

Alignment of the *rbcl* gene sequences of 5 Meliaceae species (Table 2) and 5 non-Meliaceae members of the order Sapindales (*Boswellia sacra*, NC\_029420.1; *Anacardium occidentale*, NC\_035235.1; *Leitneria floridana*, NC\_030482.1; *Citrus sinensis*, NC\_008334.1; *Acer buergerianum*, NC\_034744.1)



		660		680		700		720
C. guianensis	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
K. senegalensis	GGAGAGACCG	TTTCATATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
E. cylindricum	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
C. odorata	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
A. indica	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
A. occidentale	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
B. sacra	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
A. buergerianum	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
C. sinensis	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
L. floridana	GGAGAGACCG	TTTCCTATTT	TGTGGGGAAG	CAATCTATAA	AGGCAAGCT	GAAACAGGTG	AAATCAAAAGG	GCAATTACTTG
		740		760		780		800
C. guianensis	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
K. senegalensis	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
E. cylindricum	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
C. odorata	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
A. indica	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
A. occidentale	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
B. sacra	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
A. buergerianum	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
C. sinensis	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
L. floridana	AATGCTACTG	CAGGTACATG	GGAAGAAATG	ATAAAAAAGG	CTGCTCTTTC	CCGAGAGTTG	GGAGTTCCTA	TGTAATGCA
		820		840		860		880
C. guianensis	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
K. senegalensis	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
E. cylindricum	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
C. odorata	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
A. indica	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
A. occidentale	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
B. sacra	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
A. buergerianum	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
C. sinensis	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
L. floridana	TGACTACTTA	ACTGGGGGAT	TCACCGCAAA	TACTAGCTTG	GCTCATTATT	GCGGAGATAA	TGGTCTACTT	CTTCACATCC
		900		920		940		960
C. guianensis	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
K. senegalensis	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
E. cylindricum	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
C. odorata	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
A. indica	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
A. occidentale	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
B. sacra	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
A. buergerianum	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
C. sinensis	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
L. floridana	ACCGTGCAAT	GCATGCAGTT	ATTGATAGAG	AGAAGAATCA	TGGTATGCAC	TTTCTGTGAC	TAGCTAAAGG	TTTACGTATG
		980		1,000		1,020		1,040
C. guianensis	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
K. senegalensis	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
E. cylindricum	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
C. odorata	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
A. indica	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
A. occidentale	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
B. sacra	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
A. buergerianum	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
C. sinensis	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
L. floridana	TCTGGTGGAG	ATCATATTCA	CGCTGGTACA	GTAGTAGGTA	AACTTGAAGG	GGAAAGAGAG	ATAAACCCTTGG	GATTTGTTGA
		1,060		1,080		1,100		1,120
C. guianensis	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
K. senegalensis	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
E. cylindricum	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
C. odorata	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
A. indica	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
A. occidentale	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
B. sacra	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
A. buergerianum	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
C. sinensis	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
L. floridana	TTTACTACGT	GATGATTTTA	TTGAAAAAGA	TGGAAGCCGC	GGTATTTATT	TCACTCAAGA	TTGGGTCTCT	CTACCAAGTG
		1,140		1,160		1,180		1,200
C. guianensis	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
K. senegalensis	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
E. cylindricum	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
C. odorata	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
A. indica	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
A. occidentale	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
B. sacra	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
A. buergerianum	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
C. sinensis	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
L. floridana	TTTTGCCCGT	GGCTTCAGGA	GGTATTACAG	TTTGGCATAT	GGCTGCTTTG	ACCGAAATCT	TTGGAGATGA	TTCCGTACTA
		1,220		1,240		1,260		1,280
C. guianensis	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
K. senegalensis	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
E. cylindricum	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
C. odorata	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
A. indica	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
A. occidentale	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
B. sacra	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
A. buergerianum	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
C. sinensis	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG
L. floridana	CAATTCGGTG	GAGGAACGTT	AGGACACCCCT	TGGGGAAATG	CAACCCGGGC	CGTAGCTAAT	CGAGTAGCTC	TGGAAGCATG

		1,300		1,320		1,340		1,360	
C. guianensis	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
K. senegalensis	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
E. cylindricum	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
C. odorata	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
A. indica	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
A. occidentale	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAG	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
B. sacra	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1290
A. buergerianum	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGCGAG	GGTAATGAAA	TTATCCGTGA	GGCTAGCAAA	TGGAGTCCTG	1360
C. sinensis	TGTACAAAGCT	CGTAAATGAAG	GACGGGATCT	TGCTCGTGAA	GGTAATGAAA	TTATCCGGGA	GGCTAGCAAA	TGGAGTCCTG	1360
L. floridana	TGTACAAAGCT	CGTAAATGAAG	GACGGGACCT	TGCTCGCGAA	GGTAATGAAA	TTATCCGGGA	GGCTAGCAAA	TGGAGTCCTG	1290
		1,380		1,400		1,420			
C. guianensis	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCCA	GCAATGGATA	CTTTGTAA	1428	
K. senegalensis	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCCA	GCAATGGATA	CTTTGTAA	1428	
E. cylindricum	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCCA	GCAATGGATA	CTTTGTAA	1428	
C. odorata	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCCA	GCAATGGATA	CTTTGTAA	1428	
A. indica	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATAAAAT	TGAATTCCAA	GCAATGGATA	CTTTGTAA	1428	
A. occidentale	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCAA	GCAATGGATA	CTTTGTAA	1428	
B. sacra	AGCTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTCCAA	GCAATGGATA	CTTTGTAA	1358	
A. buergerianum	AACTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTTGAA	GCAATGGATA	CTTTGTAA	1428	
C. sinensis	AACTGGCTGC	TGCTTGTGAA	GTCTGGAAGT	AGATCAAAAT	TGAATTTGCC	GCAATGGATA	CTTTGTAA	1428	
L. floridana	AGCTGGCTGC	TGCTTGTGAA	GTATGGAAGG	AGATCAAAAT	TGAATTTGAA	GCAATGGATA	CTTTGTAA	1358	