*T. timopheevii* AABB DQ420030 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

matK\_233F (sequence and multiplex forward primer)[5’-TTGTCCGAAAGAAAAAGAAA]

*T. timopheevii* AABB DQ420031 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. timopheevii* AABB DQ420032 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. zhukovskyi* AAAAGG DQ420036 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. speltoides* SS DQ420035 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. longissima* SlSl DQ420042 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. sharonensis* SshSsh DQ420041 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. searsii* SsSs DQ420055 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. bicornis* SbSb DQ420040 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. turgidum* AABB DQ420011 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. turgidum* AABB DQ420017 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. turgidum* AABB DQ420020 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. aestivum* AABBDD DQ420013 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. monococcum* AmAm DQ420038 GATTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTTTTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. monococcum* AmAm DQ420054 GATTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTTTTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. urartu* AuAu DQ420039 GATTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTTTTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*Ae. tauschii* DD DQ420045 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATTTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*S. cereal* DQ420046 GAGTTTTATTCTCAGATTCTATCTGAAGGGTTTGCGATCGTTGTGGAAATCCCATTCTCGCTACGGGAATTATCTTGTCCGAAAGAAAAAGAAATACCAAAGTTTCAGAATTT

*T. timopheevii* AABB DQ420030 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. timopheevii* AABB DQ420031 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. timopheevii* AABB DQ420032 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. zhukovskyi* AAAAGG DQ420036 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. speltoides* SS DQ420035 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. longissima* SlSl DQ420042 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. sharonensis* SshSsh DQ420041 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. searsii* SsSs DQ420055 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. bicornis* SbSb DQ420040 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. turgidum* AABB DQ420011 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. turgidum* AABB DQ420017 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. turgidum* AABB DQ420020 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. aestivum* AABBDD DQ420013 ACGCTCTATTCATTCAATATTTCCCTTTTTTGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. monococcum* AmAm DQ420038 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. monococcum* AmAm DQ420054 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*T. urartu* AuAu DQ420039 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*Ae. tauschii* DD DQ420045 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

*S. cereal* DQ420046 ACGCTCTATTCATTCAATATTTCCCTTTTTAGAAGACAAATTTTTGCATTTGGATTATCTATCACATATAGAAATACCCTATCCTATCCATTTGGAAATCCTGGTTCAACTCCT

matK\_416R (multiplex reverse primer) [5’-GAAAGAATCGCAATAAAGGT]

*T. timopheevii* AABB DQ420030 TCAATACCGTATCCAAGATGTTCCATCTTTACATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTATTTTTCAAAAA

*T. timopheevii* AABB DQ420031 TCAATACCGTATCCAAGATGTTCCATCTTTACATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. timopheevii* AABB DQ420032 TCAATACCGTATCCAAGATGTTCCATCTTTACATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. zhukovskyi* AAAAGG DQ420036 TCAATACCGTATCCAAGATGTTCCATCTTTACATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*Ae. speltoides* SS DQ420035 TCAATACCGTATCCAAGATGTTCCATCTTTACATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*Ae. longissima* SlSl DQ420042 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTATTTTTTTCAAAAA

*Ae. sharonensis* SshSsh DQ420041 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTATTTTTTTCAAAAA

*Ae. searsii* SsSs DQ420055 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTATTTTTTTCAAAAA

*Ae. bicornis* SbSb DQ420040 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. turgidum* AABB DQ420011 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTTCTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. turgidum* AABB DQ420017 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. turgidum* AABB DQ420020 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. aestivum* AABBDD DQ420013 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. monococcum* AmAm DQ420038 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. monococcum* AmAm DQ420054 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*T. urartu* AuAu DQ420039 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

*Ae. tauschii* DD DQ420045 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTATTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTATTTTCAAAAA

*S. cereal* DQ420046 TCAATACCGTATCCAAGATGTTCCATCTTTGCATTTATTGCGATTCTTTCTCAACTACTATTCGAATTGGAATAGTTTTATTACTTCAATGAAATCCATTTTTTTTTTTCAAAAA

matK\_1534R (sequence reverse primer)[5’-ATCCATAAAGAACCATAGGG\*]

(\*this primer position is outside of the above sequences)