

# ERGA Assembly Report

v24.08.26

Tags: ERGA-BGE

TxID	2934182
ToLID	<b>xgPhyFlav1</b>
Species	Phyllidia flava
Class	Gastropoda
Order	Nudibranchia

Genome Traits	Expected	Observed
Haploid size (bp)	3,011,504,214	3,343,225,297
Haploid Number	12 (source: ancestor)	28
Ploidy	2 (source: ancestor)	2
Sample Sex	XX	XX

## EBP metrics summary and curation notes

Obtained EBP quality metric for hap1: 7.8.Q6

Obtained EBP quality metric for hap2: 7.8.Q69

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

- . Observed Haploid Number is different from Expected
- . QV value is less than 40 for hap1
- . Kmer completeness value is less than 90 for hap1
- . Assembly length loss > 3% for hap1
- . Assembly length loss > 3% for hap2

### Curator notes

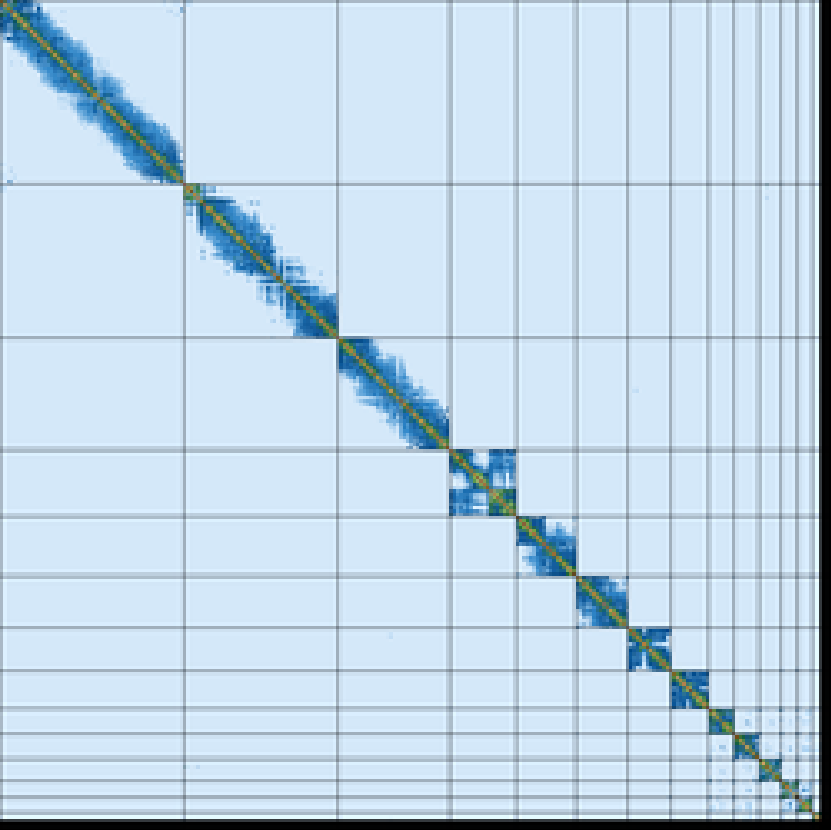
- . Interventions/Gb: 2
- . Contamination notes: "No presence of contaminants. Mitochondrial genome was removed from the assembly"
- . Other observations: "Large collapsed repeat in chr5, haplotypic inversion in chr12"

# Quality metrics table

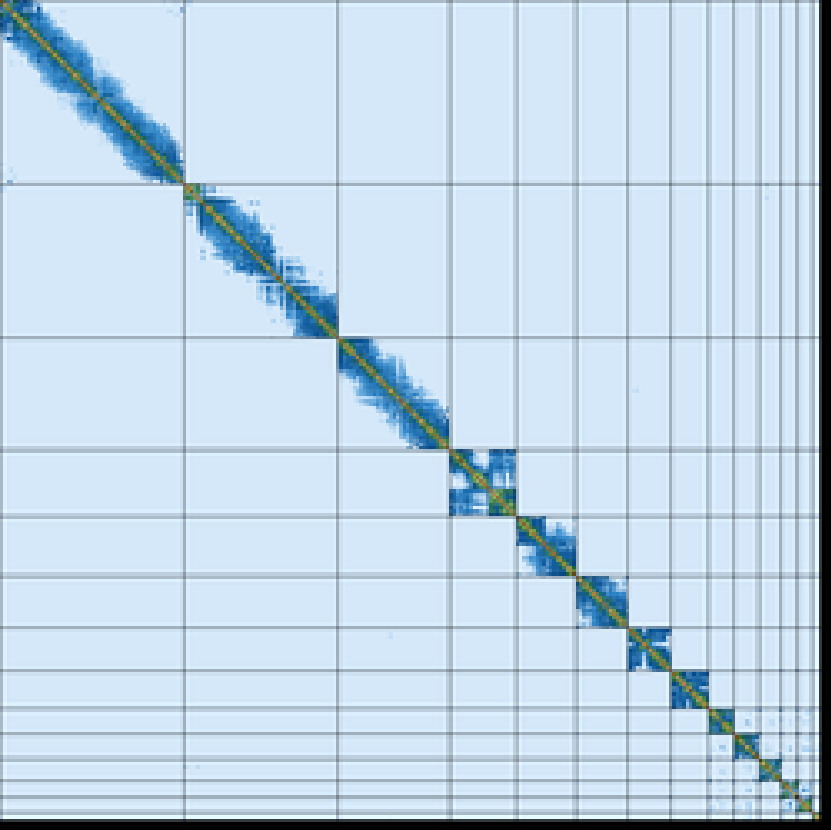
Metrics	Pre-curation hap1	Pre-curation hap2	Curated hap1	Curated hap2
Total bp	3,660,021,265	3,238,925,270	3,343,225,297	3,140,900,549
GC %	41.62	41.25	41.09	41.07
Gaps/Gbp	34.97	23.77	22.13	19.74
Total gap bp	1,874,523	3,509,524	138,686	539,693
Scaffolds	973	555	104	91
Scaffold N50	111,683,922	116,290,662	125,437,426	125,802,197
Scaffold L50	12	10	10	9
Scaffold L90	35	25	24	23
Contigs	1,101	632	178	153
Contig N50	73,275,821	88,190,939	77,716,104	88,213,608
Contig L50	16	12	14	11
Contig L90	85	40	43	36
QV	68.0694	68.4744	6	69.3854
Kmer compl.	95.5615	90.8003	9	90.8758
BUSCO sing.	95.3%	92.9%	95.2%	92.8%
BUSCO dupl.	0.7%	0.8%	0.7%	0.8%
BUSCO frag.	1.1%	1.1%	1.1%	1.1%
BUSCO miss.	2.9%	5.2%	3.0%	5.3%

BUSCO 5.4.7 Lineage: mammalia\_odb10 (genomes:24, BUSCOs:9226)

# HiC contact map of curated assembly

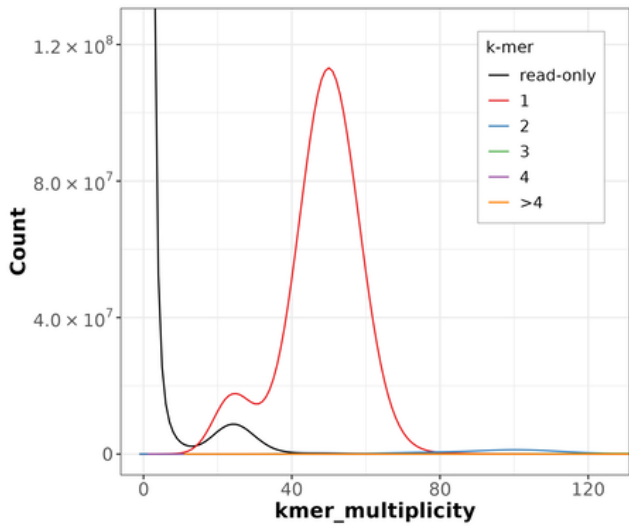


hap1 [\[LINK\]](#)

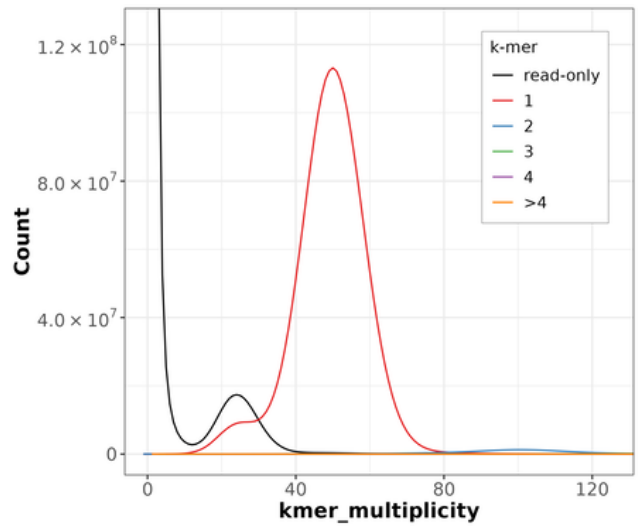


hap2 [\[LINK\]](#)

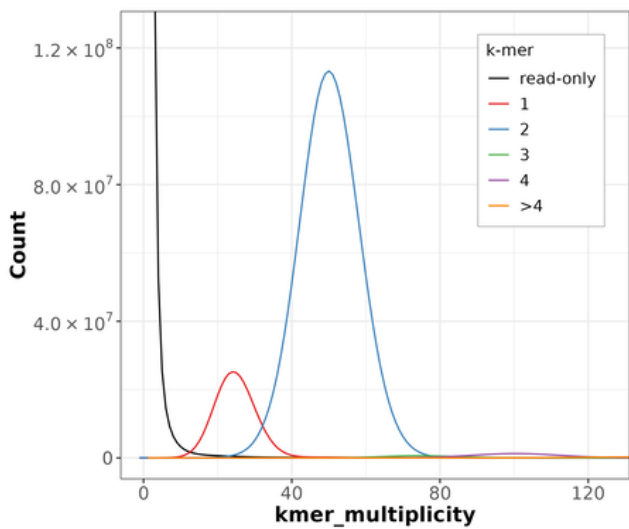
# K-mer spectra of curated assembly



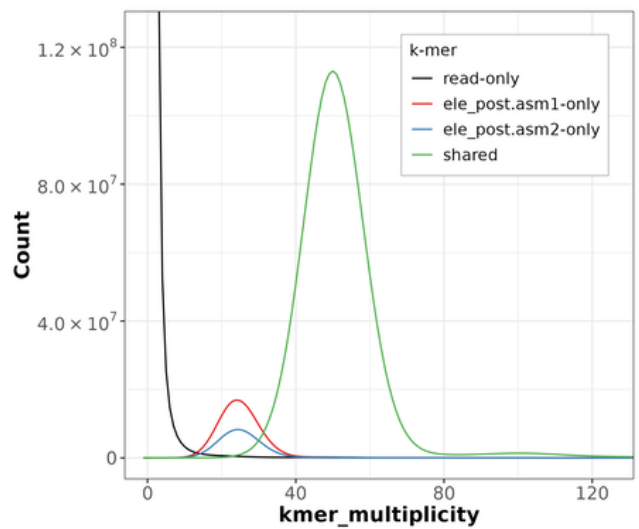
dataset\_a3b73354-725c-49cc-8f03-1d609e6a6d4f.dat



dataset\_333b5269-98ff-4725-9be3-e0d3f8860e04.dat



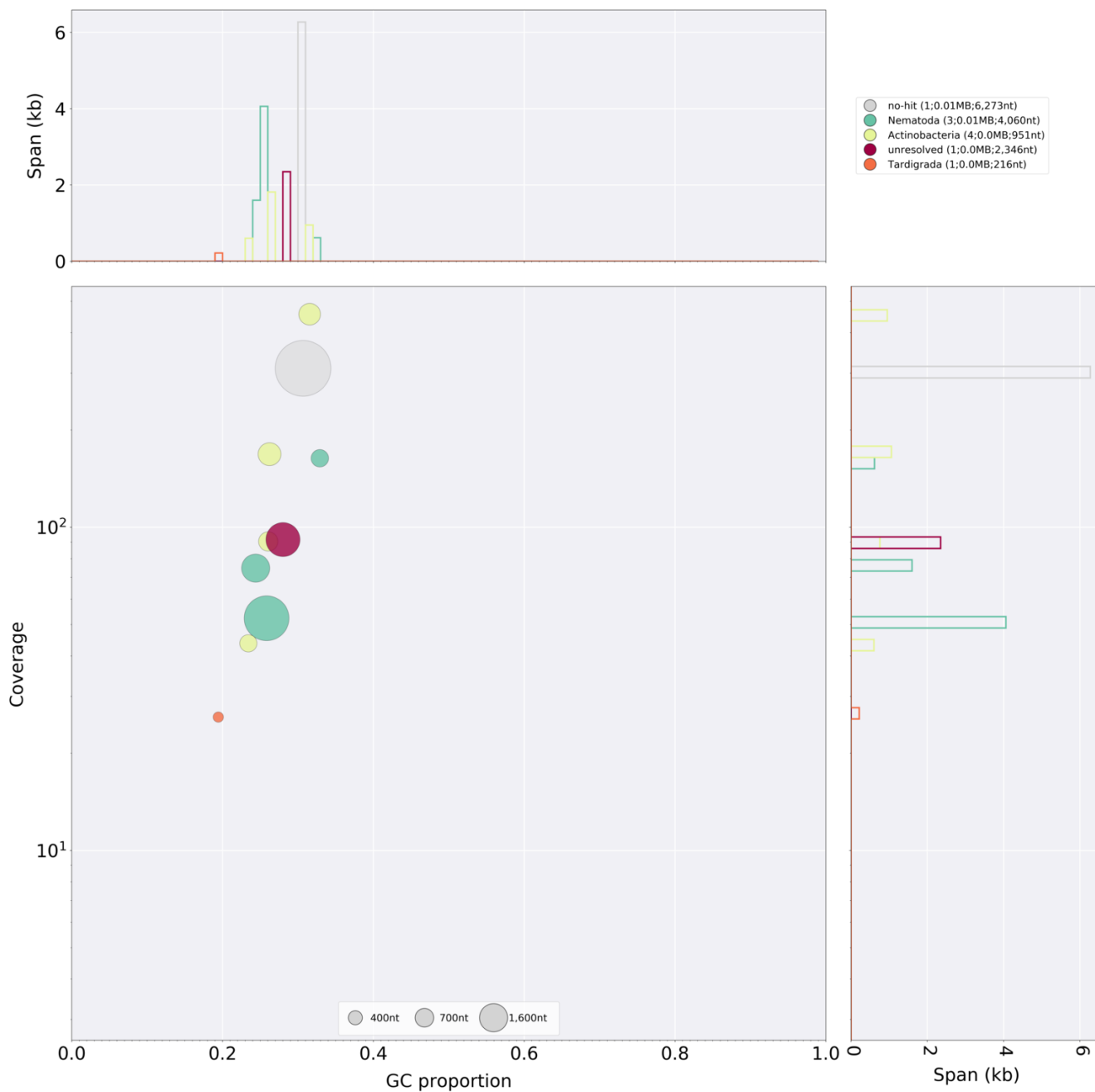
dataset\_d3e31cf3-6271-408b-8759-cb67868fa9a8.dat



dataset\_392d18f4-078f-4fbe-a2cb-f8ed4eb98419.dat

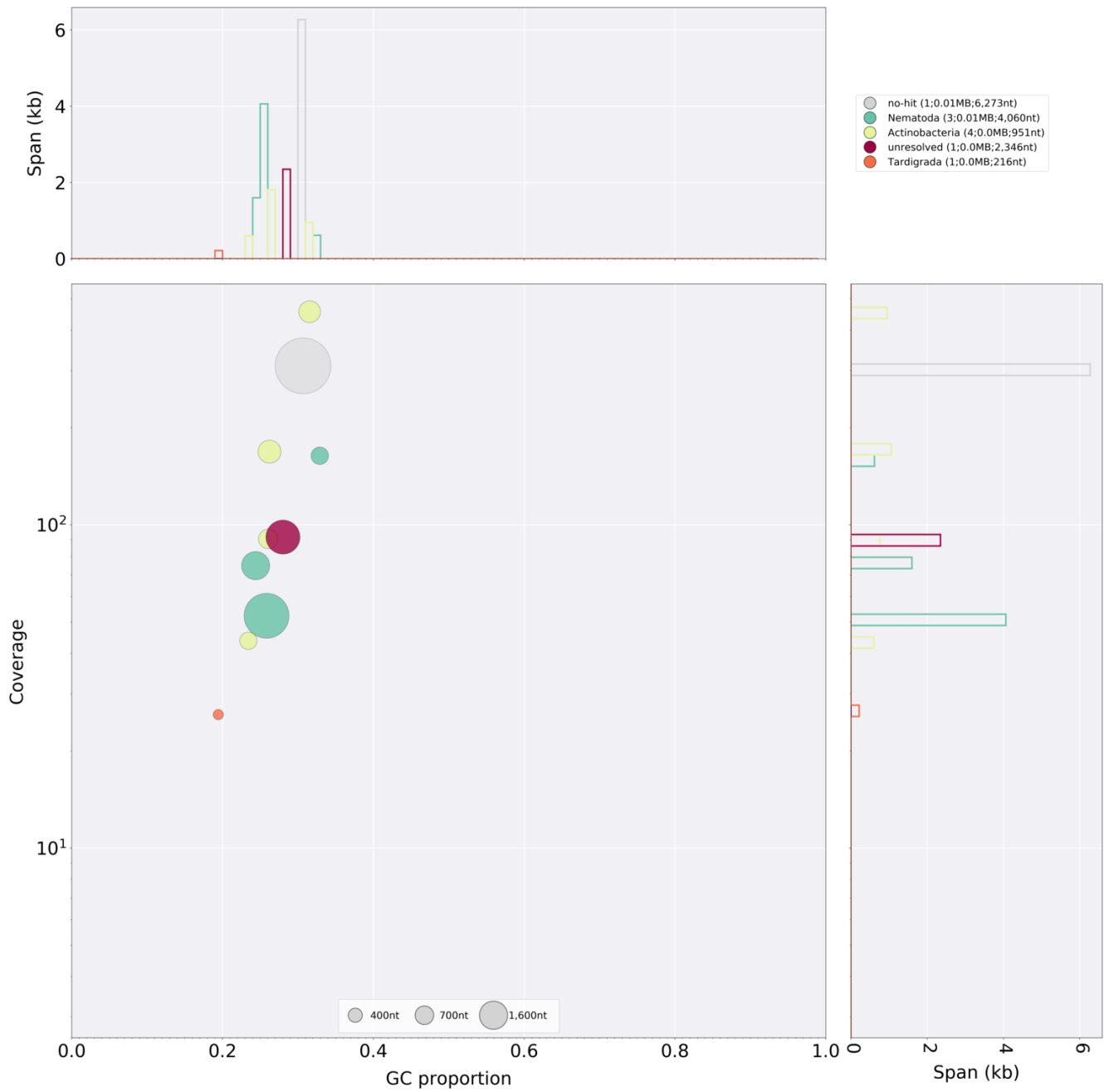
# Post-curation contamination screening

example/test.test.blobDB.json.bestsum.phylum.p7.span.100.blobplot.bam0



**hap1.** 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.

example/test.test.blobDB.json.bestsum.phylum.p7.span.100.blobplot.bam0



**hap2.** 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	HiFi	Bionano	OmniC
Coverage	40x	10x	90x

# Assembly pipeline

- **Hifiasm**
  - |\_ ver: 0.19.4
  - |\_ key param: HiC
  - |\_ key param: 10
- **purge\_dups**
  - |\_ ver: 1.2.6
  - |\_ key param: NA
- **Bionano\_solve**
  - |\_ ver: Galaxy\_3.7.0
  - |\_ key param: NA
- **YaHS**
  - |\_ ver: 1.1
  - |\_ key param: NA

# Curation pipeline

- **GRIT\_Rapid**
  - |\_ ver: 2.0
  - |\_ key param: NA
- **HiGlass**
  - |\_ ver: 1.0
  - |\_ key param: NA

Submitter: John Doe  
Affiliation: Galaxy EU

Date and time: 2024-08-29 10:47:15 CEST