Assembly Report

Experiment Details

| ExperimentID: | Experiment 89 |
|-----------------------------------|---------------|
| Sequencing Coverage: | 27 |
| Number of Partitions: | 4 |
| Allowed Mismatch Count in (Base): | 0 |
| Length of Sliding Window: | 63 |

Reads Dataset Details

| Iteaus Dataset Details | |
|-------------------------------|--------|
| Total Reads Count: | 2200 |
| Total Dataset Size in (Base): | 549860 |
| Valid Read Count: | 2200 |
| Rejected Read Count: | 0 |
| Maximum Read Length: | 251 |
| Minimum Read Length: | 212 |

Reference Genome Details

| Length of Reference Genome (Base): | 20160 |
|------------------------------------|-------|
| Number of K-mers: | 19910 |
| Length of K-mer | 591 |

Assembly Details

| Number of Contigs: | 31 |
|---------------------|-------|
| Contig N50: | 1576 |
| Contig N90: | 1270 |
| Number of Scaffold | 1 |
| Scaffold N50: | 20160 |
| Scaffold N90: | 20160 |
| Mis-assembly Count: | 0 |
| TotalAssembly Size: | 20160 |

Repeat Details

| Total Reads Count(Non-Repeat) : | 536 |
|---|------|
| Total Reads Count(Repeat): | 251 |
| Retetitve Read Count based on (Partitions Identifier): | 248 |
| Retetitve Read Count (Entire Read Frequency Identifier): | 3 |
| Retetitve Read Count (Contained Read Frequency Identifier): | 3 |
| Total Repetitive Sequences Count | 2959 |
| Total Unique Repetitive Sequences Count | 4 |

| Total Repeat Size (Base) | | 8400 | | | | |
|--------------------------|--------|---|--|------------------|--|--|
| Starting | Ending | Ending Repetitive Sequences | | Length Positions | | S |
| 1 | 20160 | CGGTCGAAAA ACTGCTGGCA GTGGGGCATT ACCTCGAATCT ACCGTCGATAT TGCTGAGTCC ACCCGCCGTA TTGCGGCAAG TCGTATTCCGG CTGATCACATG GTGCTGATGG CAGGTTTCACC GCCGGTAATG AAAAAGGCGA ACTGGTGGTG CTGCTGTTCCGA CTACTCTGCTG CGGTGCTGGC TGCCTGTTTAC GCGCCGATTG TGCGAGATTT GGACGCATTG TGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATG TTGCGAGTC TTGCCGATG TTGCGAGATTT TGCGAGATTT TGCGAGATTT TGCGAGATTT TGCGAGATTT TGCGAGTTGTT TGCGAGTTGTT TGAGTCCGATG TCCTACCAGG AAGCGATGGA GCTTTCCTACT TCGGCGCTCT AGGTCAGGCC | | 350 | Start Positio n 2832 7245 8068 10761 11904 14881 16995 18809 | End Positio n 3181 7594 8417 11110 12253 15230 17344 19158 |

| | | i i | | |
|---|-------|--------------|-----|-----------------|
| | | GATTCATTCGG | | |
| | | GATGGTCTGT | | |
| | | GTGGATTAAAA | | |
| | | AAAGAGTGTCT | | |
| | | GATAGCAGCTT | | |
| | | CTGAACTGGTT | | |
| | | ACCTGCCGTG | | |
| | | AGTAAATTAAA | | |
| | | ATTTTATTGAC | | |
| | | TTAGGTCACTA | | Otari E. I |
| | | AATACTTTAAC | | Start End |
| | | CAATATAGGCA | | Positio Positio |
| | | TAGCGCACAG | | n n |
| | | ACAGATAAAAA | | 871 1220 |
| | | TTACAGAGTAC | | 4144 4493 |
| | | ACAACATCCTC | | |
| 1 | 20160 | AAAGCCTACC 8 | 350 | 6008 6357 |
| | | GGTGACAGTG | | 9464 9813 |
| | | CGGGCTTTTTT | | 11173 11522 |
| | | TTCGACCAAAG | | |
| | | GTAACGAGGT | | 13704 14053 |
| | | AACAACCATGC | | 16623 16972 |
| | | GAGTGTTGAA | | 10422 10771 |
| | | GTCAGGAGAT | | 19422 19771 |
| | | CCTAAAGGCC | | |
| | | TGTACCCGTTA | | |
| | | CCTAGCCAGTT | | |
| | | GGCATTAAAC | | |
| | | GTATACGGTAC | | |
| | | CTAGGCATGTA | | |
| | | CGTAATCGTAG | | |
| | | CCTTAGCAATC | | |
| | | TCCAGTCC | | |

| ī | | | | | | |
|---|-------|--------------|---|-----|---------|---------|
| | | GCTTTTCATTC | | | | |
| | | TGACTGCAAC | | | | |
| | | GGGCAATATG | | | | |
| | | TCTCTGTGTGG | | | | |
| | | ATTAAAAAAAAG | | | | |
| | | AGTGTCTGATA | | | | |
| | | GCAGCTTCTG | | | | |
| | | AACTGGTTACC | | | | |
| | | TGCCGTGAGT | | | | |
| | | AAATTAAAATT | | | Ot =t | F.a.d |
| | | TTATTGACTTA | | | Start | End |
| | | GGTCACTAAAT | | | Positio | Positio |
| | | ACTTTAACCAA | | | n | n |
| | | TATAGGCATAG | | | 1 | 350 |
| | | CGCACAGACA | | | 1316 | 1665 |
| | | GATAAAAATTA | | | | |
| 1 | 20160 | CAGAGTACAC | 8 | 350 | 2021 | 2370 |
| | | AACATCCATGA | | | 5041 | 5390 |
| | | AACGCATTAGC | | | 8441 | 8790 |
| | | ACCACCATTAC | | | | |
| | | CACCACCATCA | | | 13123 | 13472 |
| | | CCATTACCACA | | | 15543 | 15892 |
| | | GGTAACGGTG | | | 18132 | 18481 |
| | | CGGGCTGACG | | | 10102 | 10101 |
| | | CGTACAGGAA | | | | |
| | | ACACAGAAAAA | | | | |
| | | AGCCCGCACC | | | | |
| | | TGACAGTGCG | | | | |
| | | GGCTTTTTTTT | | | | |
| | | CGACCAAAGG | | | | |
| | | TAACGAGGTAA | | | | |
| | | CAACCATGCG | | | | |
| | | AGTGTTGAAGT | | | | |

SRGD Performance Metrics

| Initial Reads Count: | 2200 |
|---|------|
| Reads Count after Removing Duplication: | 787 |

| Reads Count after Overlapping: | | 407 | | | |
|---------------------------------|--------------------------|-------------|-------------------|---------------------------|----|
| Initial Dataset Size in (Base): | | 549860 | | | |
| Dataset Sizet after | Removing Duplication | n: | 224564 | | |
| Dataset Size after 0 | Overlapping: | | 116498 | | |
| Overlapping Metri | CS | | | | |
| Repeat Identificatio | n Time: | | 00h:00m | n:09s:000ms | |
| Overlapping Time: | | | 00h:03m | n:48s:000ms | |
| Reads Alignment T | ime: | | 00h:00m | n:30s:000ms | |
| Total Hybrid Assem | nbly Time: | | 00h:04m:18s:000ms | | |
| Repeat Annotation | Time: | | 00h:04m:39s:000ms | | |
| Overlapping Length | O(N)2 Time Complexity | Hit Index C | Count | Overlapping Matched Count | RI |
| 249 | 287296 | 108 | | 6 | 0 |
| 248 | 280900 | 104 | | 1 | 0 |
| 246 | 279841 | 134 | | 5 | 0 |
| 245 | 274576 | 93 | | 1 | 0 |
| 242 | 273529 | 118 | | 3 | 0 |
| 241 | 241 270400 121 | | | 3 | 0 |
| 237 | 267289 120 | | | 1 | 0 |
| 236 | 266256 | 101 | | 1 | 0 |
| 235 | 265225 | 114 | | 1 | 0 |
| 233 264196 85 | | | 2 | 0 | |
| 231 | 262144 | 133 | | 2 | 0 |
| 228 | 260100 | 95 | | 2 | 0 |

| 226 | 258064 | 562 | 242 | 0 |
|-----|--------|-----|-----|---|
| 201 | 70756 | 24 | 7 | 0 |
| 196 | 67081 | 29 | 1 | 0 |
| 191 | 66564 | 27 | 1 | 0 |
| 183 | 66049 | 26 | 2 | 0 |
| 181 | 65025 | 25 | 1 | 0 |
| 176 | 64516 | 230 | 98 | 0 |