ERGA Assembly Report

v24.10.15

Tags: ERGA-BGE

TxID	3054493		
ToLID	ibLobCana1		
Species	Loboptera canariensis		
Class	Insecta		
Order	Blattodea		

Genome Traits	Expected	Observed
Haploid size (bp)	1,975,410,362	2,217,202,221
Haploid Number	17 (source: ancestor)	17
Ploidy	2 (source: ancestor)	2
Sample Sex	XX	XX

EBP metrics summary and curation notes

Obtained EBP quality metric for collapsed: 6.8.Q40

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

. Kmer completeness value is less than 90 for collapsed

Curator notes

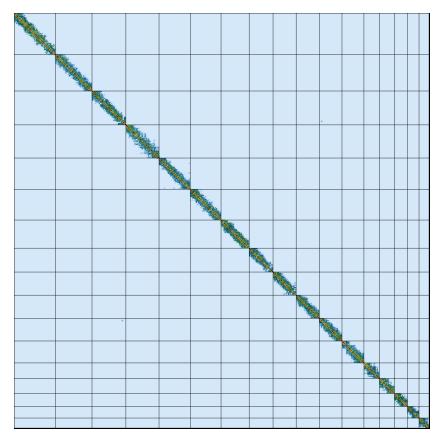
- . Interventions/Gb: 11
- . Contamination notes: "78 scaffolds detected as contaminants with BTK were removed from the curated assembly."
- . Other observations: "Curation made 0 cuts in contigs, 3 breaks at gaps and 13 joins. Sex chromosome unknown. Mitogenome was assembled into a single circular contig of 16,194 bp of high sequence accuracy."

Quality metrics table

Metrics	Pre-curation collapsed	Curated collapsed	
Total bp	2,257,139,729	2,217,202,221	
GC %	34.91	34.73	
Gaps/Gbp	217.09	225.51	
Total gap bp	98,000	100,000	
Scaffolds	129	41	
Scaffold N50	151,223,706	151,223,706	
Scaffold L50	7	7	
Scaffold L90	15	14	
Contigs	619	541	
Contig N50	8,565,483	8,641,591	
Contig L50	81	79	
Contig L90	291	277	
QV	40.8518	40.8397	
Kmer compl.	79.6128	77.859	
BUSCO sing.	97.3%	97.4%	
BUSCO dupl.	1.8%	1.7%	
BUSCO frag.	0.6%	0.7%	
BUSCO miss.	0.3%	0.2%	

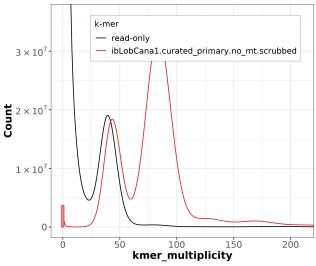
BUSCO: 5.4.0 (euk_genome_met, metaeuk) / Lineage: insecta_odb10 (genomes:75, BUSCOs:1367)

HiC contact map of curated assembly

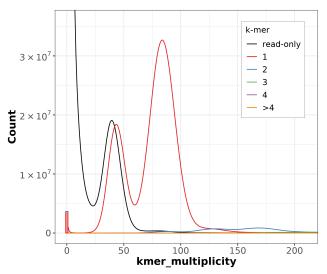


collapsed [LINK]

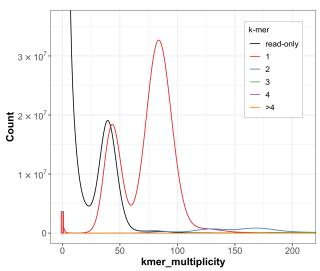
K-mer spectra of curated assembly



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

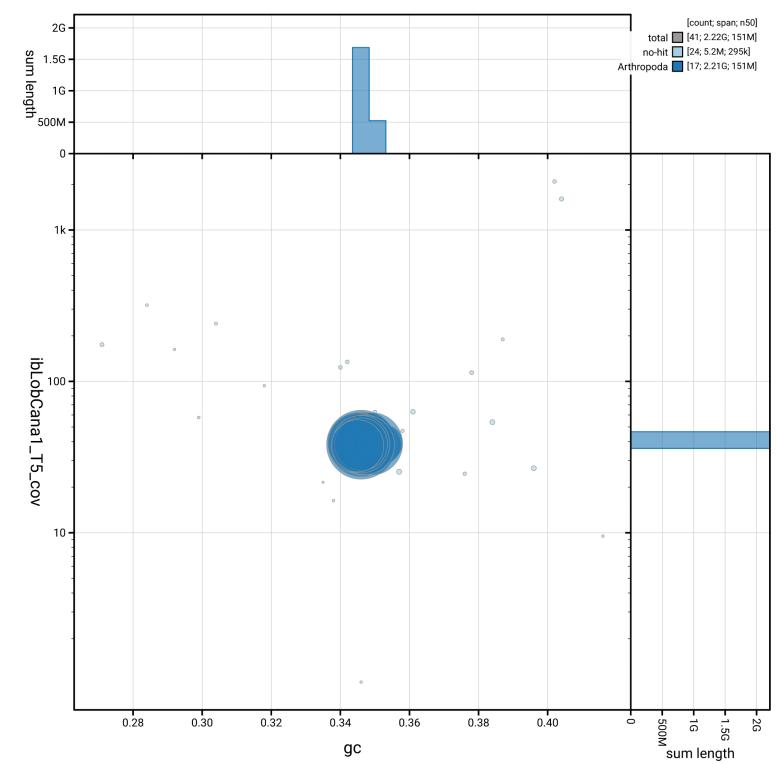


Distribution of k-mer counts per copy numbers found in asm



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

Post-curation contamination screening



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	ONT	Illumina	OmniC
Coverage	57	65	42

Assembly pipeline

```
- CLAWS pipeline
   _ ver: 2.2.0
    |_ key param: NA
- Trim_galore
   |_ ver: 0.6.7
   _ key param: NA
- Filtlong
    _ ver: 0.2.1
    |_ key param: NA
- flye
   |_ ver: 2.9.1
    _ key param: NA
- nextdenovo
   |_ ver: 2.5.0
   _ key param: NA
- hypo
    |_ ver: 1.0.3
    _ key param: NA
purge_dups
    |_ ver: 1.2.6
   | key param: NA
- YaHS
    |_ ver: 1.2a
   _ 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
- Blobtoolkit nexflow pipeline
| ver: 0.6.0
| key param: NA
- GRIT_Rapid
| ver: 2.0
| key param: NA
```

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