

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:47:58

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM245.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_SAMEA2376790.fasta /home/vdp5/data/cambodia_samples/sequences_gz/OM245-BiooBarcode23_GAGTGG_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM245-BiooBarcode23_GAGTGG_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:47:57 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM245.sorted.bam.

	bam
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2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	5,334,163
Mapped reads	1,506,181 / 28.24%
Unmapped reads	3,827,982 / 71.76%
Mapped paired reads	1,506,181 / 28.24%
Mapped reads, first in pair	756,476 / 14.18%
Mapped reads, second in pair	749,705 / 14.05%
Mapped reads, both in pair	1,455,322 / 27.28%
Mapped reads, singletons	50,859 / 0.95%
Read min/max/mean length	30 / 100 / 99.95
Duplicated reads (estimated)	147,661 / 2.77%
Duplication rate	6.99%
Clipped reads	196,235 / 3.68%

2.2. ACGT Content

Number/percentage of A's	43,288,798 / 30.06%
Number/percentage of C's	28,663,251 / 19.91%
Number/percentage of T's	43,457,750 / 30.18%
Number/percentage of G's	28,588,148 / 19.85%
Number/percentage of N's	10,822 / 0.01%
GC Percentage	39.76%

2.3. Coverage

Mean	6.0167
Standard Deviation	6.8878

2.4. Mapping Quality

Mean Mapping Quality	58.35
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2.5. Insert size

Mean	904.74
Standard Deviation	27,186.8
P25/Median/P75	339 / 360 / 370

2.6. Mismatches and indels

General error rate	1.67%
Mismatches	2,296,765
Insertions	48,559
Mapped reads with at least one insertion	3.05%
Deletions	55,329
Mapped reads with at least one deletion	3.44%
Homopolymer indels	62.25%

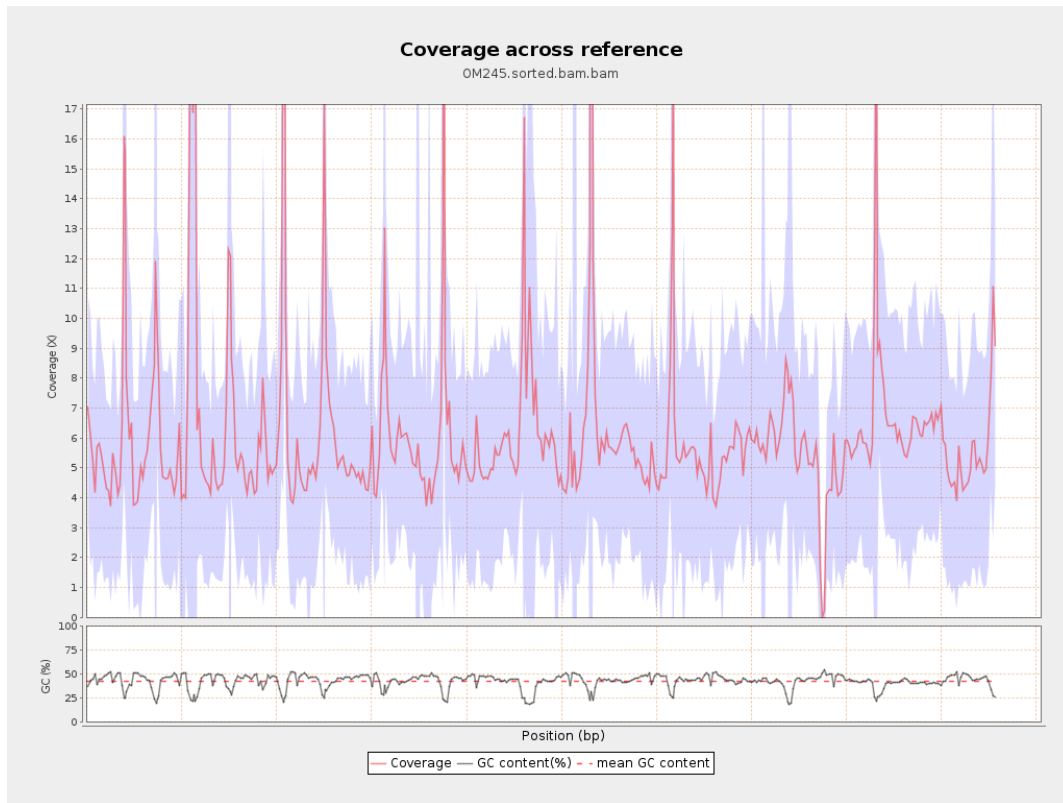
2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

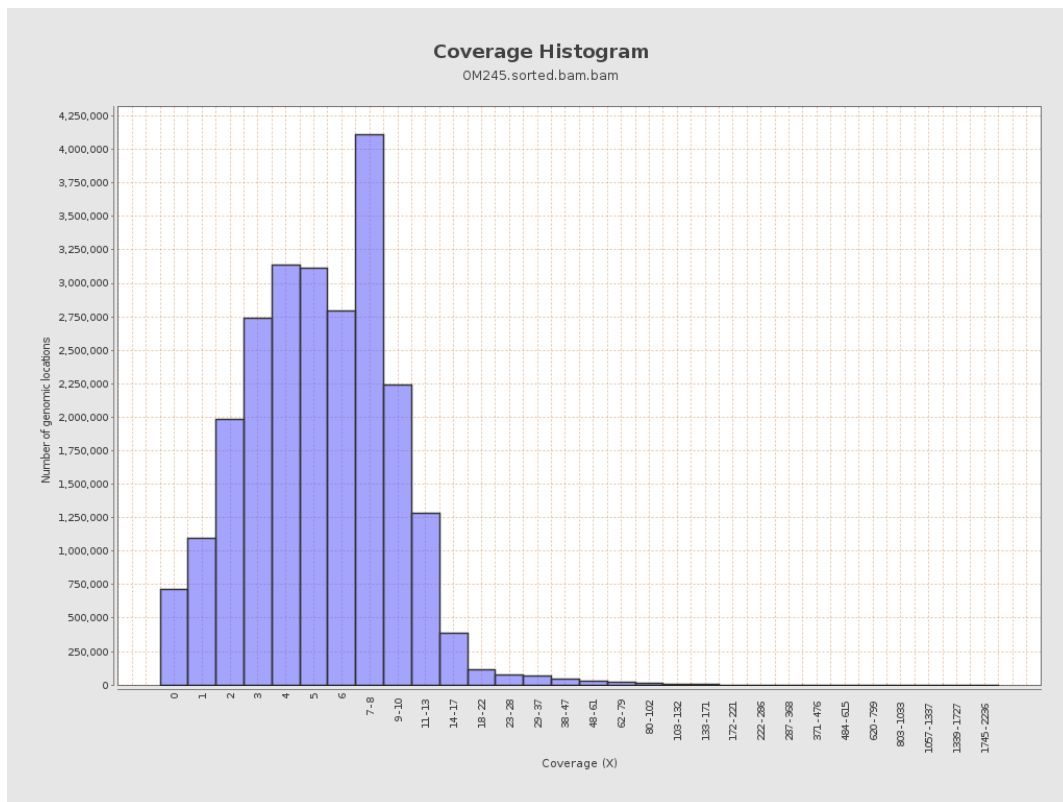
gi 1074120478 emb LT615256.1	977217	5196483	5.3176	3.7048
gi 1074120682 emb LT615257.1	860454	5576161	6.4805	6.269
gi 1074120865 emb LT615258.1	989719	7127466	7.2015	10.9691
gi 1074121086 emb LT615259.1	935450	6059871	6.478	9.446
gi 1074121301 emb LT615260.1	1432239	9095847	6.3508	6.8928
gi 1074121615 emb LT615261.1	1080962	6692871	6.1916	6.6087
gi 1074121871 emb LT615262.1	1545099	8595500	5.5631	3.3553
gi 1074122235 emb LT615263.1	1585108	9439313	5.955	6.7412
gi 1074122590 emb LT615264.1	2122358	12131954	5.7163	4.0592
gi 1074123050 emb LT615265.1	1754192	10974826	6.2563	10.96
gi 1074123421 emb LT615	2150147	13534560	6.2947	10.8376

266.1				
gi 107412389 8 emb LT615 267.1	3031036	17463366	5.7615	4.4963
gi 107412458 8 emb LT615 268.1	2359348	13070734	5.54	5.8459
gi 107412506 5 emb LT615 269.1	3135668	19195758	6.1217	3.4844

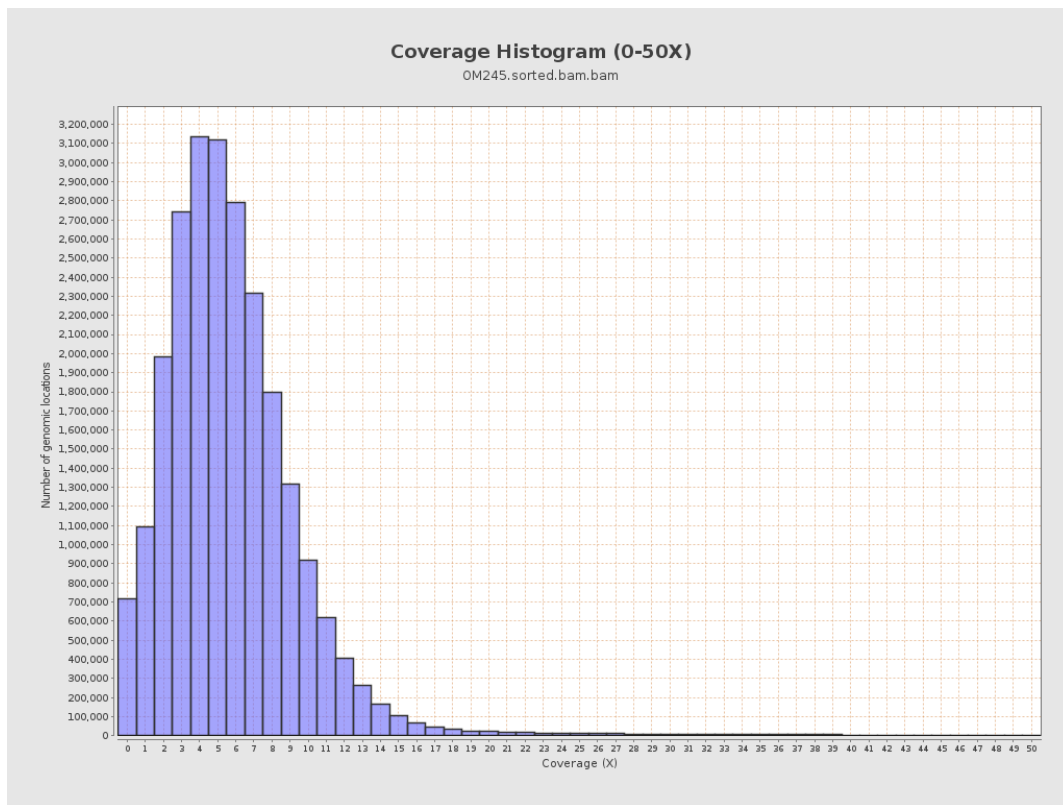
3. Results : Coverage across reference



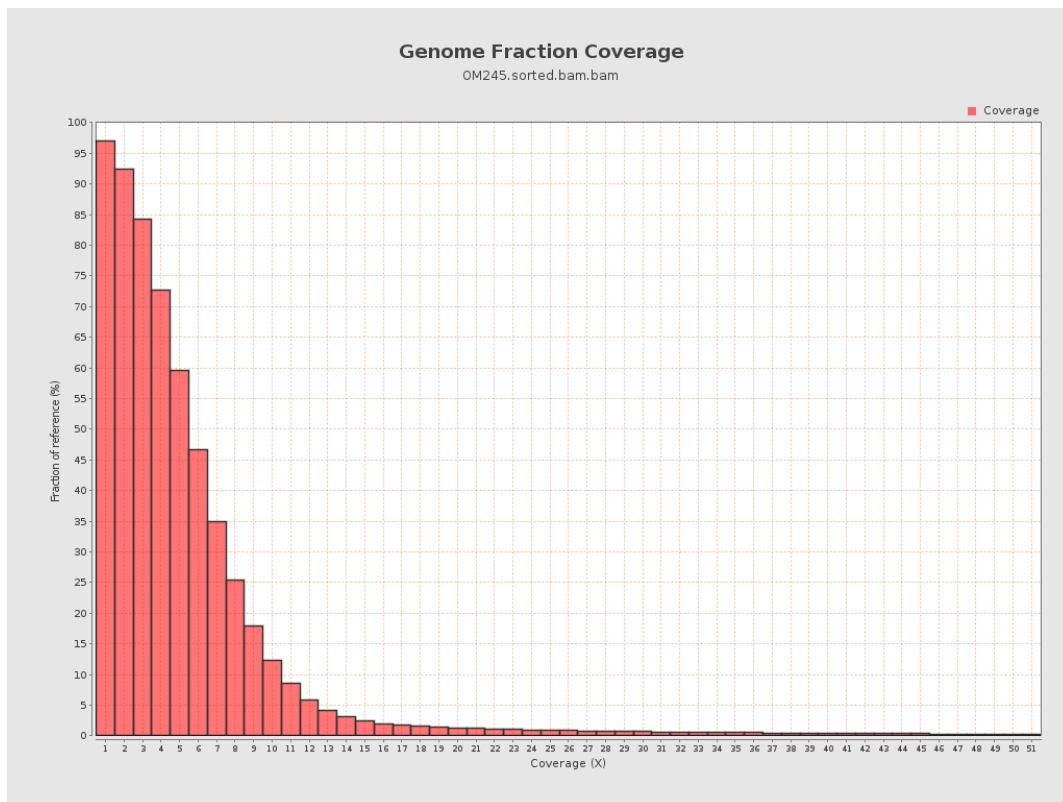
4. Results : Coverage Histogram



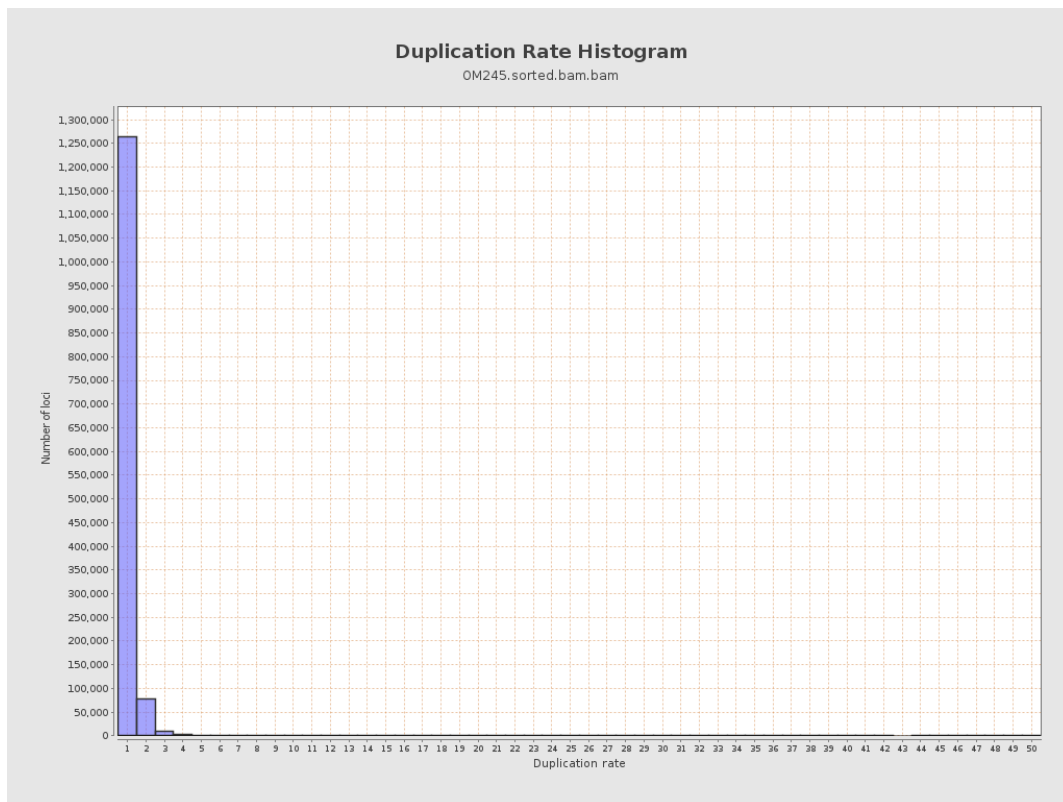
5. Results : Coverage Histogram (0-50X)



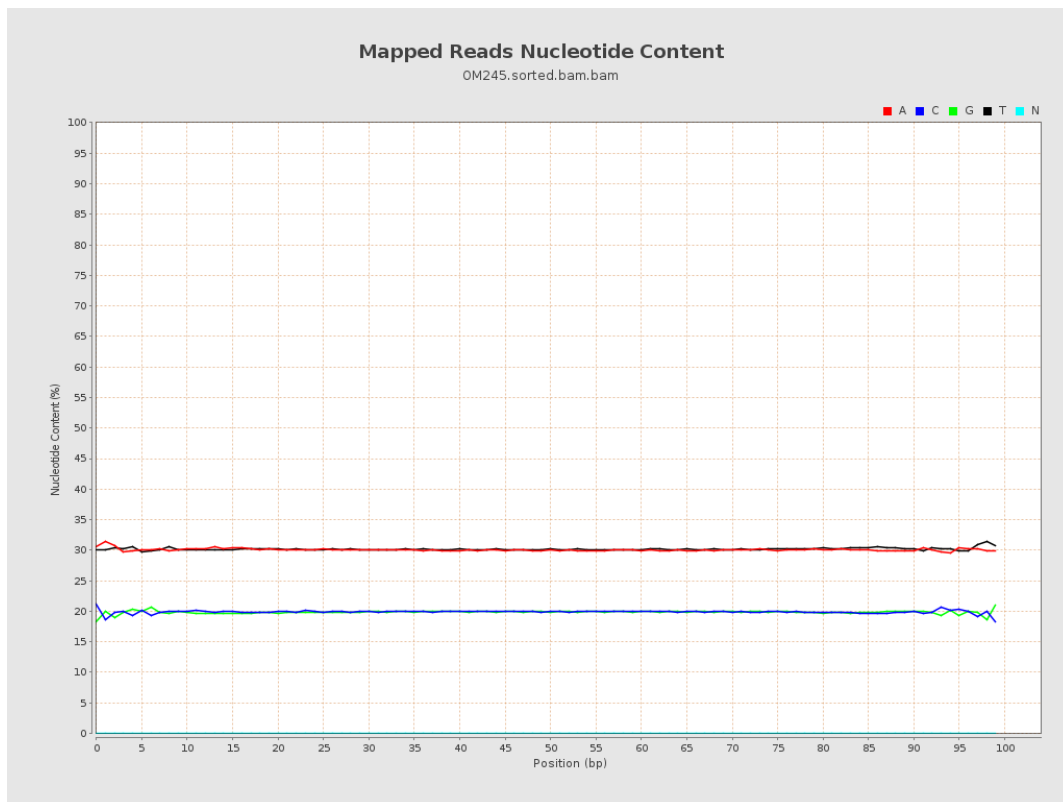
6. Results : Genome Fraction Coverage



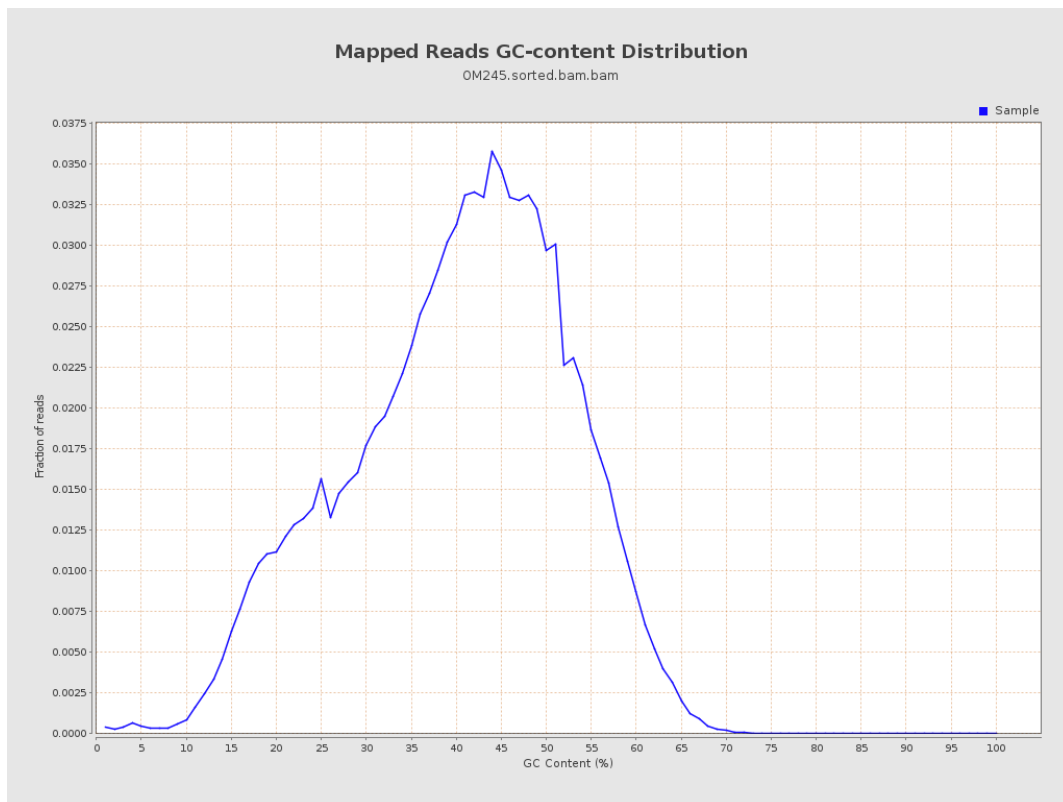
7. Results : Duplication Rate Histogram



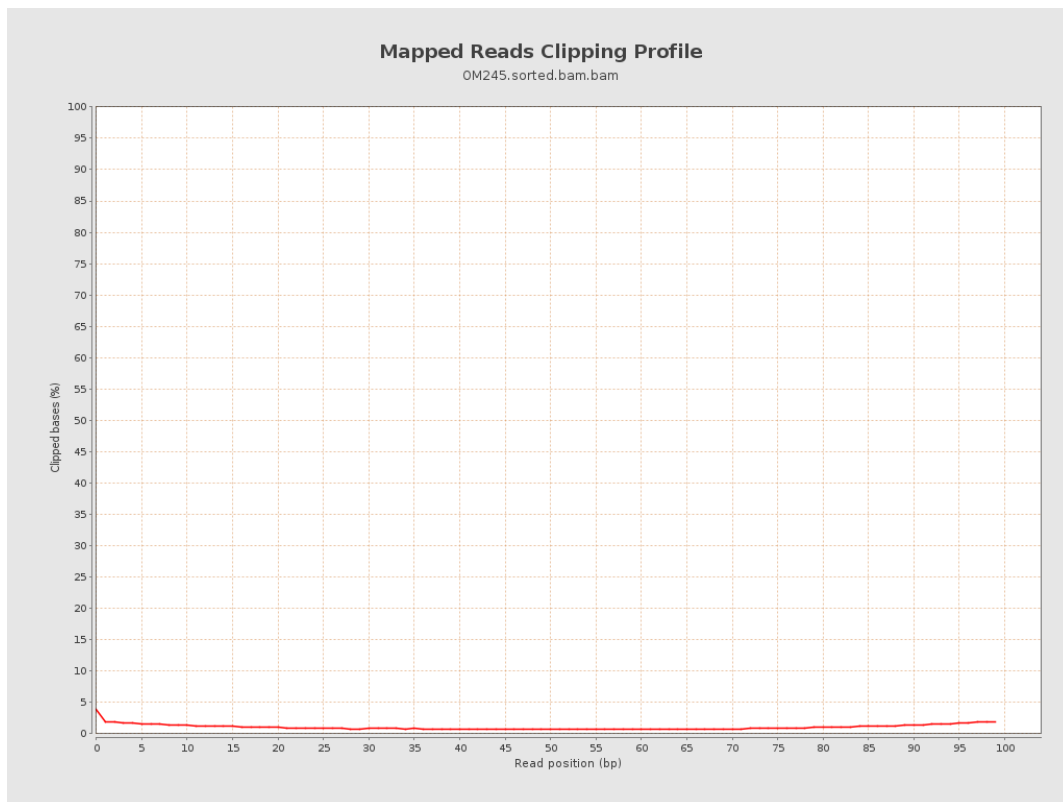
8. Results : Mapped Reads Nucleotide Content



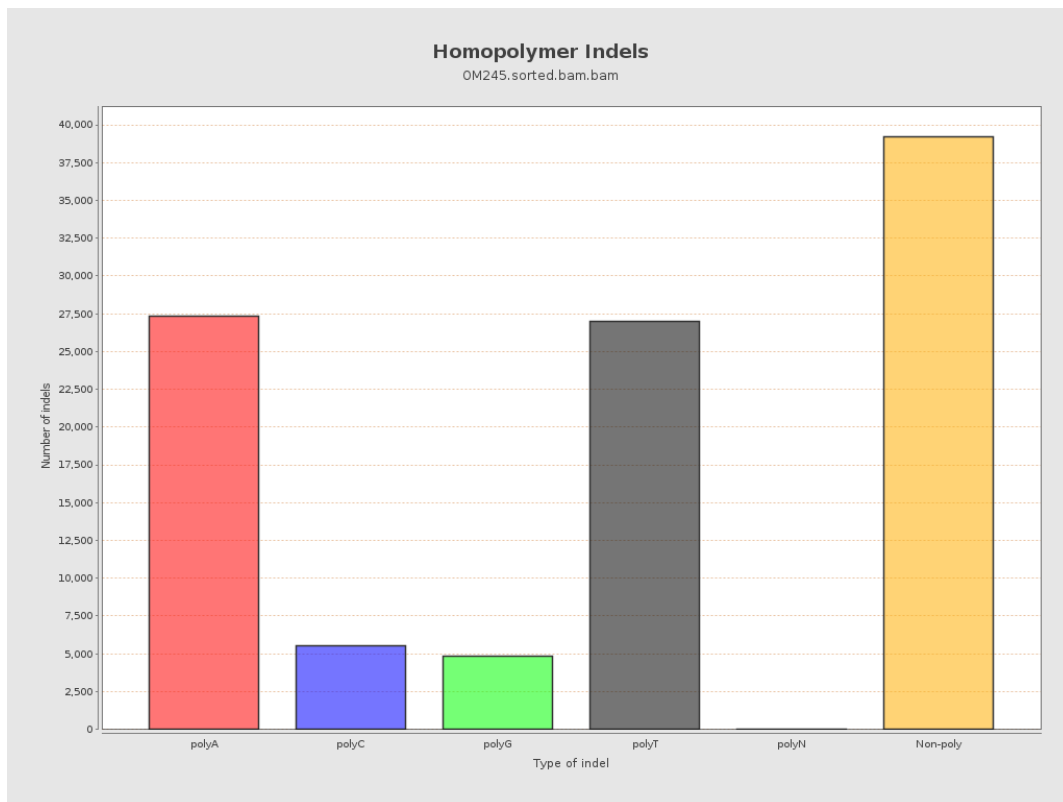
9. Results : Mapped Reads GC-content Distribution



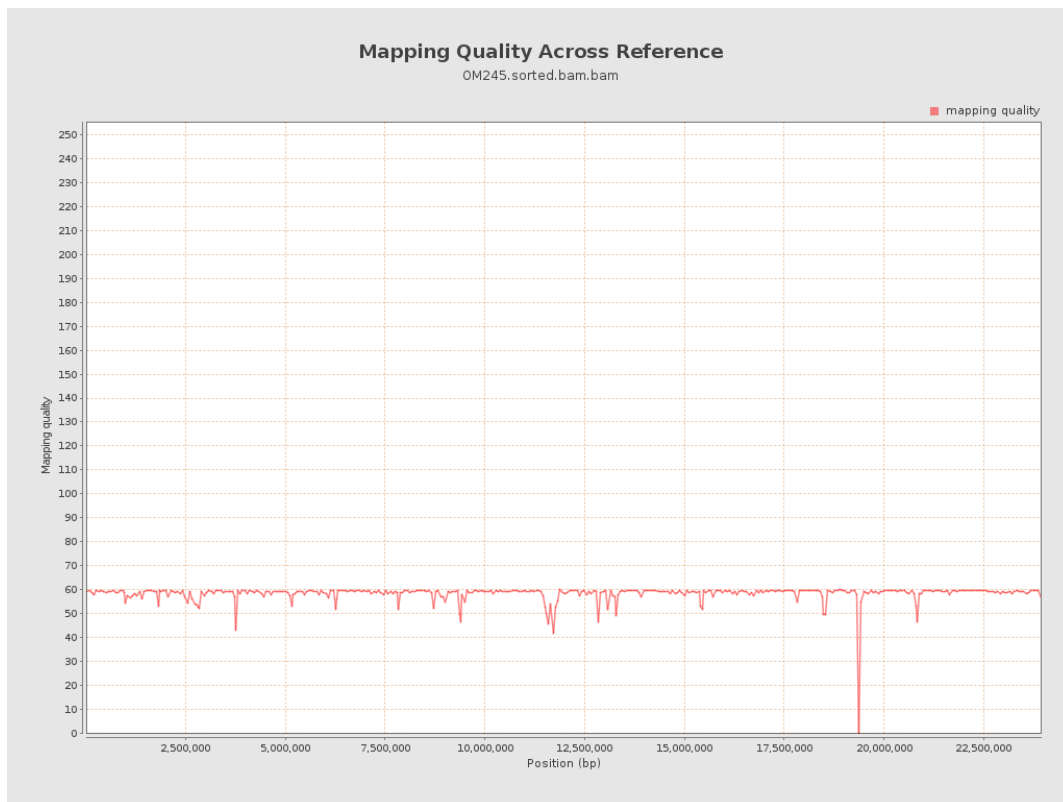
10. Results : Mapped Reads Clipping Profile



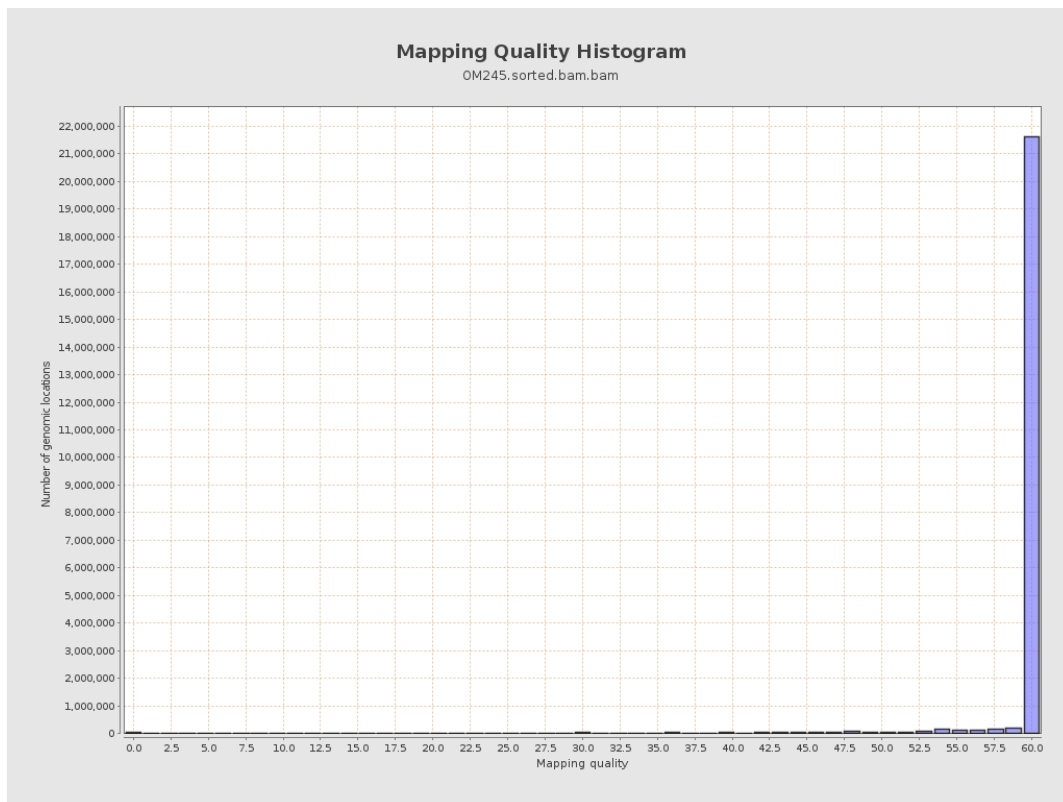
11. Results : Homopolymer Indels



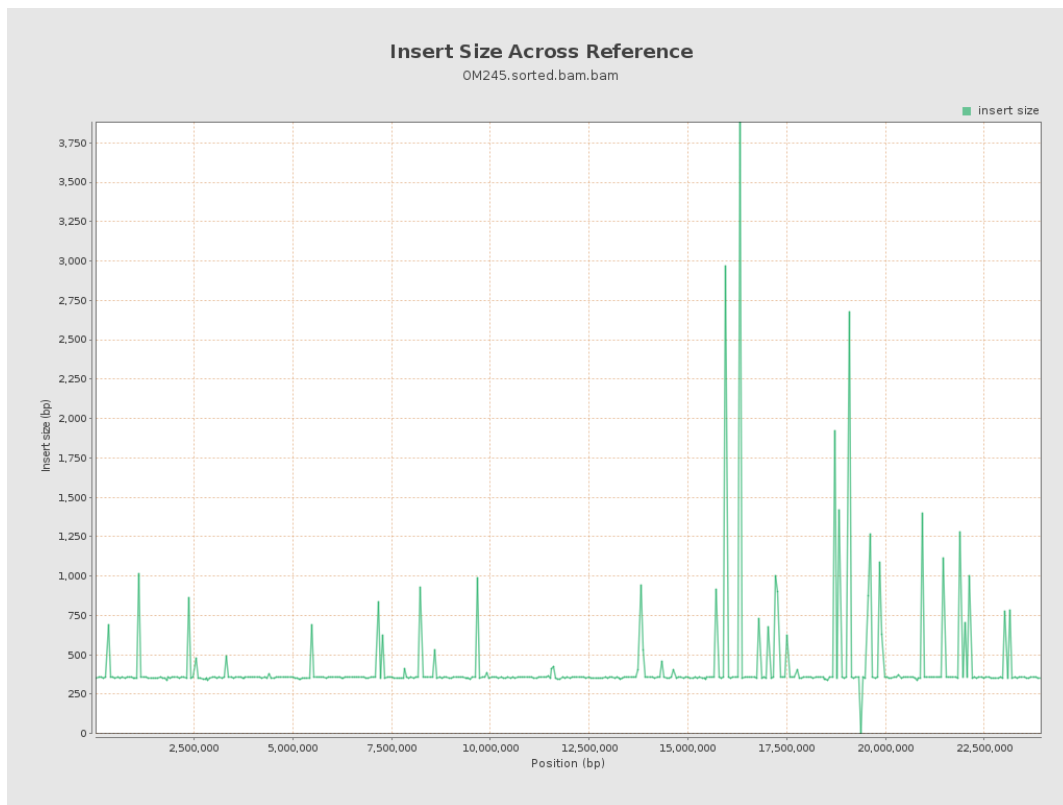
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

