

## Supplementary Material

### 1 Supplementary Data

**Supplementary Data 1** | The major facilitator superfamily (MFS) gene expression analyzed by RNA-sequencing.

### 2 Supplementary Tables

**Supplementary Table 1** | Multiple reaction monitoring (MRM) transitions for compounds determined using LC-MS/MS.

Compound	Q1 [m/z]	Q3 [m/z]	CE [eV]
2-Propenyl glucosinolate	358	95.9	-60
4-Methylsulfinylbutyl glucosinolate	435.9	95.8	-60
4-Hydroxybenzyl glucosinolate	424	95.9	-60
Linamarin (formiate adduct)	292	45	-26
Salicin	285	123	-18
Catalpol (formiate adduct)	407	199	-18

**Supplementary Table 2** |  $\mu$ CT parameters.

Species	Source voltage (kV)	Source current ( $\mu$ A)	Exposure time (ms)	Image pixel size ( $\mu$ m)	Rotation step (degrees)
<i>Phyllotreta armoraciae</i>	30	170	1600	2.1	0.1
<i>Psylliodes chrysocephala</i>	40	300	1800	1.4	0.15
<i>Phaedon cochleariae</i>	40	300	1800	1.8	0.15

**Supplementary Table 3** | Methods and results of statistical analyses.

Comparisons	Transformation	Method	Statistics	P value	Figure
Recovery of glucosides	Square-root	One-way ANOVA	$F = 22.339$	< 0.001	Figure 1B
Sequestration of glucosides	Arcsin-square-root	Generalized least squares	$LR = 96.645$	< 0.001	Figure 1C
Sequestration of glucosides	–	One-way ANOVA	$F = 97.140$	< 0.001	Figure 1D
Uptake of glucosinolate	–	Mann-Whitney $U$ test	$U = 0.000$	< 0.001	Figure 2B
Gene expression	–	Mann-Whitney $U$ test	$U = 8922.000$	0.136	Figure 3A