Assembly Report

Experiment Details

| ExperimentID: | Experiment 70 |
|-----------------------------------|---------------|
| Sequencing Coverage: | 23 |
| Number of Partitions: | 5 |
| Allowed Mismatch Count in (Base): | 0 |
| Length of Sliding Window: | 41 |

Reads Dataset Details

| Iteaus Dataset Details | |
|-------------------------------|--------|
| Total Reads Count: | 1212 |
| Total Dataset Size in (Base): | 241272 |
| Valid Read Count: | 1212 |
| Rejected Read Count: | 0 |
| Maximum Read Length: | 201 |
| Minimum Read Length: | 162 |

Reference Genome Details

| Length of Reference Genome (Base): | 10080 |
|------------------------------------|-------|
| Number of K-mers: | 9880 |
| Length of K-mer | 301 |

Assembly Details

| Number of Contigs: | 24 |
|---------------------|-------|
| Contig N50: | 951 |
| Contig N90: | 676 |
| Number of Scaffold | 1 |
| Scaffold N50: | 10080 |
| Scaffold N90: | 10080 |
| Mis-assembly Count: | 0 |
| TotalAssembly Size: | 10080 |

Repeat Details

| Total Reads Count(Non-Repeat) : | 39 |
|---|------|
| Total Reads Count(Repeat): | 349 |
| Retetitve Read Count based on (Partitions Identifier): | 349 |
| Retetitve Read Count (Entire Read Frequency Identifier): | 4 |
| Retetitve Read Count (Contained Read Frequency Identifier): | 3 |
| Total Repetitive Sequences Count | 7317 |
| Total Unique Repetitive Sequences Count | 4 |

| Total Repeat Size (Base) | | 8806 | | | | |
|--------------------------|--------|---|--------------|--------|---|---|
| Starting | Ending | Repetitive Sequences | Repeat Count | Length | Position | s |
| 1 | 10080 | CGGTCGAAAA ACTGCTGGCA GTGGGGCATT ACCTCGAATCT ACCGTCGATAT TGCTGAGTCC ACCCGCCGTA TTGCGGCAAG TCGTATTCCGG CTGATCACATG GTGCTGATGG CAGGTTTCACC GCCGGTAATG AAAAAGGCGA ACTGGTGGTG CTGATCCGA CTACTCTGCTG CGGTGCTGGC TGCCTGTTTAC GCGCCGATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT TGCGAGATTT GGACGCATG CCGCGTCAG GTGCCCGATG CCGCGTCAG GTGCCCGATG TGACGGATG TTGCAGGTTGTT GAAGTCGATG TCCTACCAGG AAGCGATGGA GCTTTCCTACT TCGGCGCTCT AGGTCAGGCC | | 350 | Start Positio n 1756 3561 3964 5117 5910 7138 8386 9149 | End Positio n 2105 3910 4313 5466 6259 7487 8735 9498 |

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|---|---|-------------|-------|-----|---------|---------|
| | | GATTCATTCGG | | | | |
| | | GATGGTCTGT | | | | |
| | | GTGGATTAAAA | | | | |
| | | AAAGAGTGTCT | | | | |
| | | GATAGCAGCTT | | | | |
| | | CTGAACTGGTT | | | | |
| | | ACCTGCCGTG | | | | |
| | | AGTAAATTAAA | | | | |
| | | ATTTTATTGAC | | | | |
| | | TTAGGTCACTA | | | Ctout | |
| | | AATACTTTAAC | | | Start | End |
| | | CAATATAGGCA | | | Positio | Positio |
| | | TAGCGCACAG | | | n | n |
| | | ACAGATAAAAA | | | 409 | 758 |
| | | TTACAGAGTAC | | | 2228 | 2577 |
| | | ACAACATCCTC | 8 350 | | | |
| 1 | | AAAGCCTACC | | 350 | 3182 | 3531 |
| | | GGTGACAGTG | | | 4730 | 5079 |
| | | CGGGCTTTTTT | | | 5529 | 5878 |
| | | TTCGACCAAAG | | | | |
| | | GTAACGAGGT | | | 6730 | 7079 |
| | | AACAACCATGC | | | 8014 | 8363 |
| | | GAGTGTTGAA | | | 9552 | 9901 |
| | | GTCAGGAGAT | | | 9332 | 19901 |
| | | CCTAAAGGCC | | | | |
| | | TGTACCCGTTA | | | | |
| | | CCTAGCCAGTT | | | | |
| | | GGCATTAAAC | | | | |
| | | GTATACGGTAC | | | | |
| | | CTAGGCATGTA | | | | |
| | | CGTAATCGTAG | | | | |
| | | CCTTAGCAATC | | | | |
| | | TCCAGTCC | | | | |

| | ı — — — — — — — — — — — — — — — — — — — | | 1 | | | |
|---|---|--------------|---|-----|---------|---------|
| | | GCTTTTCATTC | | | | |
| | | TGACTGCAAC | | | | |
| | | GGGCAATATG | | | | |
| | | тстствтвтв | | | | |
| | | ATTAAAAAAAAG | | | | |
| | | AGTGTCTGATA | | | | |
| | | GCAGCTTCTG | | | | |
| | | AACTGGTTACC | | | | |
| | | TGCCGTGAGT | | | | |
| | | AAATTAAAATT | | | C4 = "4 | C to al |
| | | TTATTGACTTA | | | Start | End |
| | | GGTCACTAAAT | | | | Positio |
| | | ACTTTAACCAA | | | n | n |
| | | TATAGGCATAG | | | 1 | 350 |
| | 10080 | CGCACAGACA | | 350 | 854 | 1203 |
| | | GATAAAAATTA | 8 | | | |
| 1 | | CAGAGTACAC | | | 1295 | 1644 |
| | | AACATCCATGA | | | 2705 | 3054 |
| | | AACGCATTAGC | | | 4337 | 4686 |
| | | ACCACCATTAC | | | | |
| | | CACCACCATCA | | | 6359 | 6708 |
| | | CCATTACCACA | | | 7574 | 7923 |
| | | GGTAACGGTG | | | 8752 | 9101 |
| | | CGGGCTGACG | | | 0732 | 9101 |
| | | CGTACAGGAA | | | | |
| | | ACACAGAAAAA | | | | |
| | | AGCCCGCACC | | | | |
| | | TGACAGTGCG | | | | |
| | | GGCTTTTTTTT | | | | |
| | | CGACCAAAGG | | | | |
| | | TAACGAGGTAA | | | | |
| | | CAACCATGCG | | | | |
| | | AGTGTTGAAGT | | | | |

| | 1 | | | | | |
|---|-------|--|---|-----|---------|---------|
| | | GTGGTGCTTG GACGCAACGG TTCCGACTACT CTGCTGCGGT GCTGGCTGCC TGTTTACGCGC CGATTGTTGC | | | | |
| | | GAGATTTTGGA | | 203 | Ot 5 mt | E. d |
| | | | | | Start | End |
| | 10080 | CGGACGTTGA | 2 | | Positio | Positio |
| 1 | | CGGGGTCTAT | | | n | n |
| | | ACCTGCGACC | | | 1905 | 2107 |
| | | CGCGTCAGGT | | | | |
| | | GCCCGATGCG | | | 7287 | 7489 |
| | | AGGTTGTTGAA | | | | |
| | | GTCGATGTCCT | | | | |
| | | ACCAGGAAGC | | | | |
| | | GATGGAGCTTT | | | | |
| | | CCTACTTCGG | | | | |
| | | CGCTCTAGGT | | | | |
| | | CAGGCCTA | | | | |

SRGD Performance Metrics

| Initial Reads Count: | 1212 |
|---|--------|
| Reads Count after Removing Duplication: | 388 |
| Reads Count after Overlapping: | 370 |
| Initial Dataset Size in (Base): | 241272 |
| Dataset Sizet after Removing Duplication: | 99165 |
| Dataset Size after Overlapping: | 74824 |

Overlapping Metrics

| Repeat Identification Time: | 00h:00m:21s:000ms |
|-----------------------------|-------------------|
|-----------------------------|-------------------|

| Overlapping Time: | | | 00h:03m:28s:000ms | | |
|-----------------------------|--------------------------|-------------------|-------------------|---------------------------|----|
| Reads Alignment Time: | | | 00h:01m:14s:000ms | | |
| Total Hybrid Assembly Time: | | 00h:04m:42s:000ms | | | |
| Repeat Annotation Time: | | 00h:39m:25s:000ms | | | |
| Overlapping Length | O(N)2 Time Complexity | Hit Index Count | | Overlapping Matched Count | RI |
| 197 | 1521 | 3 | | 1 | 0 |
| 176 | 1444 | 28 | | 16 | 0 |
| 151 | 484 | 1 | | 1 | 0 |