| В | _ | _ | _ | ~+ |
|---|---|---|---|----|
| R | e | u | O | ſι |

| | ABySS | A_STAR | HipMer | marmgCAMI2 | Megahit | metaSPAdes | Miniasm | OPERA_MS_inhouse | SPAdes |
|-----------------------------|------------|-------------|------------|-------------|------------|------------------|------------|------------------|------------|
| # contigs (>= 1000 bp) | ABy33 1 | A_31AK | 6 TripMei | mannigeAMi2 | Meganic 9 | nietasrades 9 | 1 | 3 | 3 arAdes |
| # contigs (>= 5000 bp) | 0 | 12 | 6 | 1 | 9 | 9 | 1 | 3 | 3 |
| # contigs (>= 10000 bp) | 0 | 10 | 6 | 1 | 9 | 9 | 1 | 3 | 3 |
| # contigs (>= 25000 bp) | 0 | 10 | 6 | 1 | 9 | 9 | 1 | 3 | 3 |
| # contigs (>= 50000 bp) | 0 | 2 | 6 | 1 | 9 | 9 | 1 | 3 | 3 |
| Total length (>= 1000 bp) | 1751 | 467122 | 1733750 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| Total length (>= 5000 bp) | 0 | 458624 | 1733750 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| Total length (>= 10000 bp) | 0 | 444868 | 1733750 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| Total length (>= 25000 bp) | 0 | 444868 | 1733750 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| Total length (>= 50000 bp) | 0 | 121008 | 1733750 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| # contigs | 5 | 16 | 7 | 1 | 9 | 9 | 1 | 3 | 3 |
| Largest contig | 1751 | 60504 | 544740 | 5197896 | 543510 | 449204 | 407302 | 499331 | 544558 |
| Total length | 4488 | 467122 | 1734559 | 5197896 | 2541353 | 2220491 | 407302 | 911169 | 907922 |
| Reference length | 5418 | 5418 | 5418 | 5418 | 5418 | 5418 | 5418 | 5418 | 5418 |
| GC (%) | 37.04 | 41.58 | 41.46 | 41.45 | 41.50 | 41.54 | 42.37 | 41.38 | 41.31 |
| Reference GC (%) | 38.58 | 38.58 | 38.58 | 38.58 | 38.58 | 38.58 | 38.58 | 38.58 | 38.58 |
| N50 | 868 | 46131 | 543682 | 5197896 | 543403 | 405883 | 407302 | 499331 | 544558 |
| NG50 | 678 | 60504 | 544740 | 5197896 | 543510 | 449204 | 407302 | 499331 | 544558 |
| N75 | 648 | 34607 | 170977 | 5197896 | 171079 | 169618 | 407302 | 288702 | 306195 |
| NG75 | 543 | 60504 | 544740 | 5197896 | 543510 | 449204 | 407302 | 499331 | 544558 |
| L50 | 2 | 5 | 2 | 1 | 3 | 3 | 1 | 1 | 1 |
| LG50 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| L75 | 4 | 8 | 4 | 1 | 5 | 6 | 1 | 2 | 2 |
| LG75 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| # misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # misassembled contigs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misassembled contigs length | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # local misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # scaffold gap ext. mis. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # scaffold gap loc. mis. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # unaligned mis. contigs | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| # unaligned contigs | 0 + 0 part | 0 + 16 part | 0 + 6 part | 0 + 1 part | 0 + 9 part | 0 + 9 part | 0 + 1 part | 0 + 3 part | 0 + 3 part |
| Unaligned length | 0 | 456908 | 1723422 | 5192478 | 2529069 | 2204237 | 405422 | 905797 | 902404 |
| Genome fraction (%) | 65.282 | 63.529 | 100.000 | 100.000 | 100.000 | 100.000 | 34.072 | 100.000 | 100.000 |
| Duplication ratio | 1.269 | 2.967 | 2.056 | 1.000 | 2.267 | 3.000 | 1.018 | 0.992 | 1.018 |
| # N's per 100 kbp | 311.94 | 0.86 | 5.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.01 |
| # mismatches per 100 kbp | 0.00 | 871.59 | 0.00 | 0.00 | 295.31 | 0.00 | 595.88 | 369.14 | 0.00 |
| # indels per 100 kbp | 28.27 | 174.32 | 0.00 | 0.00 | 36.91 | 0.00 | 2925.24 | 221.48 | 0.00 |
| Largest alignment | 1751 | 2051 | 4504 | 4504 | 4370 | 4504 | 1880 | 4458 | 4504 |
| Total aligned length | 3647 | 10212 | 10759 | 5418 | 12284 | 16254 | 1880 | 5372 | 5418 |
| NA50 | 678 | - | - | - | - | - | = | - | - |
| NGA50 | 543 | 2051 | 4504 | 4504 | 4370 | 4504 | = | 4458 | 4504 |
| NA75 | 471 | - | - | - | - | - | - | - | - |
| NGA75 | - | 2051 | 4504 | 4504 | 4370 | 4504 | - | 4458 | 4504 |
| LA50 | 2 | - | - | - | - | - | - | - | - |
| LGA50 | 3 | 2 | 1 | 1 | 1 | 1 | - | 1 | 1 |
| LA75 | 4 | - | - | - | - | - | - | - | - |
| LGA75 | - | 2 | 1 | 1 | 1 | 1 | - | 1 | 1 |

All statistics are based on contigs of size >= 500 bp, unless otherwise noted (e.g., "# contigs (>= 0 bp)" and "Total length (>= 0 bp)" include all contigs).

Misassemblies report

| | ABySS | A_STAR | HipMer | marmgCAMI2 | Megahit | metaSPAdes | Miniasm | OPERA_MS_inhouse | SPAdes |
|---------------------------------|-------|--------|--------|------------|---------|------------|---------|------------------|--------|
| # misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # contig misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # c. relocations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # c. translocations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # c. inversions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # scaffold misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # s. relocations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # s. translocations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # s. inversions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # misassembled contigs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misassembled contigs length | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # possibly misassembled contigs | 0 | 16 | 6 | 0 | 9 | 9 | 1 | 3 | 3 |
| # possible misassemblies | 0 | 20 | 9 | 0 | 12 | 12 | 2 | 4 | 4 |
| # local misassemblies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # scaffold gap ext. mis. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # scaffold gap loc. mis. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # unaligned mis. contigs | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| # mismatches | 0 | 30 | 0 | 0 | 16 | 0 | 11 | 20 | 0 |
| # indels | 1 | 6 | 0 | 0 | 2 | 0 | 54 | 12 | 0 |
| # indels (<= 5 bp) | 0 | 2 | 0 | 0 | 0 | 0 | 54 | 11 | 0 |
| # indels (> 5 bp) | 1 | 4 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |
| Indels length | 7 | 150 | 0 | 0 | 332 | 0 | 66 | 74 | 0 |

All statistics are based on contigs of size >= 500 bp, unless otherwise noted (e.g., "# contigs (>= 0 bp)" and "Total length (>= 0 bp)" include all contigs).

Unaligned report

| | ABySS | A_STAR | HipMer | marmgCAMI2 | Megahit | metaSPAdes | Miniasm | OPERA_MS_inhouse | SPAdes |
|-------------------------------|-------|--------|---------|------------|---------|------------|---------|------------------|--------|
| # fully unaligned contigs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fully unaligned length | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| # partially unaligned contigs | 0 | 16 | 6 | 1 | 9 | 9 | 1 | 3 | 3 |
| Partially unaligned length | 0 | 456908 | 1723422 | 5192478 | 2529069 | 2204237 | 405422 | 905797 | 902404 |
| # N's | 14 | 4 | 97 | 0 | 0 | 0 | 0 | 0 | 100 |

All statistics are based on contigs of size >= 500 bp, unless otherwise noted (e.g., "# contigs (>= 0 bp)" and "Total length (>= 0 bp)" include all contigs).













































