

**Table S4.** Parameters used for analysis programs.

**A.** Parameters used for assembly of 454 sequence reads:

```
Software used: Roche gsAssembler (Newbler)
Software version: 2.6 (20110517_1502)
Large or complex genome: true
Heterozygotic mode: false
Expected depth: 0 (=default)
Minimum read length: 20 (=default)

Parameters - Computation
Number of CPUs to use (0=all): 14
Seed step: 12 (=default)
Seed length: 16 (=default)
Seed count: 1 (=default)
Minimum overlap length: 40 (=default)
Minimum overlap identity: 90 (=default)
Alignment identity score: 2 (=default)
Alignment difference score: -3 (=default)

Parameters - Output
Reads limited to one contig: false
Pairwise alignment: None
Alignment info: True
All contig threshold: 1 (default=100)
Large contig threshold: 2,000 (default=500)
```

**B.** Parameters used for assembly of contigs

```
Software used: bb.454contignet URL:
http://www.vcru.wisc.edu/simonlab/sdata/software/index.html#contignet
Software version: 1.0.4
Parameters: --len=3 --level=8 --extend=80
```