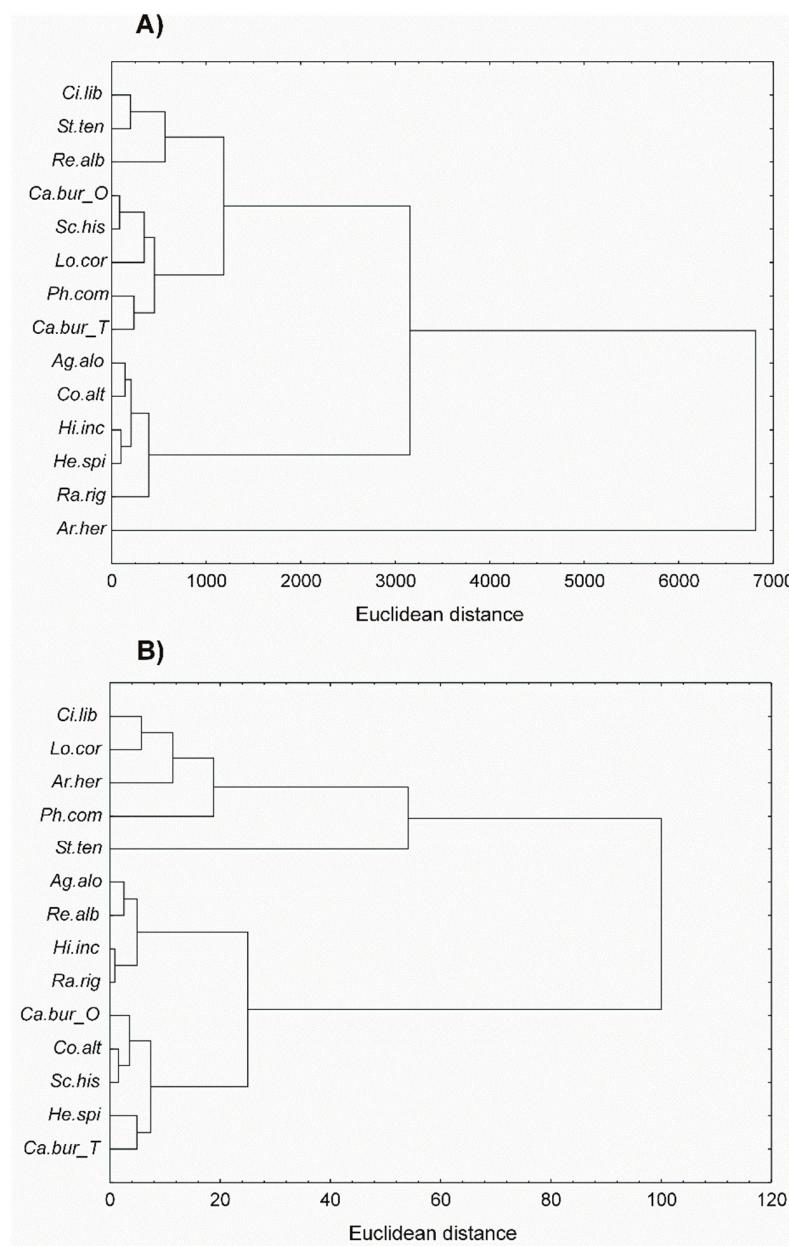


**Table S1:** Heavy metal concentrations and reference element ( $\text{mg kg}^{-1}$  DW) in the rhizospheric soils samples collected from studied sites in the oriental region of Morocco.

Site	Plants	Heavy metals							
		As	Cd	Cu	Ni	Pb	Zn	Sb	Sc (ref. element)
Touissite	<i>R. alba</i>	61 ±11.7	26.2 ±2.3	402 ±118	9 ±2.6	13487.6 ±2364.6	5387.1 ±886.9	139.3 ±27.0	2.0
	<i>C. althaeoides</i>	71.6 ±2.2	26.3 ±3.2	479.7 ±49	14.3 ±1.7	8218.3 ±1807.2	5366.5 ±63.1	158.7 ±41.8	2.6
	<i>H. spinosissimum</i>	43 ±13.5	15 ±2.3	328 ±22.3	15.7 ±2.0	6445.1 ±707.6	3264.1 ±900.5	96.7 ±10.5	3.4
	<i>P. communis</i>	59.7 ±11.9	36.5 ±10.6	1405.8 ±409.5	12.3 ±2.1	18324.5 ±1051.4	2676.8 ±107.9	242.8 ±91.7	2.5
	<i>L. corniculatus</i>	62.7 ±9.4	16.9 ±1.1	786.4 ±194.1	16 ±1.6	12223.8 ±158.6	2096.4 ±646.9	224.2 ±68.5	3.0
	<i>C. bursa-pastoris</i>	82.9 ±24.4	35.8 ±3.0	706.7 ±155.7	14.7 ±1.6	8571.5 ±1127.1	4358.3 ±226.2	236.9 ±39.1	2.6
	<i>S. hispanicus L</i>	59.4 ±9.6	25.1 ±3.5	351.5 ±35.6	13 ±1.5	7792.9 ±2656.8	3049.1 ±324.3	168.1 ±32.2	3.1
Oued el Heimer	<i>R. rigosum</i>	nd	nd	nd	nd	nd	nd	nd	nd
	<i>C. libanotis</i>	18.7 ±8.8	37.8 ±10.4	35 ±18.2	14 ±2.9	611 ±99.6	318 ±82.8	51.4 ±21.2	2.0
	<i>A. alopecuroides</i>	133.4 ±45.5	32 ±12.9	314.8 ±91.5	17.3 ±2.1	6146.2 ±1675.3	2018.3 ±1176.5	152.7 ±44.0	2.4
	<i>H. incana</i>	466 ±127	280 ±62.5	589.4 ±130.8	44.4 ±3.1	12240.4 ±925.3	18232.3 ±2400.2	212.2 ±54.1	2.2
	<i>S. tenacissima</i>	424.5 ±34.1	88.6 ±8.4	152.5 ±59	16.1 ±0.7	7284 ±1468.8	43540 ±196.6	188.0 ±81.0	2.6
	<i>A. herba-alba</i>	56.3 ±8.3	50.8 ±10.1	55.8 ±14.9	12 ±1.3	3588.6 ±826.9	340.4 ±11.5	33.9 ±1.8	1.9
	<i>C. bursa-pastoris</i>	261.2 ±62.7	47.9 ±21.3	592 ±115	22.8 ±0.7	12461.3 ±1165.7	13068.3 ±209	247.1 ±6.0	1.8
<b>Average crust</b>		6.83	0.41	38.9	29	27	29	0.67	11.7

Nd: not detected

The values in the table represent “mean ± standard deviation”



**Figure S1.** Dendrogram obtained by Ascending Hierarchical Classification (AHC) carried out on the metals concentrations in the shoots (A) and the roots (B) of the studied plants. Abbreviation of species names: *Ag.Alo*: *Agathophora alopecuroides*; *Ci.lib*: *Cistus libanotus*; *Ca.bur\_T*: *Capsella bursa-pastoris* Touissite site; *Ca.bur\_O*: *Capsella bursa-pastoris* Oued El Heimer site; *Lo.cor*: *Lotus corniculatus*; *Ph.com*: *Phragmites communis*; *He.spi*: *Hedysarum spinosissimum*; *Co.alt*: *Convolvulus althaeoides*; *Re.alb*: *Reseda alba*; *Sc.his*: *Scolymus hispanicus*; *Ra.rig*: *Rapistrum rigidum*; *Hi.inc*: *Hirschfeldia incana*; *St.ten*: *Stipa tenacissima*; *Ar.her*: *Artemisia herba-alba*.