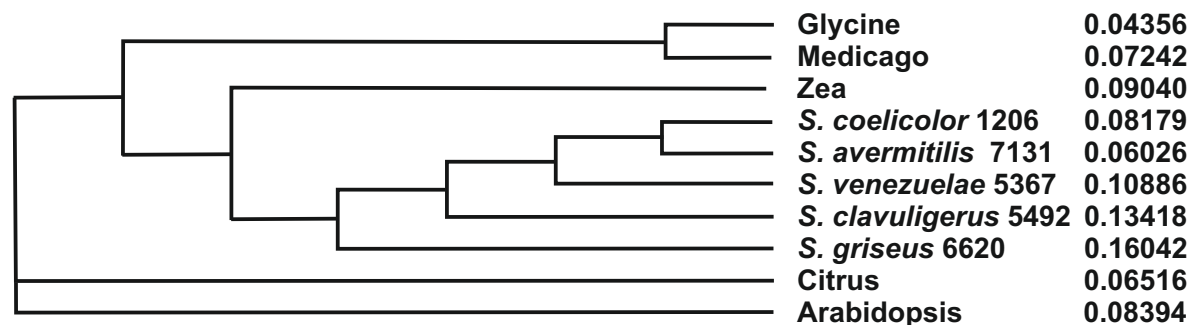


A

	<u>132</u> to <u>146</u>	<u>181</u> to <u>197</u>	<u>266</u> to <u>278</u>	<u>295</u> to <u>307</u>
<i>S. clavuligerus</i> 5492	PIAQLG C AAGGAAVN	SLLSNGL F GDGIAAAVV	FYII H AGGPRILD	RATL T EYGN I ASA
<i>S. coelicolor</i> 1206	PIAQLG C AAGGAAIN	SLLCNGL F GDGIAAAVV	FYIV H AGGPRILD	RATL T EYGN I ASA
<i>S. avermitilis</i> 7131	PIAQLG C AAGGSAIN	SLLSNGL F GDGIAAAAAR	FYII H AGGPRILD	RATL T EYGN I ASA
<i>S. ven</i> 5367	PIAQLG C AAGGAAIN	SLLSNGL F GDVAAAIV	FYII H AGGPRILD	RATL T EYGN I ASA
<i>S. griseus</i> 6620	PIAQLG C AAGGAAIN	SLLSNGL F GDALSAVV	FFIV H AGGPRILD	RATL T ERGN I ASS
	* * * * *	** * * * *	* * * * *	* * * * *
Glycine	MMYQQG C FAGGTVLR	SLVGQAL F GDGAAAVIV	FWIA H PGGPAILD	RHVLSEYGN M SSA
Medicago	MMYQQG C FAGGTVLR	SLVGQAL F GDGAAALIV	FWIA H PGGPAILD	REVLSEYGN M SSA
Citrus	MMYQQG C FAGGTVLR	SLVGQAL F GDGAAAVIV	FWIA H PGGPAILD	RQVLSEYGN M PSA
Arabidopsis	MMYQQG C FAGGTVLR	SLVGQAL F GDGAAALIV	FWIA H PGGPAILD	RHVLSEYGN M SSA
Zea Mays	MMYQQG C FAGGTVLR	SLVGQAL F GDGAAAVVV	FWVA H PGGPAILD	RHVLSEYGN M SSA
	138	188	270	303

B



Supplementary Material

Figure S1. A) Conserved sequences around the key amino acids located in chalcone synthases active center. The numbers given in the sequence correspond to *S. clavuligerus* Ncs, where the key amino acids are Cys¹³⁸, Phe¹⁸⁸, His²⁷⁰ and Asn³⁰³.

B) Phylogenetic tree of plant and *Streptomyces* chalcone synthases. The origin of the sequences used is indicated at the right side. Numbers at the far right side correspond to the genetic distance index.