# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2016/10/23 14:15:44



#### 1. Input data & parameters

#### 1.1. QualiMap command line

qualimap bamqc -bam

/home/vdp5/data/cambodia\_samples/sequences\_bam/OM314.sorted.bam.ba m -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa mem -M
	/home/vdp5/data/salvador_vivax_asia
	_2016/first-
	SAMEA2376790/pvivax_sal1_SAME
	A2376790.fasta
	/home/vdp5/data/cambodia_samples/
	sequences_gz/OM314-
	BiooBarcode40_CTCAGA_R1.fastq.g
	z
	/home/vdp5/data/cambodia_samples/
	sequences_gz/OM314-
	BiooBarcode40_CTCAGA_R2.fastq.g
	Z
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
reaus.	
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 14:15:44 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM314.sorted.bam.

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### 2. Summary

#### 2.1. Globals

Reference size	23,958,997
Number of reads	1,302,907
Mapped reads	650,350 / 49.92%
Unmapped reads	652,557 / 50.08%
Mapped paired reads	650,350 / 49.92%
Mapped reads, first in pair	326,440 / 25.05%
Mapped reads, second in pair	323,910 / 24.86%
Mapped reads, both in pair	635,691 / 48.79%
Mapped reads, singletons	14,659 / 1.13%
Read min/max/mean length	30 / 100 / 99.92
Duplicated reads (estimated)	38,388 / 2.95%
Duplication rate	4.56%
Clipped reads	73,568 / 5.65%

#### 2.2. ACGT Content

Number/percentage of A's	18,758,244 / 29.89%
Number/percentage of C's	12,626,275 / 20.12%
Number/percentage of T's	18,819,403 / 29.98%
Number/percentage of G's	12,563,989 / 20.02%
Number/percentage of N's	5,260 / 0.01%
GC Percentage	40.13%



#### 2.3. Coverage

Mean	2.6226
Standard Deviation	3.2606

#### 2.4. Mapping Quality

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Many Manning Ovality	50 57	
Mean Mapping Quality	58.57	

#### 2.5. Insert size

Mean	983.05	
Standard Deviation	30,964.05	
P25/Median/P75	330 / 342 / 351	

#### 2.6. Mismatches and indels

General error rate	1.58%
Mismatches	942,205
Insertions	20,566
Mapped reads with at least one insertion	2.99%
Deletions	23,030
Mapped reads with at least one deletion	3.34%
Homopolymer indels	63.8%

#### 2.7. Chromosome stats

Name	Length	Mapped	Mean	Standard
		bases	coverage	deviation

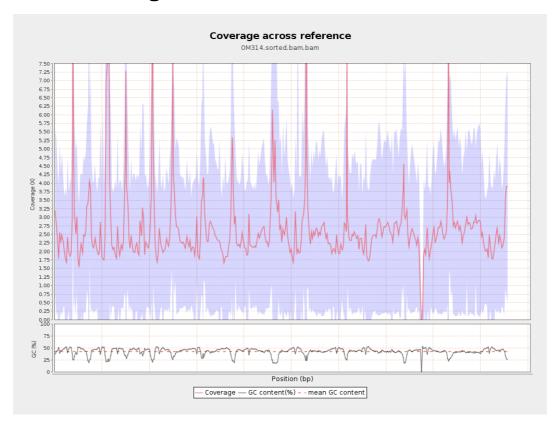
		001001000000000		CENTRO DE INVESTIGACION
gi 107412047 8 emb LT615 256.1	977217	2334161	2.3886	2.0774
gi 107412068 2 emb LT615 257.1	860454	2283655	2.654	2.3837
gi 107412086 5 emb LT615 258.1	989719	2953087	2.9838	4.4147
gi 107412108 6 emb LT615 259.1	935450	2763748	2.9545	5.1586
gi 107412130 1 emb LT615 260.1	1432239	3984719	2.7822	3.8849
gi 107412161 5 emb LT615 261.1	1080962	2902771	2.6854	3.0639
gi 107412187 1 emb LT615 262.1	1545099	3792767	2.4547	1.8104
gi 107412223 5 emb LT615 263.1	1585108	4069119	2.5671	2.2092
gi 107412259 0 emb LT615 264.1	2122358	5336555	2.5144	2.0114
gi 107412305 0 emb LT615 265.1	1754192	4895908	2.791	3.0555
gi 107412342 1 emb LT615	2150147	5658336	2.6316	6.568

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gi 107412389 8 emb LT615 267.1	3031036	7803757	2.5746	1.9415
gi 107412458 8 emb LT615 268.1	2359348	5673851	2.4048	2.6206
gi 107412506 5 emb LT615 269.1	3135668	8383008	2.6734	1.869

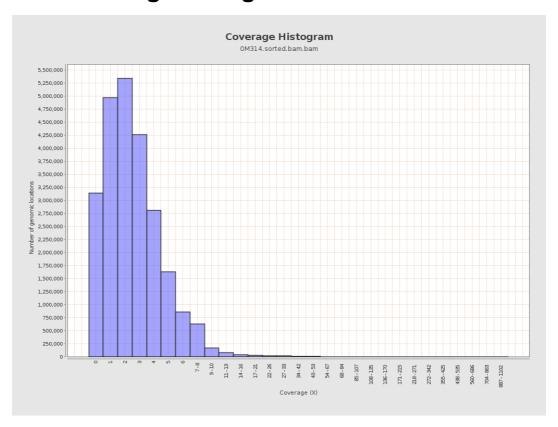


### 3. Results: Coverage across reference



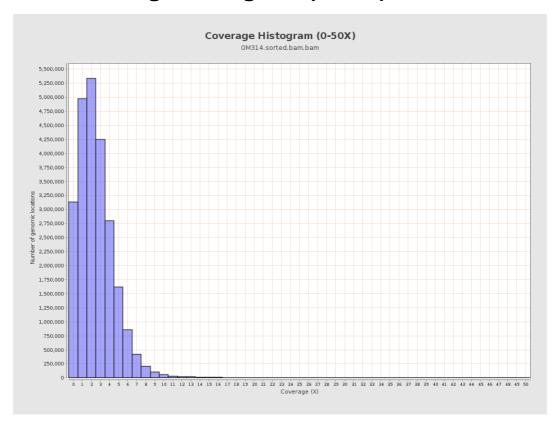


# 4. Results : Coverage Histogram



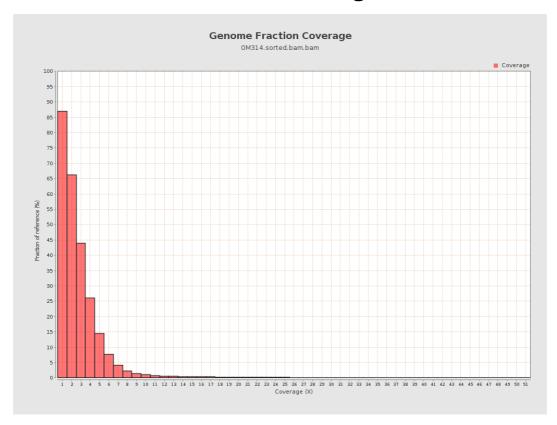


### 5. Results: Coverage Histogram (0-50X)



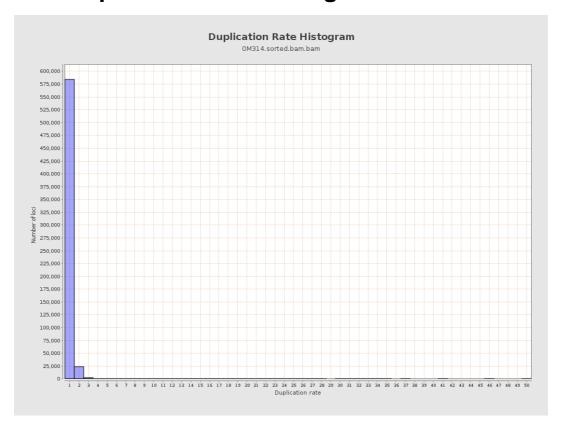


# 6. Results : Genome Fraction Coverage



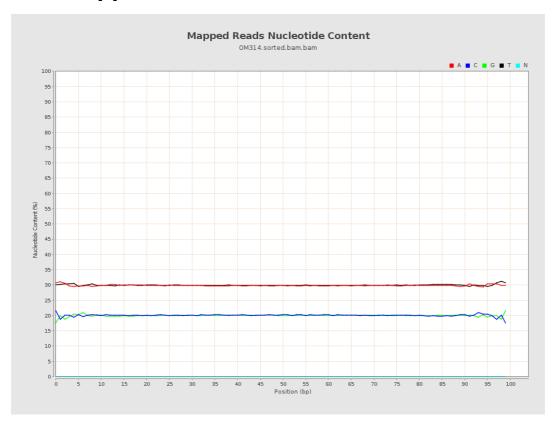


### 7. Results: Duplication Rate Histogram



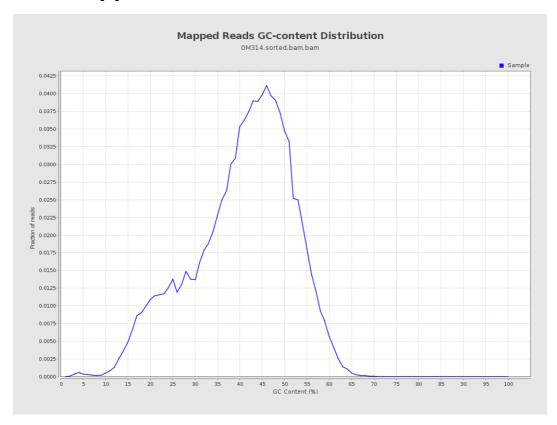


### 8. Results: Mapped Reads Nucleotide Content



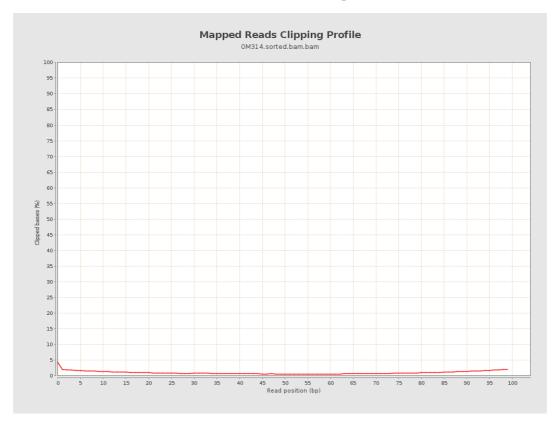


### 9. Results: Mapped Reads GC-content Distribution



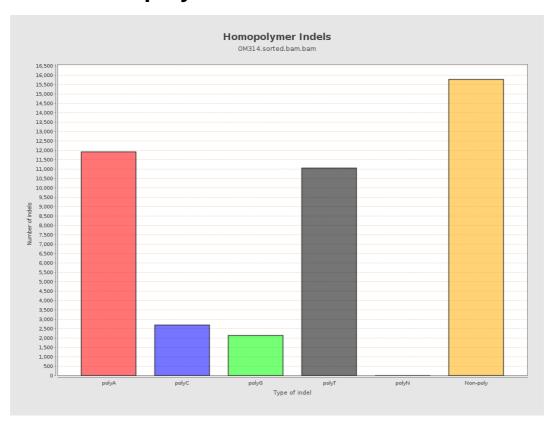


# 10. Results: Mapped Reads Clipping Profile



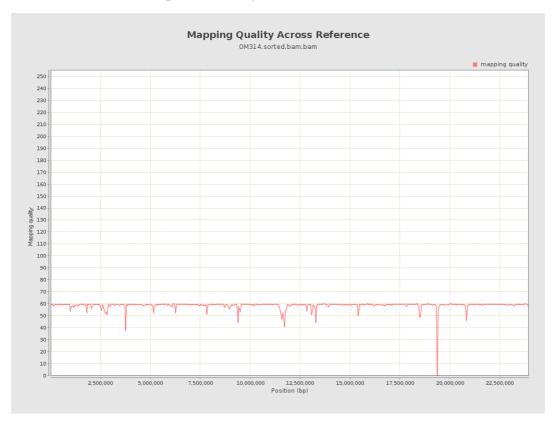


# 11. Results : Homopolymer Indels



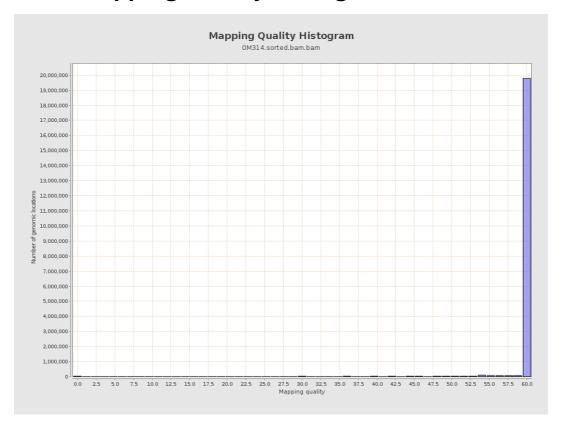


### 12. Results: Mapping Quality Across Reference



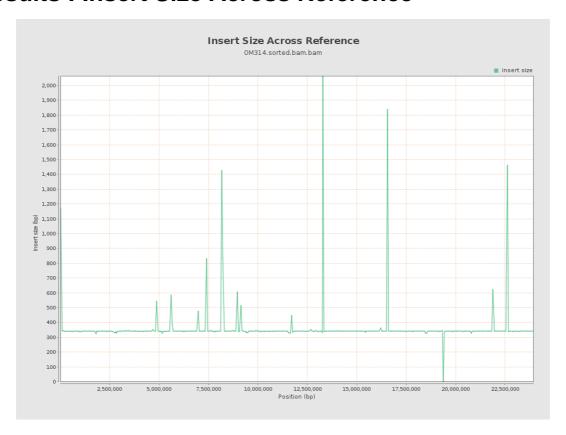


## 13. Results: Mapping Quality Histogram





#### 14. Results: Insert Size Across Reference





### 15. Results: Insert Size Histogram

