ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	2068848
ToLID	**qqArtNeph1**
Species	Artema nephilit
Class	Arachnida
Order	Araneae

Genome Traits	Expected	Observed
Haploid size (bp)	1,485,957,015	1,505,847,117
Haploid Number	11 (source: ancestor)	17
Ploidy	2 (source: ancestor)	2
Sample Sex	unknown	unknown

EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 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

. Kmer completeness value is less than 90 for collapsed

Curator notes

. Interventions/Gb: None
. Contamination notes: "Wolbachia endosymbiont removed by FCS-GX"
. Other observations: ""

Quality metrics table

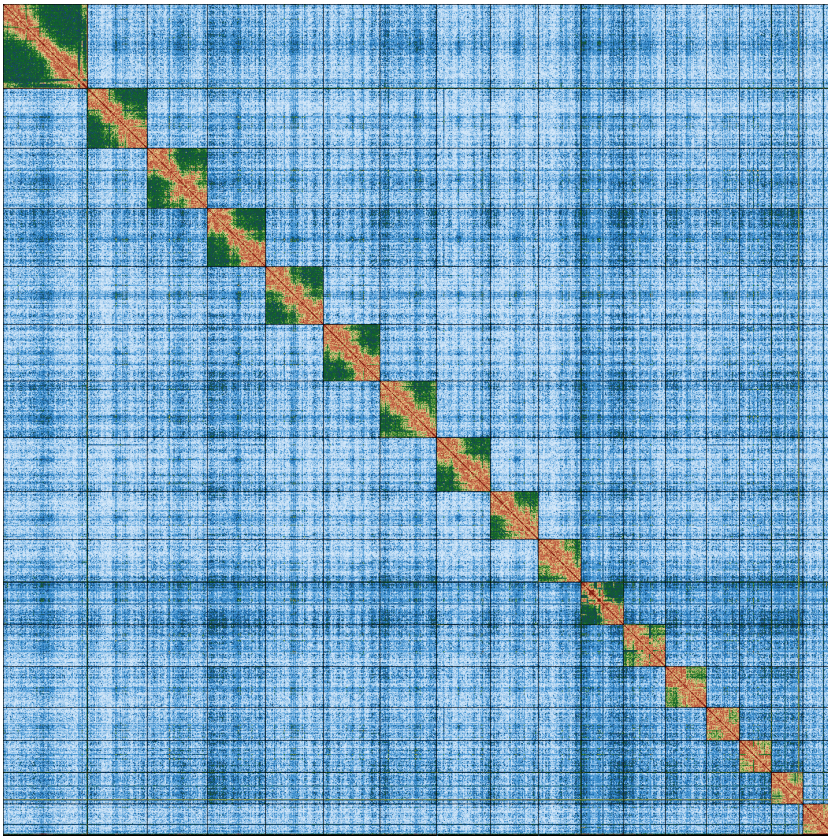| Metrics	Pre-curation collapsed	Curated collapsed
Total bp	1,527,716,421	1,505,847,117
GC %	41.58	41.55
Gaps/Gbp	39.27	59.77
Total gap bp	12,000	18,000
Scaffolds	101	47
Scaffold N50	97,804,034	101,994,854
Scaffold L50	7	7
Scaffold L90	16	15
Contigs	161	137
Contig N50	29,532,000	29,532,000
Contig L50	16	16
Contig L90	49	48
QV	66.1	69.4
Kmer compl.	88.47	88.16
BUSCO sing.	92.3%	92.7%
BUSCO dupl.	5.1%	4.8%
BUSCO frag.	0.6%	0.2%
BUSCO miss.	2.0%	2.2%

Warning! BUSCO versions or lineage datasets are not the same across results:
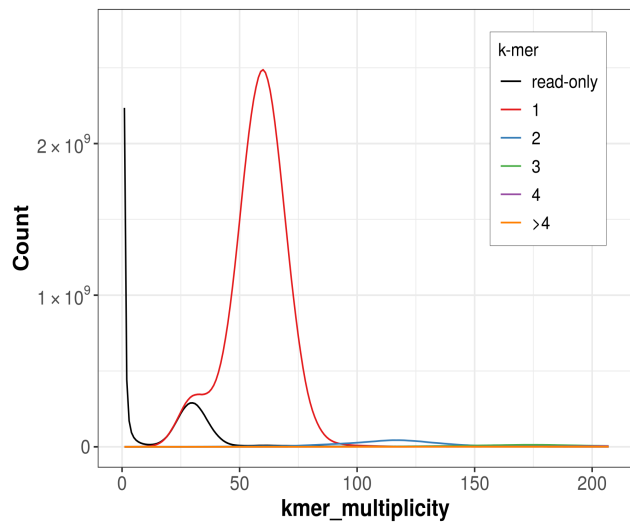BUSCO: 5.8.3 (euk_genome_min, miniprot) / Lineage: arachnida_odb10 (genomes:10, BUSCOs:2934)
BUSCO: 6.0.0 (euk_genome_min, miniprot) / Lineage: arachnida_odb10 (genomes:10, BUSCOs:2934)
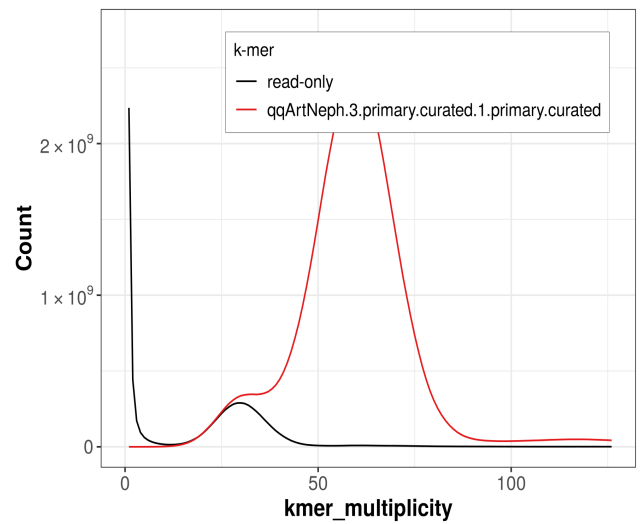
HiC contact map of curated assembly

collapsed [LINK]
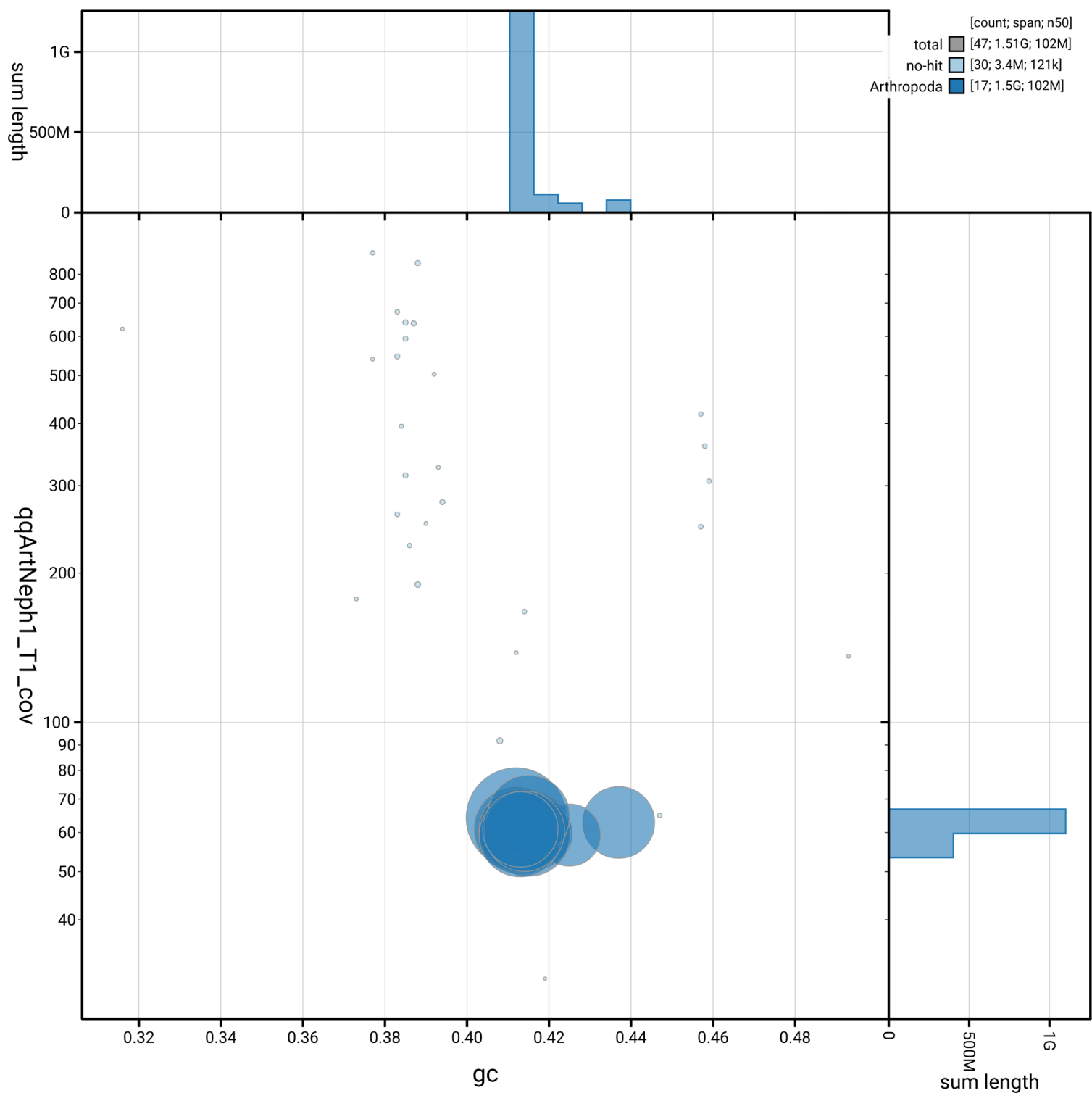
K-mer spectra of curated assembly

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

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	hifi	hic
Coverage	60x	235x

Assembly pipeline

- **NBIS/Earth-Biogenome-Project-pilot**
  |_ *ver:* commit:855f10a4de2cbfbb20122d2afce4ea6233c1336c
  |_ *key param:* NA

Curation pipeline

- **Sanger-tol/curationpretext**
  |_ *ver:* 1.5.0
  |_ *key param:* NA
- **PretextView**
  |_ *ver:* 1.0.4
  |_ *key param:* NA
- **sanger-tol/agp-tpf-utils**
  |_ *ver:* commit: 35ea45dbcd8f3ece7a91104e5813541b55beb2ff
  |_ *key param:* NA
- **mahesh-panchal/sanger-tol-ear**
  |_ *ver:* commit: 4d9020a088
  |_ *key param:* NA

Submitter: Mahesh Binzer-Panchal
Affiliation: SciLifeLab

Date and time: 2025-10-30 10:24:33 CET