

ERGA Assembly Report

v24.09.10

Tags: ERGA-BGE

TxID	1518524
ToLID	qqMacCret1.1
Species	<i>Macrothele cretica</i>
Class	Arachnida
Order	Araneae

Genome Traits	Expected	Observed
Haploid size (bp)	3,736,835,300	3,972,812,733
Haploid Number	23 (source: ancestor)	47
Ploidy	2 (source: ancestor)	2
Sample Sex	Unknown	Unknown

EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 6.7.Q58

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

- Observed Haploid Number is different from Expected

Curator notes

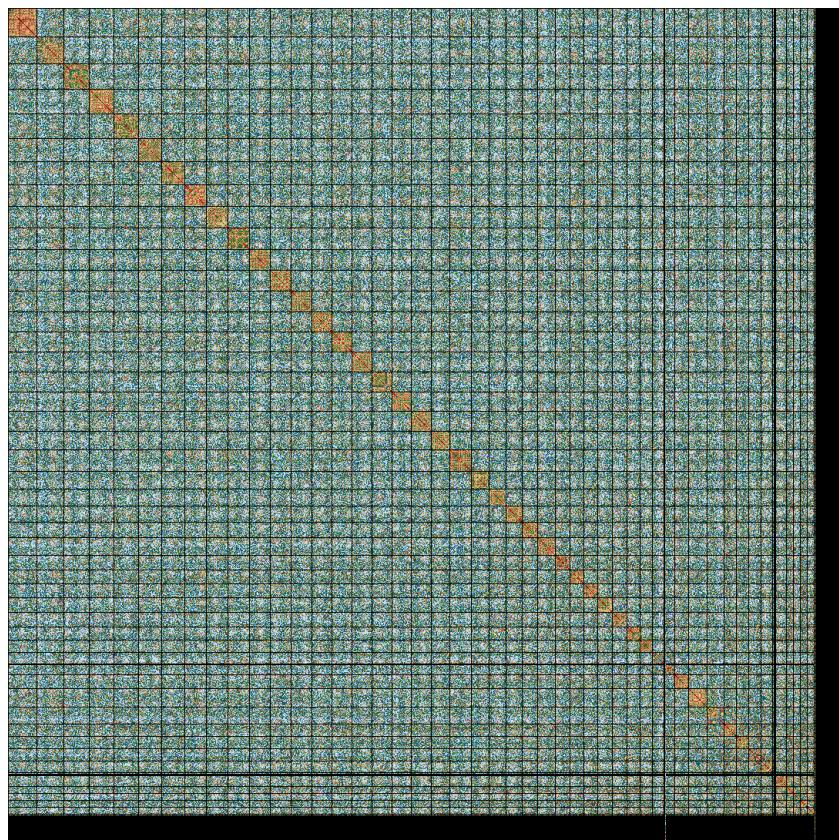
- Interventions/Gb: 38
- Contamination notes: "2 bacterian contigs removed after assembly "
- Other observations: "11 scaffolds with lower coverage corresponding to X chromosomes renamed X_1 to X_11 according to length "

Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed
Total bp	3,977,790,240	3,972,812,733
GC %	40.57	40.57
Gaps/Gbp	562.88	569.62
Total gap bp	223,900	232,900
Scaffolds	733	561
Scaffold N50	90,425,106	94,972,223
Scaffold L50	19	19
Scaffold L90	44	41
Contigs	2,972	2,824
Contig N50	3,118,366	3,123,923
Contig L50	368	367
Contig L90	1,354	1,353
QV	58.205	58.2097
Kmer compl.	96.3213	96.3082
BUSCO sing.	96.1%	96.1%
BUSCO dupl.	2.7%	2.7%
BUSCO frag.	1.2%	1.2%
BUSCO miss.	0.0%	0.0%

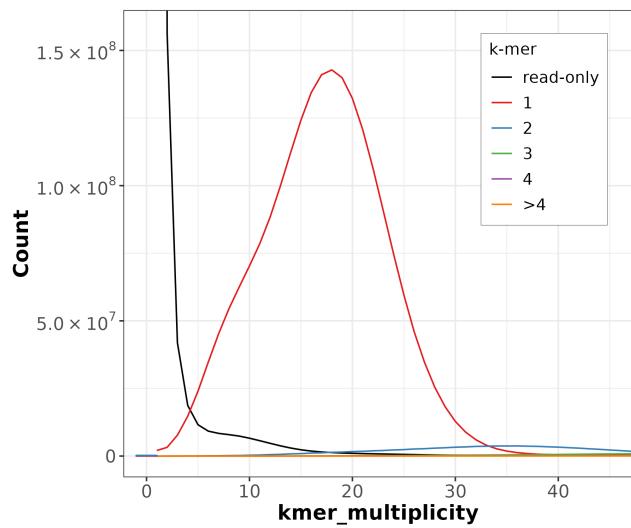
BUSCO 5.4.3 Lineage: eukaryota_odb10 (genomes:70, BUSCOS:255)

HiC contact map of curated assembly

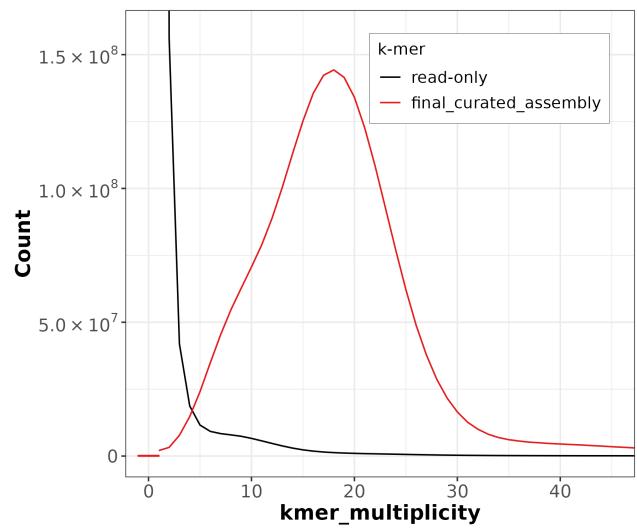


collapsed [\[LINK\]](#)

K-mer spectra of curated assembly

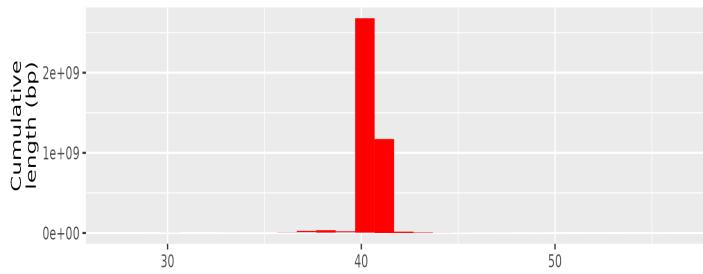


Distribution of k-mer counts per copy numbers found in asm

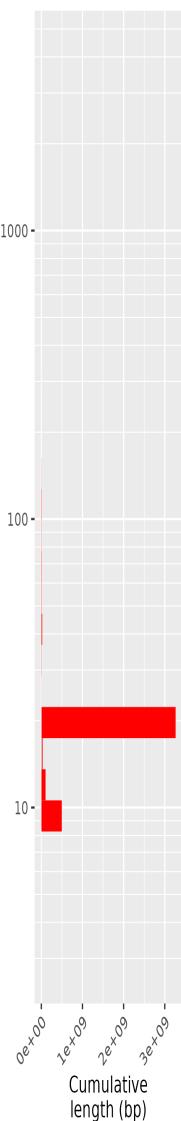
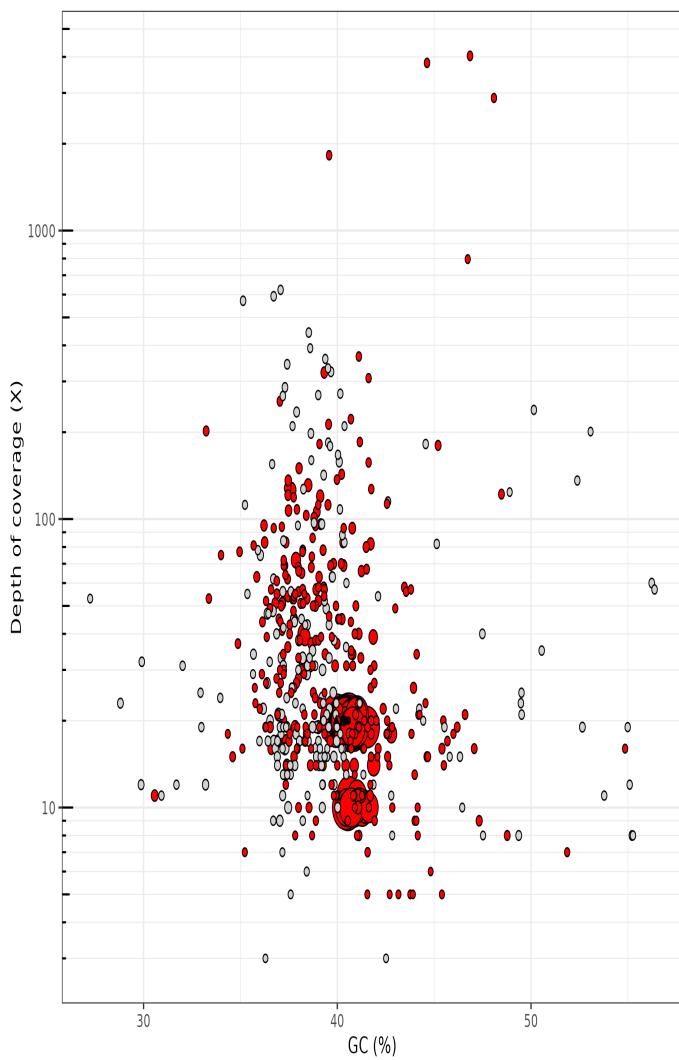


Distribution of k-mer counts coloured by their presence in reads/assemblies

Post-curation contamination screening



TAPAs summary Graph



Longest sequences (bp)

- SUPER_1 - 138909147 (Eukaryota)
- ▲ SUPER_2 - 128092427 (Eukaryota)
- SUPER_3 - 120350022 (Eukaryota)
- + SUPER_4 - 119240569 (Eukaryota)
- ▣ SUPER_5 - 117438305 (Eukaryota)

superkingdom

- Eukaryota
- N/A

Length (bp)

- 5e+07
- 1e+08

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	62	15

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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Date and time: 2024-10-23 15:01:34 CEST