### ERGA Assembly Report

v21.07.23\_beta

Tags: ERGA-Pilot

ToLID	b0enLec1		
Species	Oenanthe leucura		
Class	Aves		
Order	Passeriformes		
Haploid Number	41 (source: ['ancestor'])		
Ploidy	2		

### Data profile

Data	Coverage
HiFi	40
Omni-C	62

## Pipeline summary

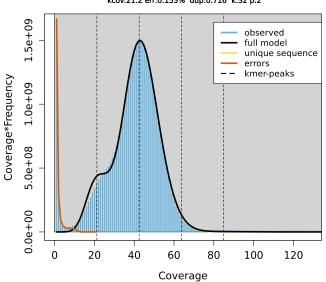
Tool	Version	
GenomeScope	2.0	
Smudgeplot	0.2.5	
Hifiasm	0.19.5-r587	
purge_dups	1.2.5	
YaHS	1.2a.1	

## Genome profiling

Estimated Haploid Length	1,074,610,835	
Heterozygosity rate	0.560172%	
Kmer coverage	21.24	
Proposed ploidy	4	

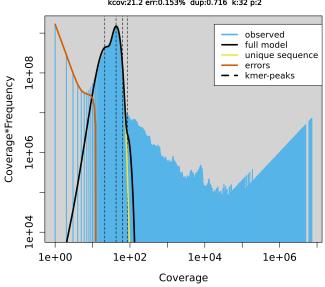
#### GenomeScope Profile

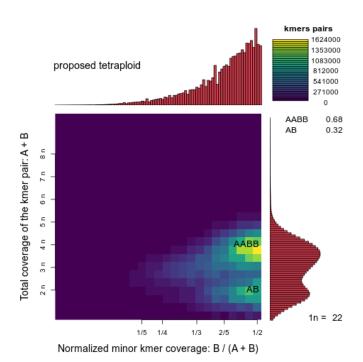
len:1,075,728,846bp uniq:83.9% aa:99.4% ab:0.565% kcov:21.2 err:0.153% dup:0.716 k:32 p:2

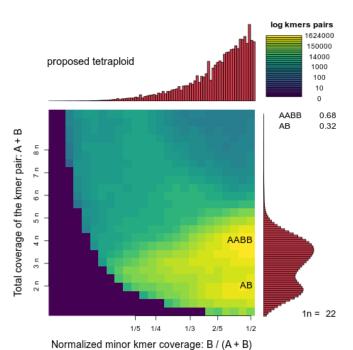


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len:1,075,728,846bp uniq:83.9% aa:99.4% ab:0.565% kcov:21.2 err:0.153% dup:0.716 k:32 p:2





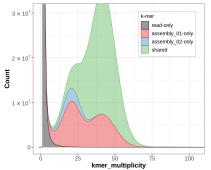


# Genome assembly: contigging

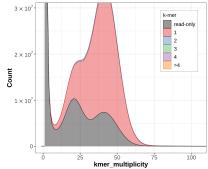
Metrics	Hifiasm pri	Hifiasm alt	purge_dups pri	purge_dups alt
Total bp	1,439,947,800	961,987,949	1,287,398,044	867,152,945
GC %	44.08	43.38	43.51	42.83
Gaps	0	0	0	0
Gaps/Gbp	0	0	0	0
Gaps bp	0	0	0	0
Scaffolds	1,771	7,495	1,082	4,106
Longest Scaf.	52,532,269	2,594,042	52,532,269	3,133,655
Scaffold auN	16,710,502.73	523,850.29	18,569,467.89	617,742.32
Scaffold N50	9,121,822	386,472	13,613,749	481,464
Scaffold L50	29	667	23	520
Scaffold L90	505	3,604	282	2,006
Contigs	1,771	7,495	1,082	4,106
Largest Cont.	52,532,269	2,594,042	52,532,269	3,133,655
Contig auN	16,710,502.73	523,850.29	18,569,467.89	617,742.32
Contig N50	9,121,822	386,472	13,613,749	481,464
Contig L50	29	667	23	520
Contig L90	505	3,604	282	2,006
QV	59.2146	60.2918	60.0324	60.3211
Kmer compl.	95.3192	69.5031	95.1355	71.1488
BUSCO sing.	94.5%	69.2%	96.1%	71.0%
BUSCO dupl.	2.0%	0.8%	0.4%	0.4%
BUSCO frag.	0.6%	1.3%	0.6%	1.5%
BUSCO miss.	2.9%	28.7%	2.9%	27.1%

Lineage: passeriformes\_odb10 (genomes:15, BUSCOs:10844)

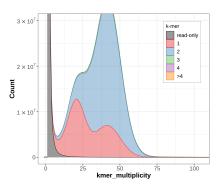
### K-mer spectra: Hifiasm



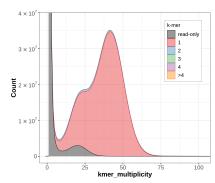
output\_merqury\_hifiasm\_noHiC\_pri\_alt.spectra-asm.st.png



output\_merqury\_hifiasm\_noHiC\_pri\_alt.assembly\_02.spectra-cn.st.png

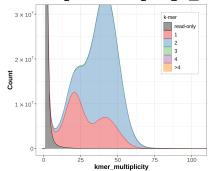


output\_merqury\_hifiasm\_noHiC\_pri\_alt.spectra-cn.st.png

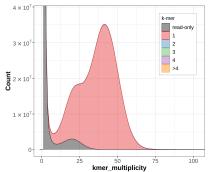


 $\verb"output_merqury_hifiasm_noHiC_pri_alt.assembly_01.spectra-cn.st.png"$ 

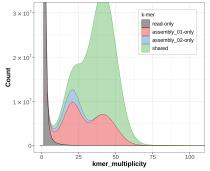
### K-mer spectra: purge\_dups



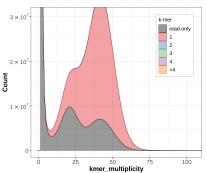
output\_merqury\_purged\_noHiC.spectra-cn.st.png



output\_merqury\_purged\_noHiC.assembly\_01.spectra-cn.st.png



output\_merqury\_purged\_noHiC.spectra-asm.st.png



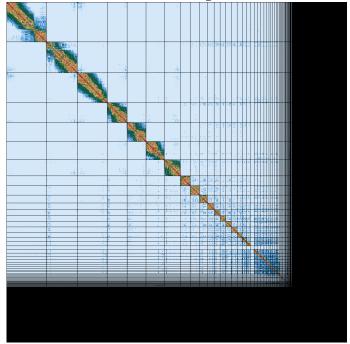
output\_merqury\_purged\_noHiC.assembly\_02.spectra-cn.st.png

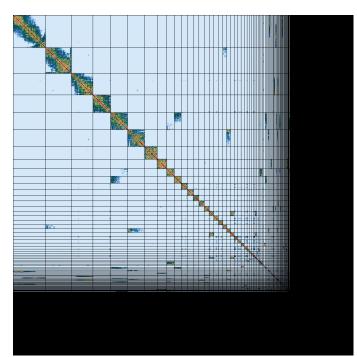
# Genome assembly: scaffolding

	YaHS	YaHS
Metrics	pri	alt
Total bp	1,287,457,044	867,557,145
GC %	43.51	42.83
Gaps	295	2,021
Gaps/Gbp	229.13	2,329.53
Gaps bp	59,000	404,200
Scaffolds	870	2,127
Longest Scaf.	151,357,496	83,286,743
Scaffold auN	59,532,087.41	28,401,071.64
Scaffold N50	60,927,470	15,355,889
Scaffold L50	7	11
Scaffold L90	157	277
Contigs	1,165	4,148
Largest Cont.	52,532,269	3,133,655
Contig auN	18,437,257.38	609,699.19
Contig N50	13,563,000	474,302
Contig L50	23	526
Contig L90	314	2,042
QV	60.0324	60.3211
Kmer compl.	95.1354	71.1488
BUSCO sing.	96.1%	71.6%
BUSCO dupl.	0.4%	0.4%
BUSCO frag.	0.6%	0.0%
BUSCO miss.	2.9%	28.0%

Lineage: passeriformes\_odb10 (genomes:15, BUSCOs:10844)

Pretext Full Map: YaHS





OenLeu\_noHiC\_yash\_PRI\_Filter.map\_FullMap.png

OenLeu\_noHiC\_yash\_ALT\_Filter.map\_FullMap.png

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Date and time: 2023-08-28 18:36:40 CEST