

Copy 1 of Bg112:

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|------------|--|---|------|--|
| GU930824.1 | | 1 | Rir | GATACTGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCTTTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 1 | DNA1 | GATACTGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCTTTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 1 | N31 | GATACTGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCTTTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 1 | DNA2 | GATACTGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCTTTGAAGTACGTTTCTTCTTC |
| ***** | | | | |
| GU930824.1 | | 1 | Rir | TTTTACCTTTCTTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTA |
| GU930824.1 | | 1 | DNA1 | TTTTACCTTTCTTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTA |
| GU930824.1 | | 1 | N31 | TTTTACCTTTCTTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTA |
| GU930824.1 | | 1 | DNA2 | TTTTACCTTTCTTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTA |
| ***** | | | | |
| GU930824.1 | | 1 | Rir | AGATTATGAATATCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATACGACC |
| GU930824.1 | | 1 | DNA1 | AGATTATGAATATCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATACGACC |
| GU930824.1 | | 1 | N31 | AGATTATGAATATCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATACGACC |
| GU930824.1 | | 1 | DNA2 | AGATTATGAATATCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATACGACC |
| ***** | | | | |

Copy 2 of Bg112:

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|------------|--|---|------|--|
| GU930824.1 | | 3 | Rir | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| GU930824.1 | | 2 | N6 | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| GU930824.1 | | 2 | DNA1 | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| GU930824.1 | | 2 | DNA2 | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| GU930824.1 | | 2 | N33 | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| GU930824.1 | | 2 | N31 | GAAACTGGGAAGTGACCATCAGCTCTTATTGAAGTACGTTTCTTCTTTTACCTTTC |
| ***** | | | | |
| GU930824.1 | | 3 | Rir | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| GU930824.1 | | 2 | N6 | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| GU930824.1 | | 2 | DNA1 | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| GU930824.1 | | 2 | DNA2 | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| GU930824.1 | | 2 | N33 | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| GU930824.1 | | 2 | N31 | TTCTCACTATTCTCTTTATTATTATTATTATTATTATTATTATTATTATTAAAGATTATGAATA |
| ***** | | | | |
| GU930824.1 | | 3 | Rir | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| GU930824.1 | | 2 | N6 | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| GU930824.1 | | 2 | DNA1 | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| GU930824.1 | | 2 | DNA2 | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| GU930824.1 | | 2 | N33 | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| GU930824.1 | | 2 | N31 | TCTTCATCAGATGAATAAATATGAGGATCGGAGAATTTGATATGACCT |
| ***** | | | | |

Copy 3 of Bg112:

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|------------|--|---|------|--|
| GU930824.1 | | 3 | Rir | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 3 | N6 | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 3 | DNA1 | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 3 | DNA2 | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 3 | N36 | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| GU930824.1 | | 3 | N31 | GAAACCGGGAAGTGACCATCAGCTCTTGTCTTACTTTTCATTGAAGTACGTTTCTTCTTC |
| ***** | | | | |
| GU930824.1 | | 3 | Rir | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| GU930824.1 | | 3 | N6 | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| GU930824.1 | | 3 | DNA1 | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| GU930824.1 | | 3 | DNA2 | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| GU930824.1 | | 3 | N36 | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| GU930824.1 | | 3 | N31 | TTTTACCTTTCTTCTCACTATACTCTTTATTATTATTATTAAAGATTATAAATATCTTCA |
| ***** | | | | |
| GU930824.1 | | 3 | Rir | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| GU930824.1 | | 3 | N6 | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| GU930824.1 | | 3 | DNA1 | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| GU930824.1 | | 3 | DNA2 | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| GU930824.1 | | 3 | N36 | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| GU930824.1 | | 3 | N31 | TCAGATGAATAAATATGAGGATTGGAGAATTTGATATGACCT |
| ***** | | | | |

Figure S4. Alignments of *Bg112* sequences across seven *R. irregularis* assemblies.

The *Bg112* sequence GU930824.1 was used to identify the homologous sequences in the six assemblies.