

**Table S1.** Iridoids identified in methanol extracts of *Centaurium erythraea* by UHPLC/DAD/ $\pm$ HESI-MS<sup>2</sup> analysis. Peak labels, retention times ( $t_R$ ), parent ions  $[M+CH_3COOH+H]^+$   $m/z$ , MS<sup>2</sup> fragments used in an SRM (Single Reaction Monitoring) experiment, collision energies (cE), and  $\lambda_{max}$  for each of the compounds are presented.

UHPLC-MS data						UHPLC-DAD data	
Peak No.	Assignment	$t_R$ (min)	$[M+CH_3COOH+H]^+$ $m/z$	SRM MS <sup>2</sup> fragments $[m/z$ (Intensity)]	cE (eV)	$t_R$ (min)	$\lambda_{max}$ [nm]
1	Loganic acid <sup>S,R</sup>	2.01	375	213 (100), 168 (<5)	20	1.95	240
5	Swertiamarin <sup>S,R</sup>	2.61	433	179 (100); 161 (15)	20	2.52	240
2	Loganin <sup>S,R</sup>	2.88	449	227 (85); 127 (100)	30	2.85	240
6	Gentiopicrin <sup>S,R</sup>	2.90	415	179 (60); 119 (100)	20	2.83	250, 280, 370
4	Sweroside <sup>S,R</sup>	3.00	417	195 (100); 179 (85)	20	2.94	250
3	Secologanin <sup>S,R</sup>	3.66	447	155 (100); 123 (30)	30	3.58	240

<sup>S</sup>Confirmed using reference standards

<sup>R</sup>Confirmed according to the literature

**Table S2.** Primer sequences used for the qPCR analysis (for other SGs metabolic pathway genes primer sets please refer to [4])

Genes		Primers (5' to 3')
<i>CeIS2</i>	F	CAAGCCATTGGTGTATCCAG
	R	CACTTGATTCTTCGCCTTGG
<i>CeCOI1</i>	F	CATCAGGAAATGCACACGAT
	R	GTGCCCAGCCAGTGAATAGT
<i>CeJAZ1</i>	F	TTGCTGATTCCGGTAGGTTT
	R	TGAATTTCTCCACCTGACC
<i>CeBIS1</i>	F	GCTTAATCTTACAGTTACAAGCACAAA
	R	CTACTTGAGTTGGGCGTTGG
<i>CeMYC2</i>	F	CCGAAAAGCAAGACTTGAGG
	R	TGGCTGCTGATGACTTGATG
<i>CeJAM2</i>	F	ATGCAGGGACTTGTCAATGG
	R	AGCCCTCAACATCTGAATGC
<i>CeJAM3</i>	F	TTCTCCGAAGGTGGAAGATG
	R	GCTCCAAGGTAGAAATCATGG
<i>CeEF1</i>	F	AGATGCACCATGAAGCCCTC
	R	GATGACCTGGGAGGTGAAGC

F, forward primer; R, reverse primer

**Table S3.** Results of factorial ANOVA on gene expression data in leaves of *C. erythraea* upon wounding. Factor **time** included all time points in hours upon wounding (HAW) as in figures 2 and 3 of the Manuscript. Factor **leaf type** represents wounded (LL - local leaves) and unwounded leaves (SL - systemic leaves) as indicated in Manuscript. **Time x leaf type** represents interaction term in factorial ANOVA. Since ANOVA residuals were heteroscedastic in several cases to stabilize the variance Box-Cox transformation was applied prior to ANOVA; this is indicated in the Box-Cox trans column. The asterisks denote the level of statistical significance: \* < 0.05, \*\* < 0.01 and \*\*\* < 0.001.

Gene	Box-Cox trans	time	leaf type	time x leaf type
<i>CeGPPS</i>	log	***		
<i>CeGES</i>	log	***		
<i>CeG8O</i>	log	***		
<i>Ce8HGO</i>	sqrt	***		
<i>CeIS2</i>	log	***		
<i>CeIO</i>	none	***		
<i>Ce7DLGT</i>	sqrt	***		
<i>Ce7DLH2</i>	none	***		
<i>CeSLS</i>	sqrt	***		
<i>CeCOI1</i>	sqrt	***		
<i>CeJAZ1</i>	none	***	**	*
<i>CeMYC2</i>	none		*	
<i>CeBIS1</i>	1/sqrt	***		
<i>CeJAM2</i>	none	***		
<i>CeJAM3</i>	none	**		
<i>CeIS1</i>	none	**		