

**Supplementary Figure S7 -- Relevant part of the nucleotide sequence of the pC-LS plasmid expressing the limonene synthase gene from *Mentha spicata*.** The lambda phage  $P_R$  promoter that comprises the -35 box (5'-**TTGACT-3'**), the -10 box (5'-**GATAAT-3'**) and the transcription start site (**A**) as well as the Shine d'Algaro sequence (ribosome bind site; **aaggagg**) sequence originating from the lambda phage *Cro* gene are shown in red (see (Mermet-Bouvier and Chauvat, 1994)). The *Mentha spicata* limonene synthase encoding gene was adapted to *Synechocystis* PCC 6803 codon-usage and cloned in the *NdeI* (**catATG**) and *EcoRI* (**gaattc**) restriction thereby truncating the chloramphenicol resistance gene ( $Cm^S$ ). This sequence can be amplified by the pFC1 Fw and pFC1 Rv primers.

5'-

**GGCGACGTGCGTCCTCAAGC**tgctcttggttaatggtttctttttgtgctcatagctta**aatctatcacccgaaggataaatatctaaccacggtgcgtgTTGACTat**  
**tttacctctggcggtGATAATggttgcAtgtactaaggaggtcatATG**GAGCGAAGAAGTGGCAACTACAACCCCTCGAGATGGGATGTTAATTTTATCCAGTCATTACT  
ATCTGACTATAAAGAAGACAAACATGTGATCAGAGCGAGCGAACTAGTTACTTTAGTAAAGATGGAGCTGGAGAAAGAAACGGATCAGATCCGACAGCTAGAACTGATAG  
ATGATCTTCAACGCATGGGCCTATCCGACCATTTTCAGAACGAATTTAAAGAAATATTGAGCTCAATTTACCTAGATCACCATTATTATAAGAACCCGTTTCCGAAAGAA  
GAACGCGACCTTTACTCCACTTCATTAGCTTTTCGTCTCCTAAGGGAACACGGATTCCAAGTTGCGCAAGAGGTATTCGACAGTTTTAAAAACGAGGAAGGTGAGTTTAA  
AGAGTCTTTATCTGACGACACTCGGGGATTACTTCAATTATATGAGGCCAGCTTTCTGCTAACGGAGGGTGAAACGACATTGGAGTCTGCAAGGGAGTTCGCCACTAAGT  
TCTTAGAGGAGAAAGTAAATGAAGGAGGCGTTGACGGAGATCTGTTAACTCGAATTGCCTATAGCCTCGATATCCCGCTCCATTGGAGAATCAAACGTCCAAATGCCCCC  
GTTTGGATTGAATGGTACCGTAAAAGGCCTGACATGAACCCAGTTGTGTTGGAACCTTGCCATCCTGGACCTTAACATTGTGCAGGCCCAATTTCAAGAAGAACTGAAGGA  
ATCCTTTTCGCTGGTGGCGGAATACCGGCTTTGTTGAAAACTCCCTTTTGCACGGGATCGGTTAGTGGAGTGCTACTTTTGGAAACACCGGGATCATTGAACCTCGACAGC  
ATGCCTCGGCTCGCATCATGATGGGCAAGGTTAATGCGCTCATTACTGTAATTGATGATATTTATGACGTCTACGGCACATTAGAAGAACTCGAACAATTTACCGATCTC  
ATTCGCCGTTGGGATATTAATTCATTGATCAGTTGCCGGACTACATGCAACTTTGCTTTTATAGCCTTAAATAATTTTGTGGACGACACAAGCTATGATGTGATGAAAGA  
AAAAGGGGTCAATGTGATTCCATACTTGCGGCAATCTTGGGTTGACTTTGGCCGATAAGTACATGGTCAAGCACGTTGGTTTTATGGGGGCCATAAACCTCCTTAGAAG  
AATATTTGGAGAATAGCTGGCAAAGTATTTCCGGTCCCTGTATGCTGACCCACATTTTCTTCCGGGTACCGATAGTTTCACCAAGGAAACCGTCGATAGTTTGTATAAG  
TATCACGATCTGGTCCGCTGGTCCTCCTTCGTGCTGCGGTTGGCCGATGATTTGGGGACCAGTGTGGAAGAAGTGAGTCGTGGGGATGTGCCCAAATCCTTGCAATGTTA  
TATGTCCGATTATAATGCCTCCGAAGCGGAAGCTCGGAAACATGTGAAGTGGCTAATTGCTGAAGTGTGGAAGAAAATGAATGCTGAACGGGTGAGTAAAGATAGTCCCT  
TTGGCAAAGATTTTATTGGGTGTGCCGTGGATTTGGGTGCTATGGCGCAATTGATGTATCATAATGGTGATGGTCATGGTACCCAACACCCCATTTATTCACCAACAAATG  
ACCCGCACCTTGTTTGGAGCCCTTTGCTTAAggaatccatggtcgcatcggtcgacgctagc**gaattc**CGTATGGCAATGAAAGACGGGTGAGCTGGTGATATGGGATAGTG  
**TTCACCTTGTACAC-3'**

#### Amino acid sequence of the 4S-limonene synthase from *Mentha Spicata*

MERRSGNYNPSRWVDNFIQSLSDYKEDKHVIRASELVTLVKMELEKETDQIRQLELIDDLQRMGLSDHFQNEFKEILSSIYLDHHYYKNPFPKEERDLYSTSLAFRLREH  
GFQVAQEVFDSFKNEEGEFKESLSDDTRGLLQLYEASFLLTEGETTLESAREFATKFLEEKVNEGGVDGDLTRIAYSLDIPLHWRIKRPNAPVWIEWYRKRPMNPVLE  
LAILDLNIVQAQFQEELKESFRWWRNTGFVEKLPFARDRLVECYFWNTGHEPRQHASARIMMGKVNALITVIDDIYDVYGTLEELEQFTDLIRRDINSIDQLPDYMQLCF  
LALNNFVDDTSYDVMKEKGVNIPYLRQSWVDLADKYMVEARWFYGGHKPSLEEYLENSWQSISGPCMLTHIFFRVTSFTKETVDSLYKYHDLVRWSSFVLRLLADDL  
GTSVEEVSRGDVPSLQCYMSDYNASEAEARKHVKWLIAEVWKKMNAERVSVDSPFGKDFIGCAVDLGRMAQLMYHNGDGHGTQHPIHQMQMTRTLFEPFA\*