## **Assembly Report**

**Experiment Details** 

| ExperimentID:                     | Experiment 51 |
|-----------------------------------|---------------|
| Sequencing Coverage:              | 23            |
| Number of Partitions:             | 1             |
| Allowed Mismatch Count in (Base): | 0             |
| Length of Sliding Window:         | 201           |

**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                    | 378   |

Assembly Details

| Number of Contigs:  | 28    |
|---------------------|-------|
| Contig N50:         | 926   |
| Contig N90:         | 826   |
| Number of Scaffold  | 2     |
| Scaffold N50:       | 2491  |
| Scaffold N90:       | 2491  |
| Mis-assembly Count: | 0     |
| TotalAssembly Size: | 10371 |

Repeat Details

| Total Reads Count(Non-Repeat) :                             | 393 |
|---|-----|
| Total Reads Count(Repeat):                                  | 6   |
| Retetitve Read Count based on (Partitions Identifier):      | 0   |
| Retetitve Read Count (Entire Read Frequency Identifier):    | 3   |
| Retetitve Read Count (Contained Read Frequency Identifier): | 3   |
| Total Repetitive Sequences Count                            | 9   |
| Total Unique Repetitive Sequences Count                     | 3   |

| Total Repeat Size (Base) |        | 3500  |              |        |                            |  |
|--------------------------|--------|---|--------------|--------|----------------------------|--|
| Starting                 | Ending | Repetitive<br>Sequences   | Repeat Count | Length | Position                   | s  |
| 1                        | 2491   | GCTTTTCATTC TGACTGCAAC GGGCAATATG TCTCTGTGTGG ATTAAAAAAAA GAGTGTCTGATA GCAGCTTCTG AACTGGTTACC TGCCGTGAGT AAATTAAAATT TTATTGACTTA GGTCACTAAAT ACTTTAACCAA TATAGGCATAG CGCACAGACA GATAAAAATTA CAGAGTACAC AACATCCATGA AACGCATTAGC ACCACCATCA CCACCATCAC CCACCACCATCA CGGGCTGACG CGGCTGACG CGGCTGACG CGGCTGACG CGTACAGGAA ACACCATCAC CACCACCATCA CCATTACCAC CCATTACCAC CCATTACCAC CACCACCATCA CACCACCACC TGACAGGAA ACACAGAAAAA AGCCCGCACC TGACAGTGCG GGCTTTTTTT CGACCAAAGG TAACGAGGTAA CAACCATGCG AGTGTTGAAGT | 3            | 350    | Start Positio n 1 799 2039 | End<br>Positio<br>n<br>350<br>1148<br>2388 |

| 2201 | 10080 | CGGTCGAAAA ACTGCTGGCA GTGGGGGCATT ACCTCGAATCT ACCGTCGATAT TGCTGAGTCC ACCCGCCGTA TTGCGGCAAG TCGTATTCCGG CTGATCACATG GTGCTGATGG CAGGTTTCACC GCCGGTAATG AAAAAGGCGA ACTGGTGGTG CTTGGACGCA ACGGTTCCGA CTACTCTGCTG CGGTGCTGATTAC GCGCCGATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGATTT GGACGCATTG TTGCGAGTTT GACGGGTC TGCCTGTTTAC GCGCCGATTG TGCCGGTCAG CTGCCGATTG TGCGAGATTT GGACGGACGT TGACGGGGTC TGACGGGTC TGACGGGTC TGACGGGTC TGACGGGTC TGACGGGTC TGACGGGTT TGACGGGT TGACGGGTT TGACGAGGTT TGACGGGTT TGACGGGAT TGACGGGAT TGACCT TGACCAGGGAT TGACCT TGACCAGGGAT TGACCT TGACCAGGAT TGACCAGGAT TGACCT TGACCAGGAT TGACCT TTCCT TATACCT TGACCAGGAT TGACCT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGAT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGGAT TTCCT TATACCT TGACCAGAT TTCCT TATACCT TTCCT TATACCT TTCCT TATACCT TTCCT TTCCT TATACCT TTCCT TTCCT TTCCT TTCCT TTCCT TTCCT TTCCT TTCCT TTCCT | 3 | 350 | Start<br>Positio<br>n<br>4127<br>6570<br>8665 | End<br>Positio<br>n<br>4476<br>6919<br>9014 |
|------|-------|--|---|-----|---|---|
|      |       | TCCTACCAGG<br>AAGCGATGGA   |   |     |   |   |

|      | 1     | <del>                                     </del> |   |     |         |         |
|------|-------|--|---|-----|---------|---------|
|      |       | GATTCATTCGG                                      |   |     |         |         |
|      |       | GATGGTCTGT                                       |   |     |         |         |
|      |       | GTGGATTAAAA                                      |   |     |         |         |
|      |       | AAAGAGTGTCT                                      |   |     |         |         |
|      |       | GATAGCAGCTT                                      |   |     |         |         |
|      |       | CTGAACTGGTT                                      |   |     |         |         |
|      |       | ACCTGCCGTG                                       |   |     |         |         |
|      |       | AGTAAATTAAA                                      |   |     |         |         |
|      |       | ATTTTATTGAC                                      |   |     |         |         |
|      |       | TTAGGTCACTA                                      |   |     |         |         |
|      |       | AATACTTTAAC                                      |   |     |         |         |
|      |       | CAATATAGGCA                                      |   |     |         |         |
|      |       | TAGCGCACAG                                       |   |     | Start   | End     |
|      |       | ACAGATAAAAA                                      |   |     | Positio | Positio |
|      |       | TTACAGAGTAC                                      |   |     | n       | n       |
|      |       | ACAACATCCTC                                      |   |     | 2005    |         |
| 2201 | 10080 | AAAGCCTACC                                       | 4 | 350 | 3285    | 3634    |
|      |       | GGTGACAGTG                                       |   |     | 4858    | 5207    |
|      |       | CGGGCTTTTTT                                      |   |     | 7202    | 7551    |
|      |       | TTCGACCAAAG                                      |   |     |         |         |
|      |       | GTAACGAGGT                                       |   |     | 9332    | 9681    |
|      |       | AACAACCATGC                                      |   |     |         |         |
|      |       | GAGTGTTGAA                                       |   |     |         |         |
|      |       | GTCAGGAGAT                                       |   |     |         |         |
|      |       | CCTAAAGGCC                                       |   |     |         |         |
|      |       | TGTACCCGTTA                                      |   |     |         |         |
|      |       | CCTAGCCAGTT                                      |   |     |         |         |
|      |       | GGCATTAAAC                                       |   |     |         |         |
|      |       | GTATACGGTAC                                      |   |     |         |         |
|      |       | CTAGGCATGTA                                      |   |     |         |         |
|      |       | CGTAATCGTAG                                      |   |     |         |         |
|      |       | CCTTAGCAATC                                      |   |     |         |         |
|      |       | TCCAGTCC   |   |     |         |         |

SRGD Performance Metrics

| Initial Reads Count:                    | 1212 |
|---|------|
| Reads Count after Removing Duplication: | 399  |

| Reads Count after Overlapping:  |                          | 169         |                   |                           |    |
|---------------------------------|--------------------------|-------------|-------------------|---------------------------|----|
| Initial Dataset Size in (Base): |                          | 241272      |                   |                           |    |
| Dataset Sizet after             | Removing Duplication     | n:          | 101376            |                           |    |
| Dataset Size after 0            | Overlapping:             |             | 38685             |                           |    |
| Overlapping Metric              | CS                       |             |                   |                           |    |
| Repeat Identificatio            | n Time:                  |             | 00h:00m           | n:17s:000ms               |    |
| Overlapping Time:               |                          |             | 00h:04m           | n:38s:000ms               |    |
| Reads Alignment T               | ime:                     |             | 00h:00m           | n:19s:000ms               |    |
| Total Hybrid Assem              | nbly Time:               |             | 00h:04m:57s:000ms |                           |    |
| Repeat Annotation               | Time:                    |             | 00h:00m:01s:000ms |                           |    |
| Overlapping Length              | O(N)2 Time<br>Complexity | Hit Index ( | Count             | Overlapping Matched Count | RI |
| 200                             | 154449                   | 90          |                   | 11                        | 0  |
| 199                             | 145924                   | 81          |                   | 11                        | 0  |
| 197                             | 137641                   | 61          |                   | 7                         | 0  |
| 196                             | 132496                   | 87          |                   | 11                        | 0  |
| 195                             | 124609                   | 97          |                   | 12                        | 0  |
| 194                             | 116281                   | 73          |                   | 1                         | 0  |
| 188                             | 188 115600 74            |             |                   | 6                         | 0  |
| 187                             | 111556                   | 57          |                   | 1                         | 0  |
| 186                             | 110889                   | 55          |                   | 1                         | 0  |
| 184                             | 110224                   | 69          |                   | 3                         | 0  |
| 183                             | 108241                   | 54          |                   | 1                         | 0  |
| 179                             | 107584                   | 42          |                   | 1                         | 0  |

| 176 | 106929 | 345 | 154 | 0 |
|-----|--------|-----|-----|---|
| 161 | 29929  | 10  | 1   | 0 |
| 159 | 29584  | 18  | 1   | 0 |
| 157 | 29241  | 20  | 1   | 0 |
| 154 | 28900  | 8   | 1   | 0 |
| 151 | 28561  | 10  | 6   | 0 |