

1 (I) full sequence of the dwarf NIL line

2 1 CGCTTCTCGC ATGGTCTCAA GGTAGAGCGA GCGAGCTCCC ACATGGATTG CCTGCGGCTG
3 61 GCGGTAGCGG CGGCGGCGCT CTTTCTCGCG GCGCTCGCGG CGGCGGCCGA CGACGCGCAG
4 121 CTGCTGGACG AGTTCAGGAT GGGCTGCCCC AGCCAGGCGC CGCTCGAAGG CTGGACCGCG
5 181 CGGGAGGGCG CCTGCAGGTT CCCC GGCGG GTGTGCGGG GCGGGCGGCT CACGTCGCTC
6 241 TCGCTCGCCG CCGTCACGCT CAATGCCGAC TTCCGCGCCG TCGCCAACAC CCTGCTGCAG
7 301 CTCAGCGCCG TCGAGCGGCT CAGCCTGCGC GCGGCCAACG TCAGCGGCGC GCTCGCGGCC
8 361 GCCAGGTGCG GCGGCAAGCT CGAGGAGCTC GACCTCTCCG GGAATGCCG GCTGCGCGGC
9 421 TCCGTCGCCG ACGTCGCGC GCTCGCCGCG TCCTGCGGCG CGCTCCGGAC GCTGAATCTC
10 481 TCCGGTGACG CGGTTGGTGC GGCCAAGCCC GCTGGCGGTG GCGGTGGCGG GCAGGGGTTT
11 541 GCGGCCCTCG ACGCCCTCGA CTTGTCCAGC AACAAGATCG CCGGAGATGC CGACCTTCGC
12 601 TGGATGGTGG GTGCCGGCCT TGGGTCTGTC CGGTGGCTGG ACCTCGCCTG GAACAAGATC
13 661 TCCGGCGGCC TCTCGGACTT CACCAACTGC TCCGGCCTGC AGTACCTTGA CCTATCCGGC
14 721 AACCTCATCG CCGGCGATGT CGCCGCGGCG GCGCTCTCCG GCTGCGCAG CCTCAGAGCG
15 781 TCAACCTCT CAGCAACCA TCTCGCCGCG GCGTTCCCGC CCAACATCG CGGCCACC
16 841 TCGCTCACCG CCCTCAACCT GTCCAACAAC AACTTCTCTG GCGAGGTCCC CGCCGACGCT
17 901 TTCACCGGCC TGCAGCAGCT CCAGTCGCTG TCCCTCTCCT TCAACCACTT CAGCGGCTCC
18 961 ATCCCTGATT CCGTCGCTGC GCTGCCGAC CTCGAGGTGC TCGACCTCAG CTCCAACAAC
19 1021 TTCTCCGGCA GCATCCCCGA CTCCCTCTGC CAAGATCCCA ACTCGAGGCT CCGCGTGCCT
20 1081 TACCTTCAGA ACAACTATCT CTCCGGCAGC ATCCCGGAGG CCGTCTCCA CTGCAACCGAC
21 1141 CTCGTCTCCC TCGACCTCAG TCTCAACTAG ATCAACGGCT CCATCCCGGA ATCCCTCGGC
22 1201 GAGCTTAGCC GCCTCCAGGA CTTTATCATG TGGCAGAACT TACTGGAGGG CGAGATACCT
23 1261 GCGTCTCTGT CAAGCATTCC CGGCCCTGGAG CATCTCATCC TCGACTACAA CGGGCTCACC
24 1321 GGCAGCATCC CGCCGGAGCT GGCCAAGTGC AAGCAGCTCA ACTGGATATC CTTGGCGAGC
25 1381 AACCGGCTGT CTGGGCCGAT CCCCTCGTGG CTTGGGAAGC TCAGCAACTT GGCAATCCTA
26 1441 AAGCTGAGCA ATAATTCCTT CACCGGAAAG ATACCCGACG AGCTTGGTGA CTGCAAGAGC
27 1501 TTGGTATGCG TGGACCTCAA CAGCAACCA CTTAATGGAT CAATCCACC CGAGCTGGCA
28 1561 GAGCAGTCGG GGAAGATGAC CGTTGGCCTC ATTATTGGGC GGCCCTATGT GTATCTTCGC
29 1621 AACGACGAGC TGAGCAGCCA GTGTGCTGGC AAGGGCAGCT TGCTGGAGTT CTCAAGCATC
30 1681 CGGTCCGAGG ACCTTAGTCG GATGCCGAGC AAGAAGCTGT GCAACTTCAC AAGGATGTAC
31 1741 ATGGGGAGCA CAGAGTATAC CTTCAACAAG AATGGCTCCA TGATATTTCT GGATTTGTCA
32 1801 TTTAATCAGC TTGACTCGGA GATACCCAAG GAGCTTGGA ATATGTCTA CCTCATGATC
33 1861 ATGAATCTTG GGCACAACCT TCTGTCTGGT GCTATCCCAA CAGAGCTAGC TGGTGCAAAG
34 1921 AAGCTTGACG TACTTGACCT TTCGCACAAC CGATTGGAAG GGCAGATACC CAGCTCGTTC
35 1981 TCGTCACTGT CTTTGTCTGA GATCAATCTG TCGAGTAATC AGCTGAATGG GACAATTCOA
36 2041 GAGCTTGGTT CTCTTGCCAC ATTCCCAAAG AGCCAGTATG AGAACAATC CGGTCTGTGT
37 2101 GGCTTTCCAC TGCCACCATG TGAGTCGCAT ACTGGGCAAG GCTCTTCCAA CGGTGGCCAA
38 2161 TCTAACCGGA GGAAGGCGTC CTTTGGCGGC AGCGTTGCTA TGGGACTCTT GTTCTCGCTC
39 2221 TTCTGTATAT TTGGGTTGGT CATCATAGCC ATCGAGAGCA AGAAGCGGAG GCAGAAGAA
40 2281 GACGAGGCAA GTACCTCCCG TGATATATAC ATTGATAGCC GGTACATTC TGGCAGCATG
41 2341 AATTCCAATT GGAGACTCTC TGGTACAAAT GCTCTCAGCA TCAACCTTGC TGCAATTTGAG
42 2401 AAGCCACTGC AGAAACTCAC CTTGGGTGAT CTTGTTGAGG CCACCAATGG CTTCCACAAT
43 2461 GATAGCTTGA TTGGGTCTGG TGGATTTGGT GATGTCTACA AGGCACAGCT CAAGGATGGG
44 2521 AGGGTTGTTG CTATCAAGAA GCTAATACAT GTGAGTGGCC AGGGTGACCG GGAGTTCACA
45 2581 GCGGAAATGG AGACCATTTG CAAGATCAAA CGCCGCAACC TTGTTCCGCT CCTCGGCTAC
46 2641 TGCAAGATCG GCGAGGAGCG GCTGCTGATG TATGACTTCA TGAAGTATGG CAGCTTGGAG
47 2701 GATGTGCTCG ACGACCGCAA AAAGATTGGG GTAAGGCTGA ACTGGGCGGC AAGCGGAAAG
48 2761 ATTGCAATCG GGGCAGCAAG GGGGTTGGCA TTCCTCCACC ACAACTGCAT TCCGCACATC
49 2821 ATCCACCAGG ACATGAAGTC AAGCAATGTG CTTGTTGATG AGAATCTGGA GGCAAGGGTC
50 2881 TCTGATTTTC GCATGGCGAG GATGATGAGT GTGGTGGACA CACACCTGAG CGTGTCCACC
51 2941 CTCGCCGGCA CGCCGGGGTA TGTGCCACCG GAGTACTACC AGAGCTTCCG ATGCACCACC
52 3001 AAGGGTGTATG TGTATAGCTA CGGTGTGTG TTGCTGGAGC TGCTCACTGG GAAGCCCCCG
53 3061 ACGGATTCOA CAGATTTTGG TGAGGACCAT AATCTTGTAG GATGGGTGAA GATGCACACA
54 3121 AAGTTGAAGA TCACTGATGT GTTTGACCCG GAGCTGCTGA AGGACGATCC CACCCTGGAG
55 3181 CTTGAGCTGC TGGAGCATTT GAAAATCGCA TGTGCGTGCC TGGATGACAG GCCGTCGAGG
56 3241 CGACCAACGA TGCTCAAGGT GATGACGATG TTCAAGGAGA TCCAGGCTGG GTCAACGGTG
57 3301 GACTCGAAAA CCTCGTCGGT GGCTACCGGG CTGAGCGACG ATCCTGGTTT TGGGGTCAATG
58 3361 GACATGACCC TCAAGGAGGC CAAGGAGGAG AAAGATTAGG AAGATGACCA CCGGCGACAC
59 3421 GCAGACGGCG GTGACCGGCA GCAACACGTC CGTCCGTCCG TCCAGTTTGG GTTTGGGGGC
60 3481 GAAAAAACC GTAGAAATCA GCCTCTCAGA TGATTGATGA TGATGTGATG ATACCATCTCT
61 3541 GAGGTTCCCA CGCAAGCT

(II) full sequence of the tall NIL line

1
2
3 1 CGCTTCTCGC ATGGTCTCAA GGTAGAGCGA GCGAGCTCCC ACATGGATTG CCTGCGGCTG
4 61 GCGGTAGCGG CGGCGGCGCT CTTTCTCGCG GCGCTCGCGG CGGCGGCCGA CGACGCGCAG
5 121 CTGCTGGACG AGTTCAGGAT GGCGCTGCCG AGCCAGGCGC CGCTCGAAGG CTGGACC GCG
6 181 CGGGAGGGCG CCTGCAGGTT CCCC GGCGCG GTGTGCCGGG GCGGGCGGCT CACGTCGCTC
7 241 TCGCTCGCCG CCGTACAGCT CAATGCCGAC TTCCGCGCCG TCGCCAACAC CCTGTGCAG
8 301 CTCAGCGCCG TCGAGCGGCT CAGCCTGCGC GCGGCCAACG TCAGCGGCGC GCTCGCGGCC
9 361 GCCAGGTGCG GCGGCAAGCT CGAGGAGCTC GACCTCTCCG GGAATGCCGC GCTGCGCGGC
10 421 TCCGTCGCCG ACGTCGCCGC GCTCGCCGGC TCCTGCGGCG CGCTCCGGAC GCTGAATCTC
11 481 TCCGGTGACG CGGTTGGTGC GGCCAAGCCC GCTGGCGGTG GCGGTGGCGG GCAGGGGTTT
12 541 GCGGCCCTCG ACGCCCTCGA CTTGTCCAGC AACAAGATCG CCGGAGATGC CGACCTTCGC
13 601 TGGATGGTGG GTGCCGGCCT TGGGTCTGTC CGGTGGCTGG ACCTCGCCTG GAACAAGATC
14 661 TCCGGCGGCG TCTCGGACTC CACCAACTGC TCCGCCTCG AGTACCTTGA CCTATCCGGC
15 721 AACCTCATCG CCGGCGATGT CCGCGGCGC GCGCTCTCCG GCTGCGCGC GCTGCGCGC
16 781 CTCAACCTCT CCAGCAACCA TCTCGCCGGC GCGTTCCCGC CCAACATCGC CGGCCTCACC
17 841 TCGCTCACCG CCCTCAACCT GTCCAACAAC AACTTCTCTG GCGAGGTCCC CGCCGACGCT
18 901 TTCACCGGCC TGCAGCAGCT CCAGTCGCTG TCCCTCTCCT TCAACCACCT CAGCGGTCC
19 961 ATCCCTGATT CCGTCGCTGC GCTGCCGGAC CTCGAGGTGC TCGACCTCAG CTCCAACAAC
20 1021 TTCTCCGGA GCATCCCCG CTCCCTGTC CAAGATCCCA ACTCGAGGT CCTCGTCTC
21 1081 TACTTCCAGA ACAACTATCT CTCGGGACG ATCCCGGAG CCGTCTCCAA CTGCACGAC
22 1141 CTCGTCTCCC TCGACCTCAG TCTCAACTAC ATCAACGGCT CCATCCCGGA ATCCCTCGGC
23 1201 GAGCTTAGCC GCCTCCAGGA CTTTATCATG TGGCAGAACT TACTGGAGGG CGAGATACCT
24 1261 GCGTCTCTGT CAAGCATTCC CGGCCTGGAG CATCTCATCC TCGACTACAA CGGGCTCACC
25 1321 GGCAGCATCC CGCCGGAGCT GGCCAAGTGC AAGCAGCTCA ACTGGATATC CTTGGCGAGC
26 1381 AACCGGCTGT CTGGGCCGAT CCCCTCGTGG CTTGGGAAGC TCAGCAACTT GGCAATCTA
27 1441 AAGTGAGCA ATAATTCCTT CACCGGAAAG ATACCCGACG AGCTTGGTGA CTGCAAGAGC
28 1501 TTGGTATGCG TGGACCTCAA CAGCAACCAA CTTAATGGAT CAATTCCACC CGAGCTGGCA
29 1561 GAGCAGTCGG GGAAGATGAC CGTTGGCCTC ATTATTTGGC GGCCCTATGT GTATCTTCGC
30 1621 AACGACGAGC TGAGCAGCCA GTGTGCTGGC AAGGGCAGCT TGCTGGAGTT CTCAAGCATC
31 1681 CGGTCCGAGG ACCTTAGTCG GATGCCGAGC AAGAAGCTGT GCAACTTCAC AAGGATGTAC
32 1741 ATGGGGAGCA CAGAGTATAC CTTCAACAAG AATGGCTCCA TGATATTTCT GGATTTGTCA
33 1801 TTAAATCAGC TTGACTCGGA GATACCCAAG GAGCTTGGCA ATATGTCTA CCTCATGATC
34 1861 ATGAATCTTG GGCACAACCT TCTGTCTAGT GCTATCCCAA CAGAGCTAGC TGGTGCAAAG
35 1921 AAGCTTTCAG TACTTGACCT TTCGCACAA CGATTGGAAG GGCAGATACC CAGCTCGTTC
36 1981 TCGTCACTGT CTTTGTCTGA GATCAATCTG TCGAGTAATC AGCTGAATGG GACAATTTCA
37 2041 GAGCTTGGTT CTCTTGCCAC ATTCCCAAAG AGCCAGTATG AGAACAATC CGGTCTGTGT
38 2101 GGCTTTCCAC TGCCACCATG TGAGTCGAT ACTGGGCAAG GCTCTTCCAA CGGTGGCCAA
39 2161 TCTAACCGGA GGAAGCGGTC CCTTGGCGGC AGCGTTGCTA TGGGACTCTT GTTCTCGCTC
40 2221 TTCTGTATAT TTGGGTGGT CATCATAGCC ATCGAGAGCA AGAAGCGGAG GCAGAAGAAT
41 2281 GACGAGGCAA GTACCTCCCG TGATATATAC ATTGATAGCC GGTACATTC TGGCACGATG
42 2341 AATTCCAATT GGAGACTCTC TGGTACAAAT GCTCTCAGCA TCAACCTTGC TGCATTTGAG
43 2401 AAGCCACTGC AGAAACTCAC CTTGGGTGAT CTTGTTGAGG CCACCAATGG CTTCCACAAT
44 2461 GATAGCTTGA TTGGGTCTGG TGGATTTGGT GATGTCTACA AGGCACAGCT CAAGGATGGG
45 2521 AGGGTTGTTG CTATCAAGAA GCTAATACAT GTGAGTGGCC AGGGTGACCG GGAGTTTACA
46 2581 GCGGAAATGG AGACCATTGG CAAGATCAA CACCGCAACC TTGTTCCGCT CCTCGGTAC
47 2641 TGCAAGATCG GCGAGGAGCG CAGTCTGATG TATGACTTCA TGAAGTATGG CAGCTTGGAG
48 2701 GATGTGCTGC ACGACCGCAA AAAGATTGGG GTAAGGCTGA ACTGGGCGC AAGGCGAAAG
49 2761 ATTGCAATCG GGGCAGCAAG GGGGTGGCA TTCCTCCACC ACAACTGCAT TCCGCACATC
50 2821 ATCCACCAGG ACATGAAGTC AAGCAATGTG CTTGTTGATG AGAATCTGGA GGCAAGGGTC
51 2881 TCTGATTTG CAGATGGCGAG GATGATGAGT GTGGTGGACA CACACCTGAG CGTGTCCACC
52 2941 CTCGCCGGCA CGCCGGGGTA TGTGCCACCG GAGTACTACC AGAGCTTCCG ATGCACCACC
53 3001 AAGGGTGTAT TGTATAGTCA CGGTGTGTG TTGCTGGAGC TGCTACTGAG GAAGCCCCG
54 3061 ACGGATTCAA CAGATTTTGG TGAGGACCAT AATCTTGTAG GATGGGTGAA GATGCACACA
55 3121 AAGTTGAAGA TCACTGATGT GTTTGACCCG GAGCTGCTGA AGGACGATCC CACCCTGGAG
56 3181 CTTGAGCTGC TGGAGCATTT GAAAATCGCA TGTGCGTGCC TGGATGACAG GCCGTCGAGG
57 3241 CGACCAACGA TGCTCAAGGT GATGACGATG TTCAAGGAGA TCCAGGCTGG GTCAACGGTG
58 3301 GACTCGAAAA CCTCGTCCGT GGCTACCGGG CTGAGCGACG ATCCTGTTT TGGGGTATG
59 3361 GACATGACCC TCAAGGAGGC CAAGGAGGAG AAAGATTAGG AAGATGACCA CCGGCGACAC
60 3421 GCAGACGGCG GTGACCGGCA GCAACACGTC CGTCCGTCG TCCAGTTTGG GTTTGGGGC
61 3481 GAAAAAACC GTAGAAATCA GCCTCTCAGA TGATTGATGA TGATGTGATG ATACCATTCT
62 3541 GAGGTTCCCA CGCAAGCT
63
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