

ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	1046855
ToLID	qqAmiAura12
Species	Amilenus aurantiacus
Class	Arachnida
Order	Opiliones

Genome Traits	Expected	Observed
Haploid size (bp)	493,755,031	787,386,345
Haploid Number	12 (source: ancestor)	10
Ploidy	2 (source: ancestor)	2
Sample Sex	XX	unknown

EBP metrics summary and curation notes

Obtained EBP quality metric for pri: 6.7.Q62

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

- . Observed Haploid size (bp) has >20% difference with Expected
- . Observed Haploid Number is different from Expected
- . Observed sex is different from Sample sex
- . Not 90% of assembly in chromosomes for pri

Curator notes

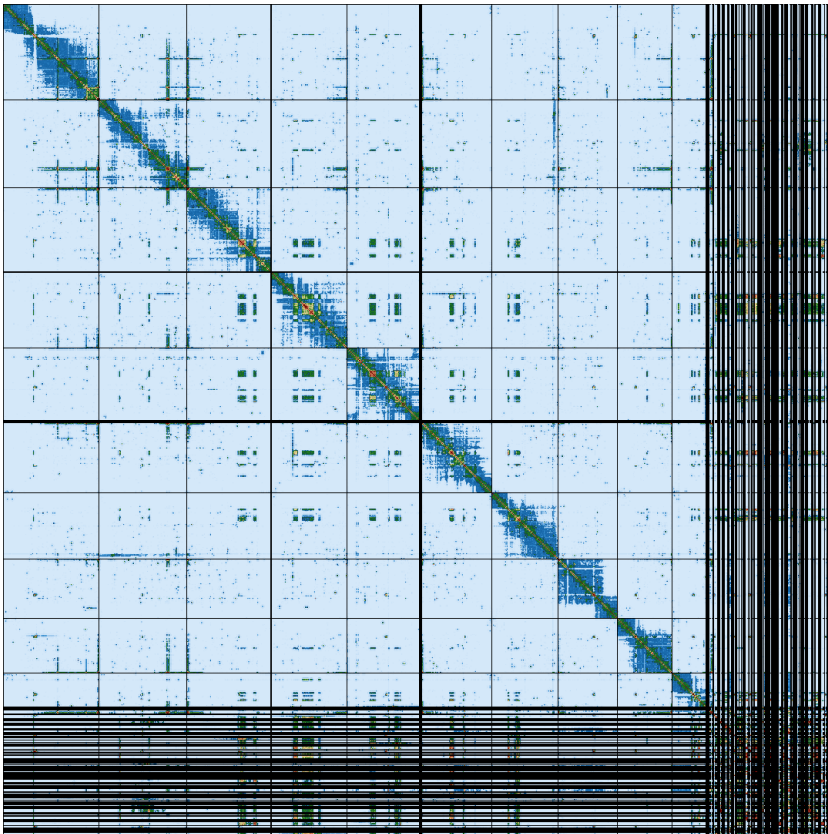
- . Interventions/Gb: 66
- . Contamination notes: "BTK on the primary assembly failed. The run on hap2 is shown. No true contaminants found - some false positives. BTK says Mollusca on a 45M scaffold, but there are more arthropoda hits with higher bitscores than mollusk hits. There are some extreme GC distributions, but related to repeats I think. "
- . Other observations: "Curation made 6 cuts in contigs, 17 breaks at gaps and 29 joins. Curated MQ0 map."

Quality metrics table

Metrics	Pre-curation pri	Curated pri
Total bp	792,648,794	787,386,345
GC %	32.78	32.78
Gaps/Gbp	108.5	152.4
Total gap bp	17,200	24,000
Scaffolds	360	329
Scaffold N50	28,513,148	66,555,013
Scaffold L50	9	6
Scaffold L90	56	27
Contigs	446	449
Contig N50	6,101,000	5,622,897
Contig L50	33	34
Contig L90	133	136
QV	62.3124	62.2914
Kmer compl.	96.8274	96.7164
BUSCO sing.		94.8%
BUSCO dupl.		0.5%
BUSCO frag.		3.0%
BUSCO miss.		1.7%

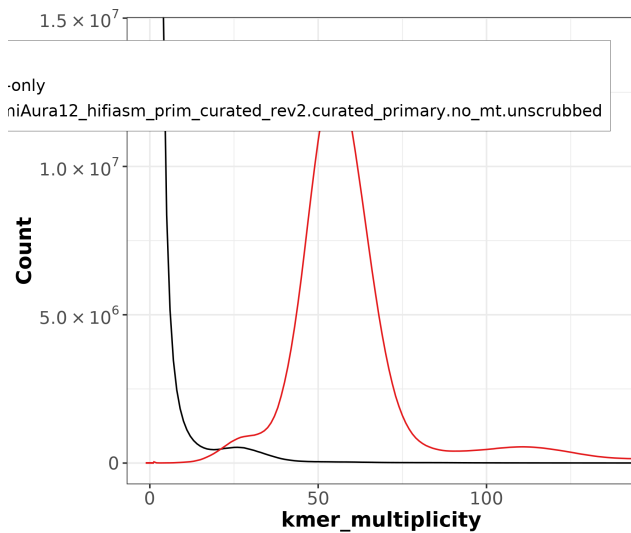
BUSCO: 5.5.0 (euk_genome_met, metaeuk) / Lineage: metazoa_odb10 (genomes:65, BUSCOs:954)

HiC contact map of curated assembly

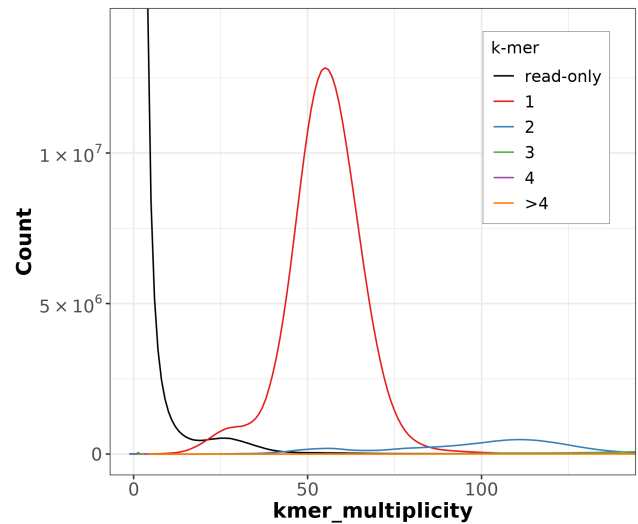


pri [\[LINK\]](#)

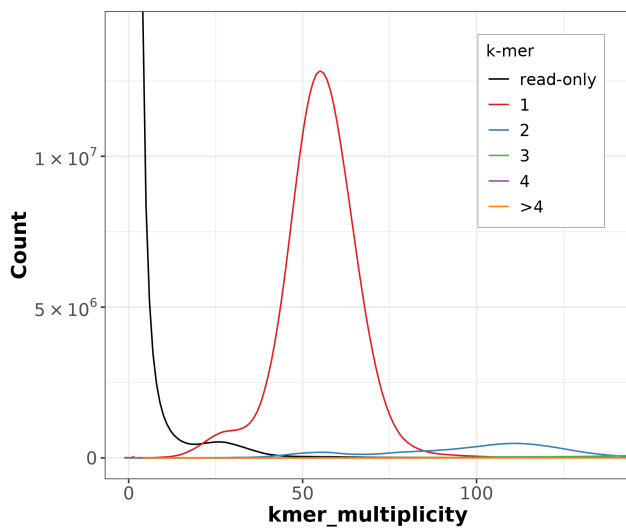
K-mer spectra of curated assembly



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

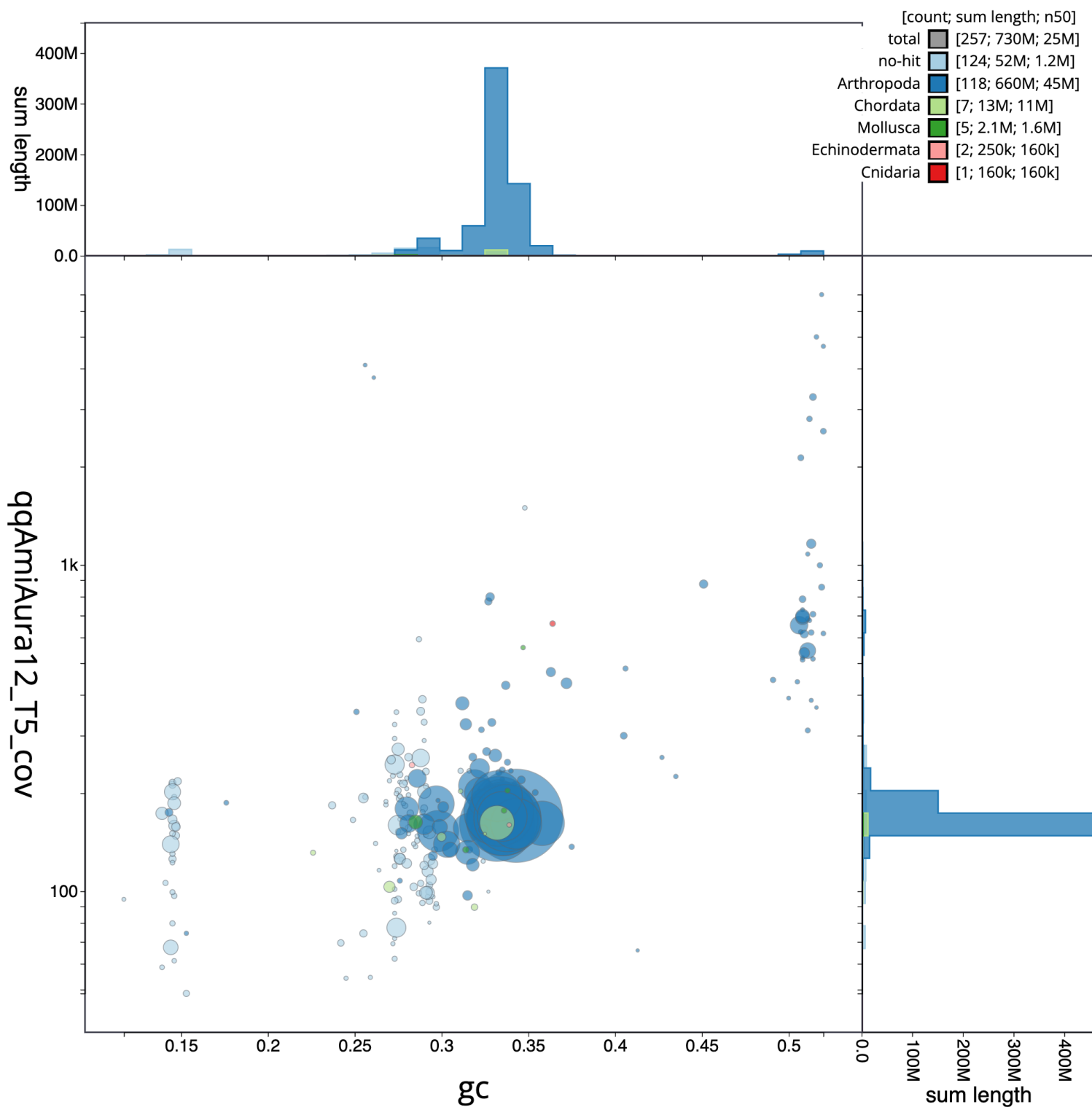


Distribution of k-mer counts per copy numbers found in asm



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

Post-curation contamination screening



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	Omni-C	Illumina WGS
Coverage	112x	131x	54x

Assembly pipeline

- **Filtlong**
 - |_ *ver*: 0.2.1
 - |_ *key param*: --min_length 1000 --min_mean_q 97 -t 42000000000
- **Hifiasm**
 - |_ *ver*: 0.24.0
 - |_ *key param*: --ont
- **YaHS**
 - |_ *ver*: 1.2a
 - |_ *key param*: NA
- **CLAWS pipeline**
 - |_ *ver*: 2.3.0
 - |_ *key param*: NA
- **Blobtoolkit Nextflow pipeline (latest)**
 - |_ *ver*: 0.6
 - |_ *key param*: NA
- **FOAM pipeline**
 - |_ *ver*: 0.5
 - |_ *key param*: NA
- **mitos**
 - |_ *ver*: 2.1.3
 - |_ *key param*: NA

Curation pipeline

- **PretextView**
 - |_ *ver*: 0.2.5
 - |_ *key param*: NA
- **GRIT_Rapid**
 - |_ *ver*: 2.0
 - |_ *key param*: NA

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