

Supporting Information

An Automated High-Throughput System to Fractionate Plant Natural Products for Drug Discovery

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Figure S1. Typical ELSD chromatograms for preparative HPLC fractionation.

Figure S2. Chromatograms for sample 79622 showing the correlation of the ELSD signal to the molecular mass of fractions.

Figure S3. Biological screening of fractions from the natural products library.

Table S1. Sample Registration Information for Batch 05112009_1.

Figure S1. Typical ELSD chromatograms for preparative HPLC fractionation:

(A) Sample 78794 with predominantly polar compounds; (B) sample 78862 with predominantly nonpolar compounds, and (C) sample 79065 with both polar and nonpolar compounds.

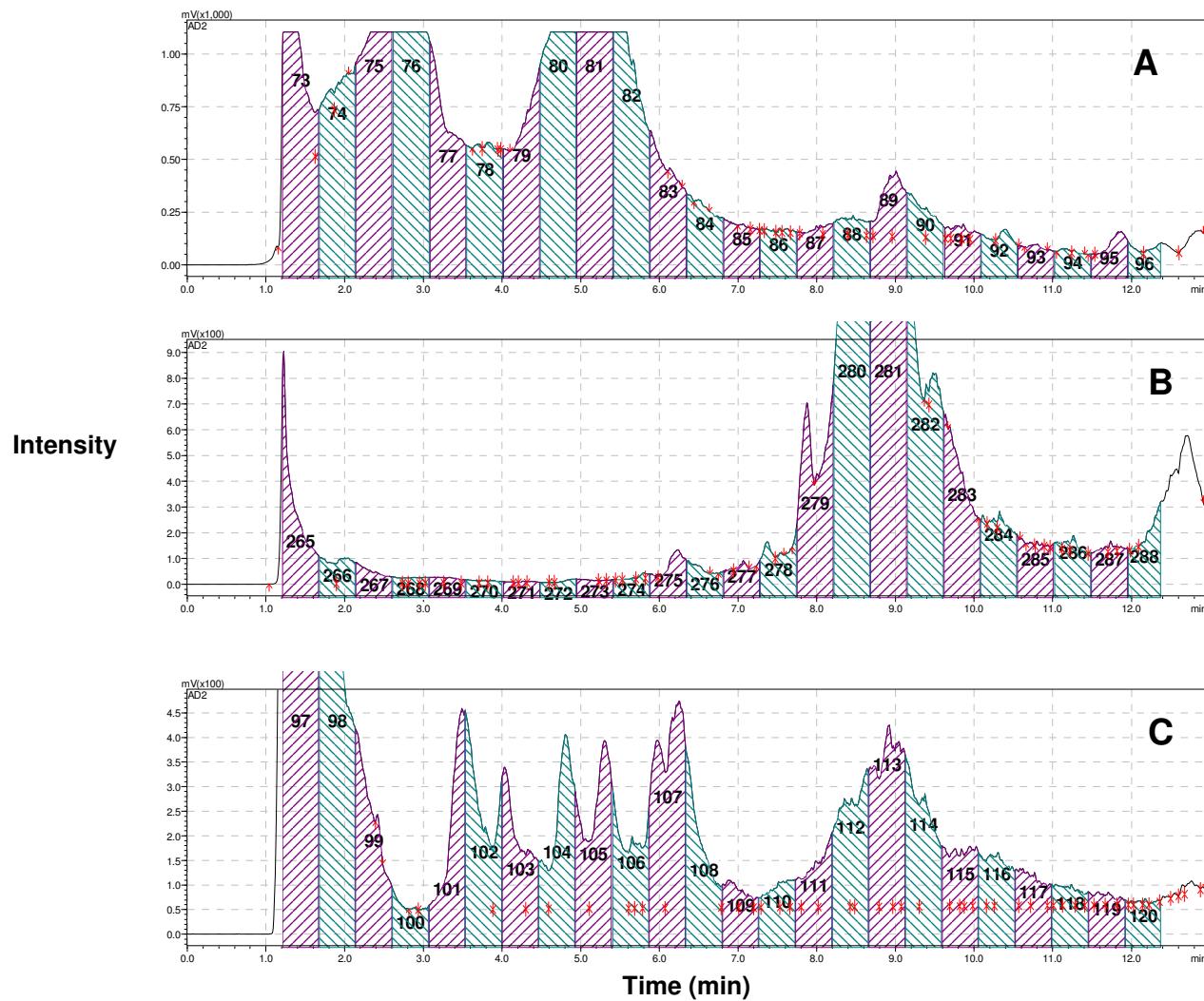


Figure S2. Chromatograms for sample 79622 showing the correlation of the ELSD signal to the molecular mass of fractions. (A) UV chromatogram at 254 nm; (B) molecular mass of fractions in milligrams, and (C) ELSD chromatogram.

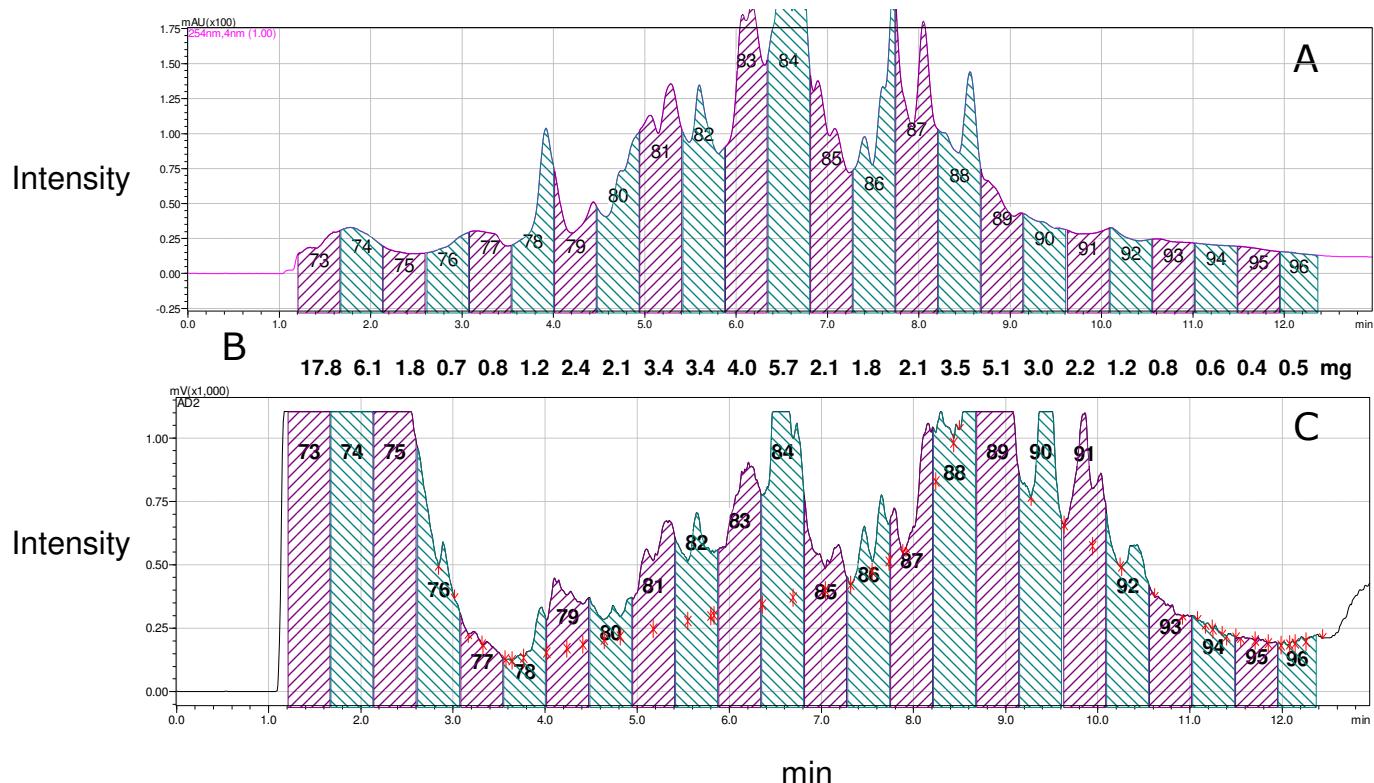


Figure S3. Biological screening of fractions from the plant extracts library by a panel of five assays results of 140 randomly chosen samples. EC₅₀ values ($\mu\text{g/mL}$) represent results of three independent experiments. Fractions are grouped by extract on the y-axis, with more polar fractions at the top of each extract group.

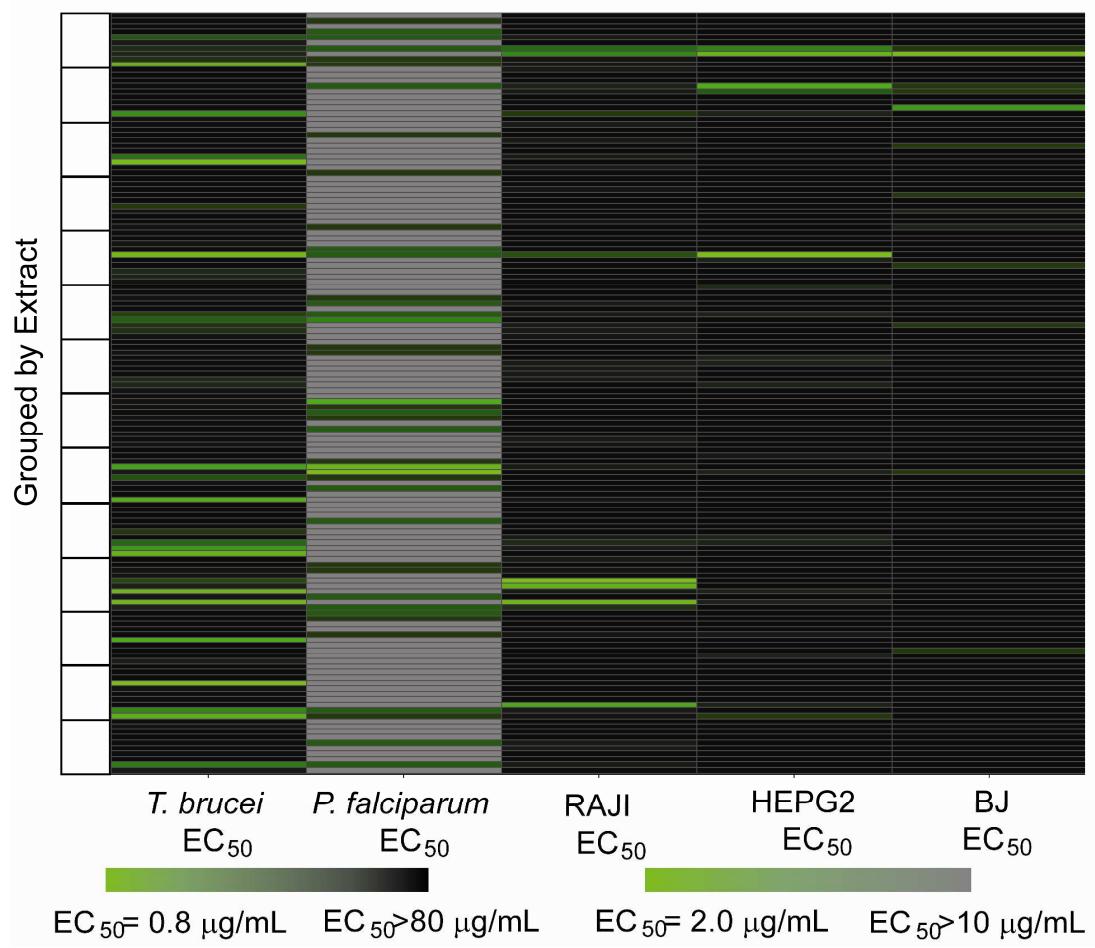


Table S1. Sample Registration Information for Batch 05112009_1^a

No.	NP number	Plant Part	Mass(mg)	Family	Species
1	79547	FL-FR	100.50	Rubiaceae	<i>Psychotria berteroana</i> DC.
2	79548	ST	102.80	Myrtaceae	<i>Myrcia splendens</i> DC.
3	79549	PL	105.00	Selaginellaceae	<i>Selaginella krugii</i> Hieron.
4	79550	LF	108.60	Betulaceae	<i>Alnus serrulata</i> Willd.
5	79551	PX	102.30	Lamiaceae	<i>Hyptis mutabilis</i> Briq.
6	79552	FR	106.20	Polygonaceae	<i>Coccoloba uvifera</i> L.
7	79553	lf-fl-fr	106.40	Asteraceae	<i>Sonchus oleraceus</i> L.
8	79554	BK	116.50	Bignoniaceae	<i>Tabebuia heterophylla</i> Britton
9	79555	FR	104.70	Meliaceae	<i>Guarea guidonia</i> (L.) Sleumer
10	79556	LF	103.40	Zingiberaceae	<i>Renealmia alpinia</i> (Rottb.) Maas
11	79557	PL	101.50	Haemodoraceae	<i>Lachnanthes caroliniana</i> (Lam.) Dandy
12	79558	LF-FL	113.30	Cucurbitaceae	<i>Cucurbita moschata</i> Duchesne

^aAbbreviations: NP, natural product; FL-FR, leaf & flower; ST, stem; LF, leaf; PX, plant minus roots; FR, fruit; LF-FL-FR, leaf,

flower & fruit; BK, bark; LF-FL, leaf & flower.