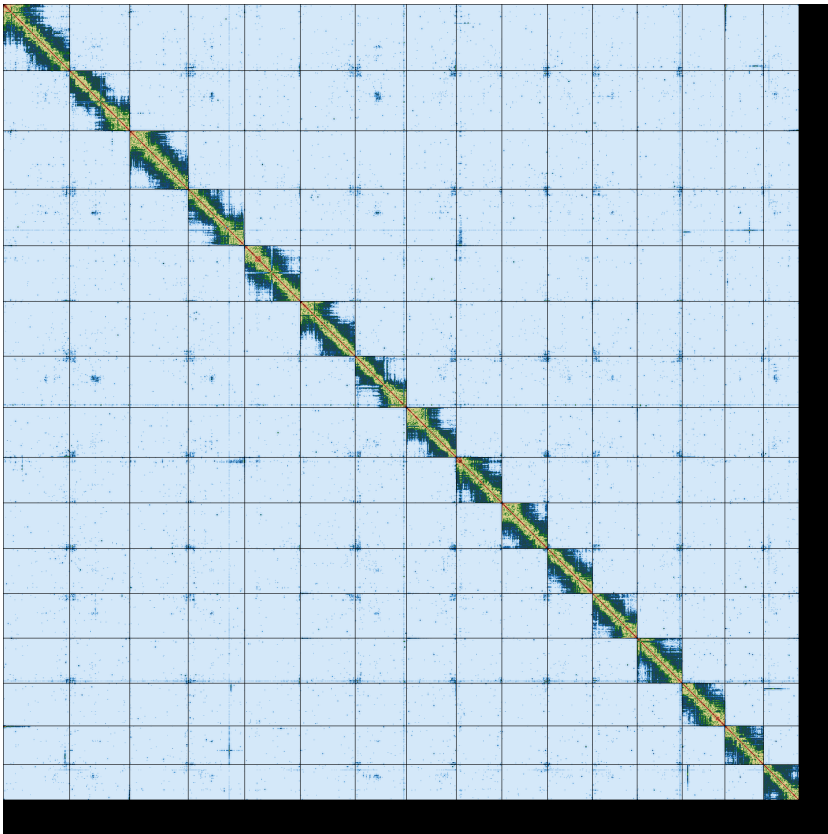
- . Interventions/Gb: 200
- . Contamination notes: "From the BlobTools analysis, chromosomes SUPER\_12 and SUPER\_16 are classified as "Arthropoda" instead of "Chordata," thus identifying them as contaminants. Both align to the same sequence, with an alignment length of 6,051 in both cases."
- . Other observations: ""

# Quality metrics table

Metrics	Pre-curation pri	Curated pri
Total bp	600,884,103	563,800,036
GC %	40.66	40.22
Gaps/Gbp	1,214.88	1,424.26
Total gap bp	73,000	96,400
Scaffolds	1,101	699
Scaffold N50	30,480,455	33,584,967
Scaffold L50	9	8
Scaffold L90	28	15
Contigs	1,831	1,502
Contig N50	1,215,688	1,243,442
Contig L50	135	126
Contig L90	595	512
QV	39.7478	41.8511
Kmer compl.	84.7795	80.7483
BUSCO sing.	88.4%	90.4%
BUSCO dupl.	4.1%	1.9%
BUSCO frag.	2.2%	1.6%
BUSCO miss.	5.3%	6.2%

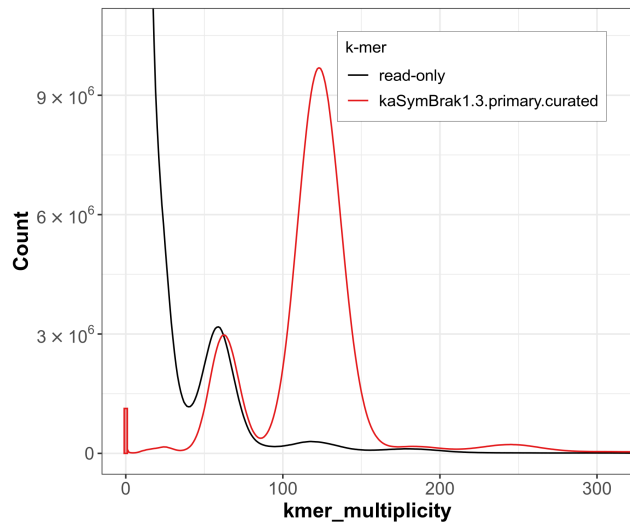
BUSCO: 5.8.2 (euk\_genome\_aug, augustus) / Lineage: metazoa\_odb10 (genomes:65, BUSCOs:954)

# HiC contact map of curated assembly

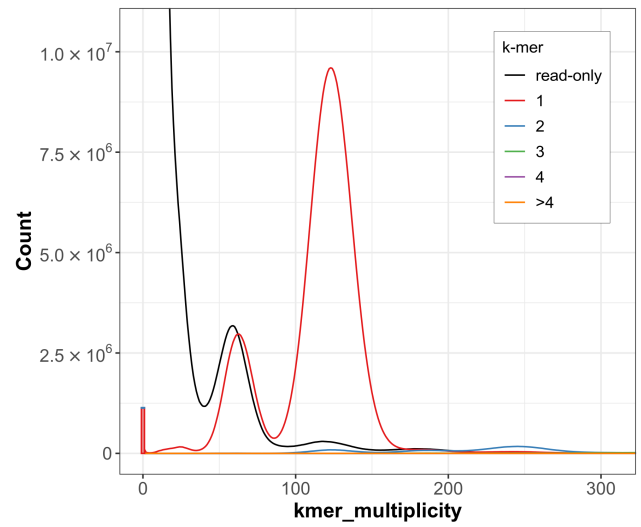


pri [\[LINK\]](#)

# K-mer spectra of curated assembly



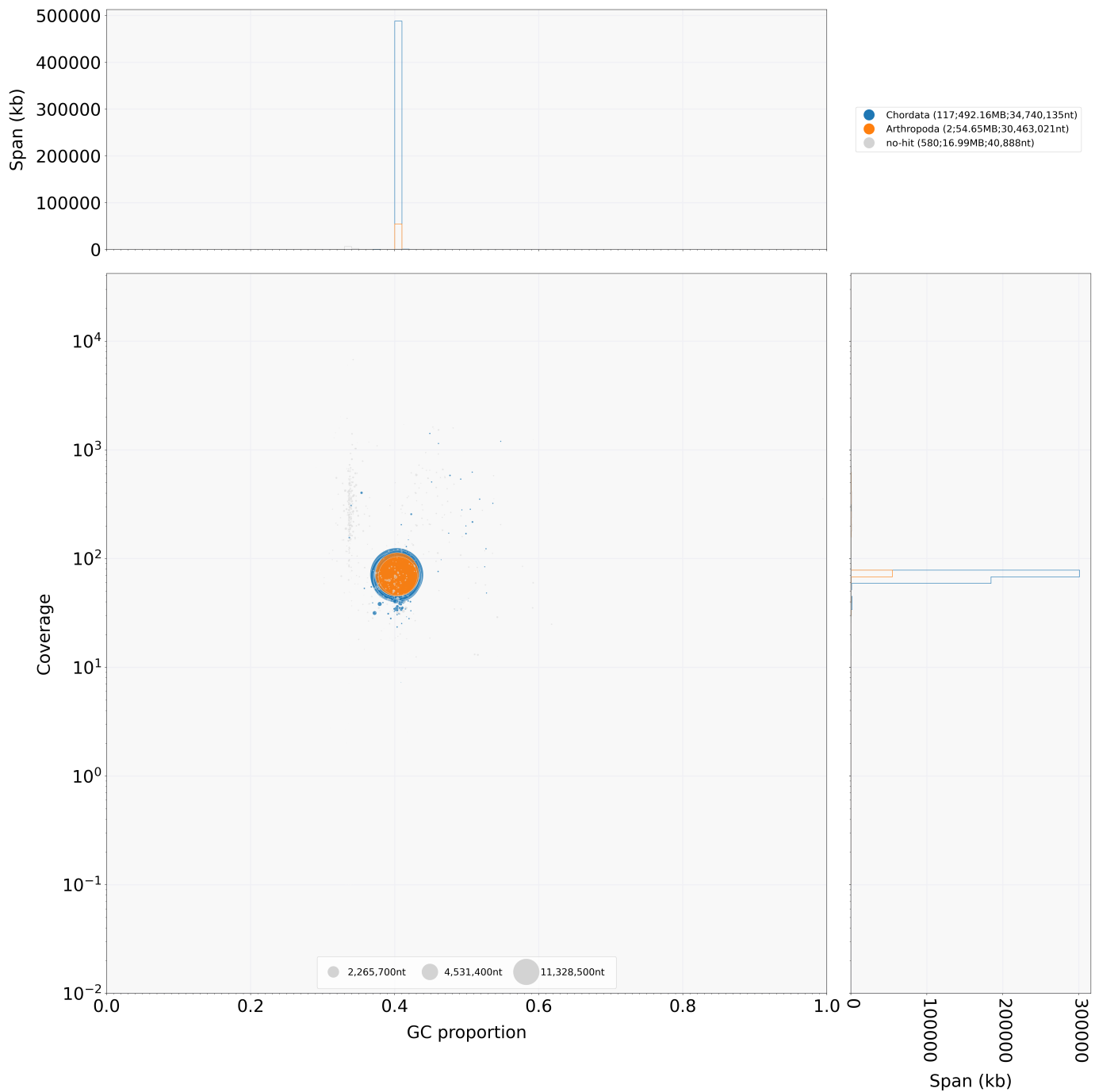
Distribution of k-mer counts coloured by their presence in reads/assemblies



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

# Post-curation contamination screening

filename.blobDB.json.bestsum.phylum.p8.span.100.blobplot.bam0



**pri.** 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	ONT	Bionano	HiC
Coverage	169x	NA	104x

## Assembly pipeline

- **Necat**
  - |\_ *ver*: 0.0.1
  - |\_ *key param*: NA
- **purge\_dups**
  - |\_ *ver*: 1.2.5
  - |\_ *key param*: NA
- **YaHS**
  - |\_ *ver*: 1.1
  - |\_ *key param*: NA

## Curation pipeline

- **sanger-tol/curationpretext**
  - |\_ *ver*: 1.4.1
  - |\_ *key param*: NA
- **PretextView**
  - |\_ *ver*: 1.0.3
  - |\_ *key param*: NA

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