

Table 1S. Concentrations of flavonoids and alkaloids in the *Hydrastis canadensis* leaf extract

Constituent	Concentration (mM) \pm SD
Berberine	8.0 \pm 0.1
Hydrastine	2.61 \pm 0.05
Canadine	0.054 \pm 0.008
Sideroxylin	0.173 \pm 0.036
6-Desmethyl-sideroxylin/8-desmethyl-sideroxylin ^a	1.59 0.27

a. The isomeric flavonoids 6-desmethyl-sideroxylin and 8-desmethyl-sideroxylin coeluted and were quantified as a mixture.

Table 2S. Minimum inhibitory concentration of *H. canadensis* alkaloids against several strains of MRSA.

Alkaloid	<i>Minimum inhibitory concentration (MIC, μg/mL)</i>		
	<i>TCH1516</i>	<i>AH1263</i>	<i>LAC</i>
Berberine	150	300	>300
Canadine	>300	>300	>300
Hydrastine	>300	>300	>300

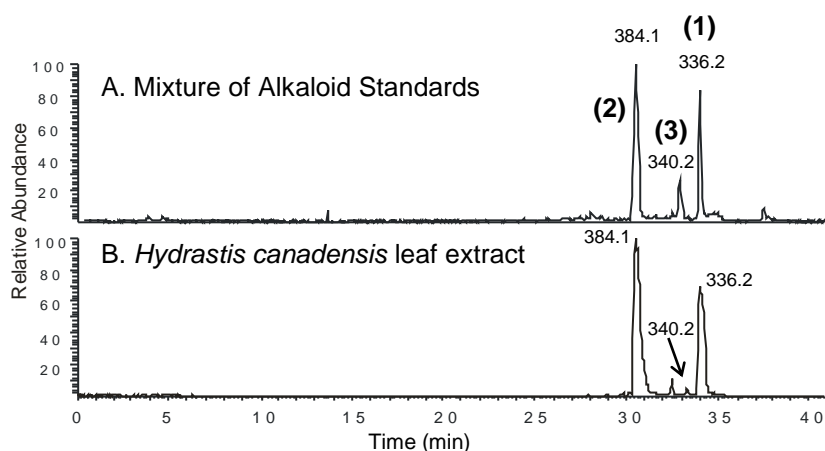


Figure 1S. Comparison of base peak LC-MS chromatograms (positive ion mode) for an equimolar mixture of the standard alkaloids berberine, hydrastine and canadine at 1 μM (A) and a 100-fold dilution of a ethanolic extract from the aerial portions of goldenseal (*Hydrastis canadensis*) (B). Peaks are labeled with the m/z value of the ion detected, which was consistent with M^+ for berberine **(1)** (monoisotopic mass of 336.12 g/mole), and MH^+ for hydrastine **(2)** and canadine **(3)** (monoisotopic masses of 384.14 and 340.15 g/mole, respectively). The bold numbers in (A) correspond to the structures in Figure 3 of the main manuscript.