#### ERGA Assembly Report

v24.04.03 beta

Tags: ERGA-BGE

TxID	3163510	
ToLID	idEumHisp1	
Species	Eumerus hispidus	
Class	Insecta	
Order	Diptera	

Genome Traits	Expected	Observed
Haploid size (bp)	533,676,914	672,114,584
Haploid Number	6 (source: ancestor)	7
Ploidy	3 (source: ancestor)	2
Sample Sex	M	М

#### EBP metrics summary and curation notes

Obtained EBP quality metric for pri: 7.7.Q65

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 Ploidy is different from Expected

#### Curator notes

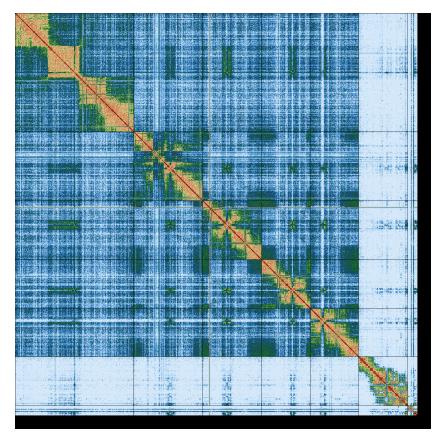
- . Interventions/Gb: 59
- Contamination notes: "Contamination report for assembly labelled hap1; Total length of scaffolds removed: 1,008,721 (0.1 %);Scaffolds removed: 23 (6.9 %);Largest scaffold removed: (201,185);FCS-GX contaminant species (number of scaffolds; total length of scaffolds):Manihot esculenta, plants (5; 92,971);Hevea brasiliensis, plants (3; 237,937);Asaia bogorensis, a-proteobacteria (3; 135,041);Asaia krungthepensis, a-proteobacteria (2; 119,779);Kozakia baliensis, a-proteobacteria (2; 86,105);Drosophila suzukii associated hytrosavirus 1, viruses (1; 120,106);Asaia lannensis, a-proteobacteria (1; 68,758);Neoasaia chiangmaiensis, a-proteobacteria (1; 36,138);Swaminathania salitolerans, a-proteobacteria (1; 33,799);Asaia astilbis, a-proteobacteria (1; 25,523); Mitochondrion (3; 52,564)"
- . Other observations: "Assembly was Hi-C phased; The exact order and orientation of the contigs on chromosome X (75.4 79.2 Mbp) are unknown. The X and Y chromosome was identified by read coverage."

# Quality metrics table

Metrics	Pre-curation pri	Curated pri
Total bp	672,552,723	672,114,584
GC %	38.2	38.18
Gaps/Gbp	71.37	132.42
Total gap bp	4,800	13,200
Scaffolds	335	282
Scaffold N50	79,633,640	94,877,594
Scaffold L50	3	3
Scaffold L90	10	6
Contigs	383	371
Contig N50	12,617,015	11,607,000
Contig L50	15	16
Contig L90	48	51
QV	66.3	65.9
Kmer compl.	99.43	99.40
BUSCO sing.	98.8%	98.8%
BUSCO dupl.	0.6%	0.5%
BUSCO frag.	0.3%	0.3%
BUSCO miss.	0.4%	0.4%

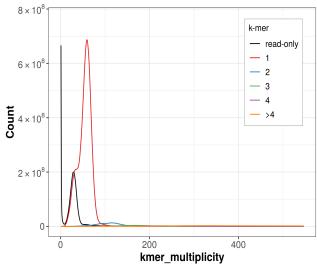
BUSCO 6.0.0 Lineage: insecta\_odb10 (genomes:75, BUSCOs:1367)

# HiC contact map of curated assembly

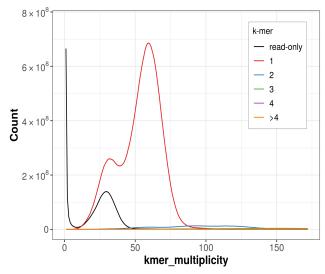


pri [LINK]

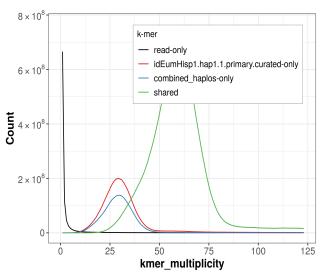
# K-mer spectra of curated assembly



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

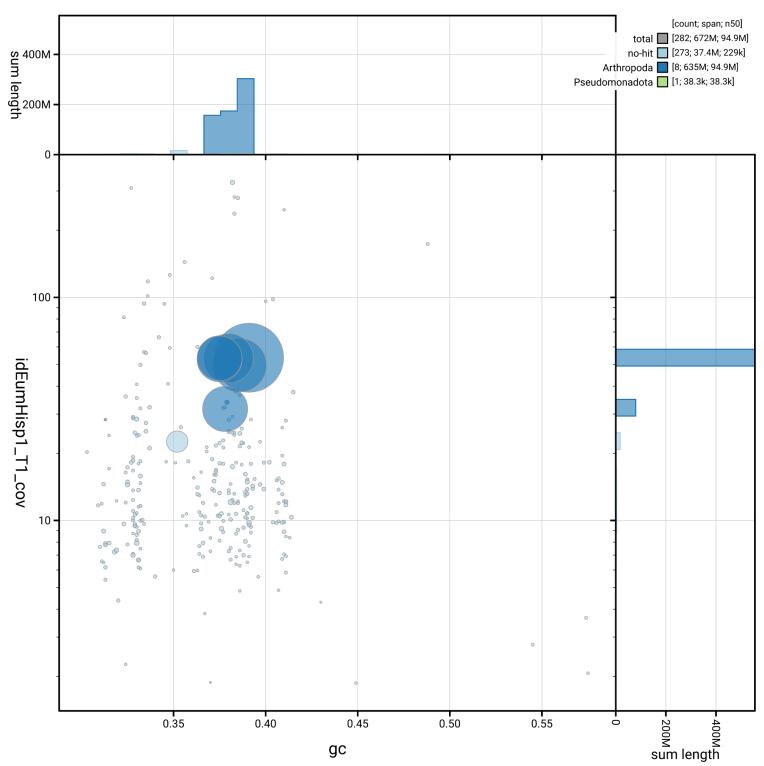


Distribution of k-mer counts per copy numbers found in asm



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

## Post-curation contamination screening



**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	PacBio HiFi	Arima v2
Coverage	58x	436x

## Assembly pipeline

```
- hifiasm-hic

|_ ver: 0.19.8-r603

|_ key param: --h1/--h2

- yahs

|_ ver: 1.2.2

|_ key param: NA
```

# Curation pipeline

Submitter: Daniel Zilov Affiliation: WSI

Date and time: 2025-08-18 13:03:34 CEST