#### ERGA Assembly Report

v24.04.03\_beta

Tags: ATLASea[INVALID TAG]

TxID	12959	
ToLID	odAxiPoly	
Species	Axinella polypoides	
Class	Demospongiae	
Order	Axinellida	

Genome Traits	Expected	Observed
Haploid size (bp)	134,596,807	137,764,085
Haploid Number	5 (source: ancestor)	24
Ploidy	2 (source: ancestor)	2
Sample Sex	Unknown	unknown

#### EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 5.6.Q55

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

- . Observed Haploid Number is different from Expected
- . Kmer completeness value is less than 90 for collapsed
- . Assembly length loss > 3% for collapsed
- . More than 1000 gaps/Gbp for collapsed

#### Curator notes

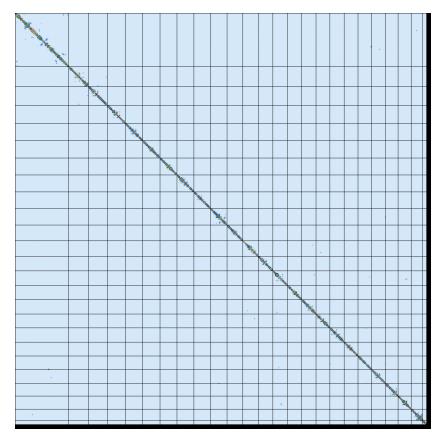
- . Interventions/Gb: None
- . Other observations: "Some hplotigs were removed"

# Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed
Total bp	151,026,055	137,764,085
GC %	44.16	44.21
Gaps/Gbp	2,026.14	2,693.01
Total gap bp	30,600	48,000
Scaffolds	174	73
Scaffold N50	5,723,994	5,432,210
Scaffold L50	11	10
Scaffold L90	23	22
Contigs	480	444
Contig N50	753,704	606,803
Contig L50	46	62
Contig L90	206	239
QV	54.8181	55.5584
Kmer compl.	53.4643	49.4857
BUSCO sing.	89.4%	90.6%
BUSCO dupl.	2.4%	1.2%
BUSCO frag.	3.9%	3.9%
BUSCO miss.	4.3%	4.3%

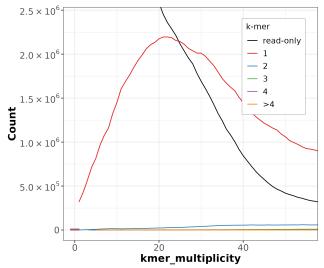
BUSCO 5.4.3 Lineage: eukaryota\_odb10 (genomes:70, BUSCOs:255)

HiC contact map of curated assembly

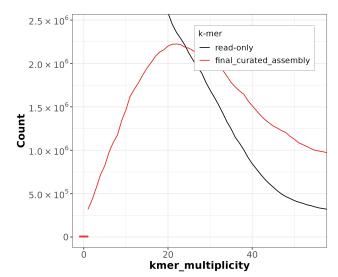


collapsed [LINK]

# K-mer spectra of curated assembly

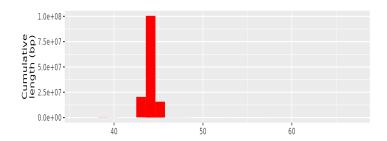


Distribution of k-mer counts per copy numbers found in asm

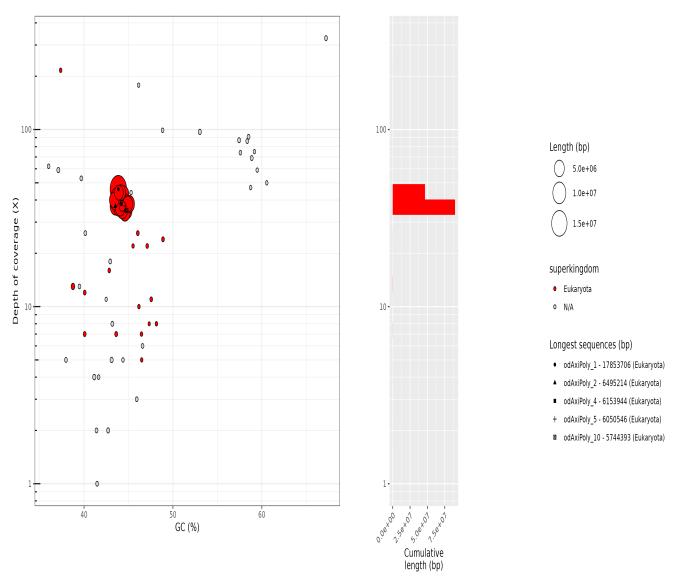


Distribution of k-mer counts coloured by their presence in reads/assemblies

#### 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 (4-enz)
Coverage	95	390

#### Assembly pipeline

```
- Hifiasm
|_ ver: 0.19.5-r593
|_ key param: NA
- purge_dups
|_ ver: 1.2.5
|_ key param: NA
```

## Curation pipeline

Submitter: Caroline Belser Affiliation: Genoscope

Date and time: 2024-08-02 08:58:53 CEST