

Supplementary materials

Table S.1. Samples of commercial herbal preparations in this study.

Samples	Nominal composition	Botanic species
19	Caralluma	<i>Caralluma adscendens</i>
20	Caralluma	<i>Caralluma adscendens</i>
21	Pholia magra	<i>Cordia ecalyculata</i>
24	Caralluma	<i>Caralluma adscendens</i>
25	Slendesta, Caralluma fimbriata	<i>Caralluma adscendens</i>
27	Caralluma	<i>Caralluma adscendens</i>
32	Caralluma	<i>Caralluma adscendens</i>
33	Garcinea, kitosán	<i>Garcinia gummi-gutta</i>
34	Caralluma	<i>Caralluma adscendens</i>
37	Faseolamina	<i>Phaseolus vulgaris</i> , <i>Cordia ecalyculata</i> , <i>Garcinia gummi-gutti</i>
38	Cáscara sagrada	<i>Rhamnus purshiana</i>
40	Faseolamina	<i>Phaseolus vulgaris</i>
49	Cáscara sagrada	<i>Rhamnus purshiana</i>
50	Centella asiática, espirulina, alcachofra, garcinea	<i>Arthrospira maxima</i> , <i>Rhamnus purshiana</i>
53	Caralluma	<i>Caralluma adscendens</i>
60	Espirulina	<i>Arthrospira maxima</i>
69	Caralluma	<i>Caralluma adscendens</i>
70	Cáscara sagrada, espirulina, fucus, centella asiática, garcinea	<i>Rhamnus purshiana</i>
71	Caralluma	<i>Caralluma adscendens</i>
72	Pholia magra	<i>Cordia ecalyculata</i>
73	Abacateiro, cáscara sagrada, centella asiática	<i>Persea Americana</i> , <i>Rhamnus purshiana</i> , <i>Centella asiatica</i>
79	Advantra, fucus, centella asiática, chá verde	<i>Camelia sinensis</i>
84	Caralluma	<i>Caralluma adscendens</i>
85	Garcinia	<i>Garcinia gummi-gutta</i>
89	Caralluma	<i>Caralluma adscendens</i>

Table S.2. Representative voltammetric signals for characterizing the components of herbal preparations in this study. From square wave voltammograms of microparticulate films of ethanolic extracts immersed into aqueous acetate buffer at pH 4.75.

Component	Voltammetric signals (E_p in mV vs. Ag/AgCl)
Alcachofra	Isolated peak at +160
Caralluma	Isolated peaks at +250 and +650
Cascara sagrada	Isolated peak at +550
Pholia magra	Isolated peak at +400
Centella asiatica	Peaks at +660 and +900
Abacateiro	Isolated peak at +360
Garcinia	Peaks at +420 and +750
Chá verde	Isolated peak at +200
Fucus	Isolated peak at +220
Spirulina	Isolated peak at +640

Figure S.1 compares the linear scan voltammograms, after semi-derivative deconvolution, of microparticulate films from ethanolic extracts of: a) *Arthrospira maxima*, b) *Rhamnus purshiana*, c) sample **50**, and d) sample **70**, immersed into potassium phosphate buffer. *Arthrospira maxima* displays an isolated anodic peak at +0.65 V whereas *Rhamnus purshiana* yields a unique signal at +0.55 V. Both peaks are clearly recorded in sample **50**, nominally containing both components and *Garcinia*, responsible for the signal at +0.89, thus suggesting the possibility of elucidating voltammetrically the composition of herbal mixtures. Interestingly, the voltammogram of sample **70**, nominally containing only *Rhamnus purshiana*, presents two overlapping signals at ca. +0.60 V. This voltammetric pattern suggests that in this sample, the nominal component is accompanied by any other vegetal species.

Figure S.1. Linear scan voltammograms, after semi-derivative deconvolution, of microparticulate films on glassy carbon electrode prepared from ethanolic extracts of: a) *Arthrospira maxima*, b) *Rhamnus purshiana*, c) sample **50**, and d) sample **70**, immersed into air-saturated 0.10 M aqueous potassium phosphate buffer at pH 7.00. Potential scan rate 50 mV/s. Black arrows mark the signal characteristic of *Arthrospira maxima* whereas dotted arrows mark the signal characteristic of *Rhamnus purshiana*. Semi-derivative deconvolution was performed to increase peak resolution.

