

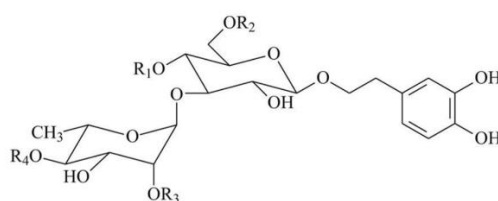
Supplementary Material

Phytochemical Profile and Biological Activity of Endemic *Sideritis sipylea* Boiss. in North Aegean Greek Islands

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Compound	R ₁	R ₂	R ₃	R ₄
echinacoside	feru.	glc	H	H
forsythoside B	caff.	api.	H	H
verbascoside	caff.	H	H	H
samioside	caff.	H	H	api.
isoverbascoside	H	caff.	H	H
allysonoside	feru.	api.	H	H
leucoseptoside A	feru.	H	H	H

Figure S1. Identified phenylethanoid glycosides in *S. sipylea* (feru-feruoyl, caff-caffeyl, glc-glucose, api-apiose).

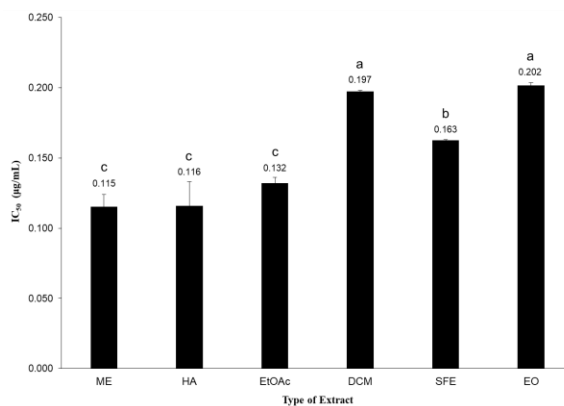


Figure S2. IC₅₀ values of crude methanol (ME), water/methanol (HA), ethyl acetate (EtOAc), dichloromethane (DCM), and supercritical fluid (SFE) extracts, along with essential oil (EO) obtained from *S. sipylea* aerial parts (mean ± SD). Significant differences among the IC₅₀ values of extracts are indicated by different letters ($p < 0.05$).

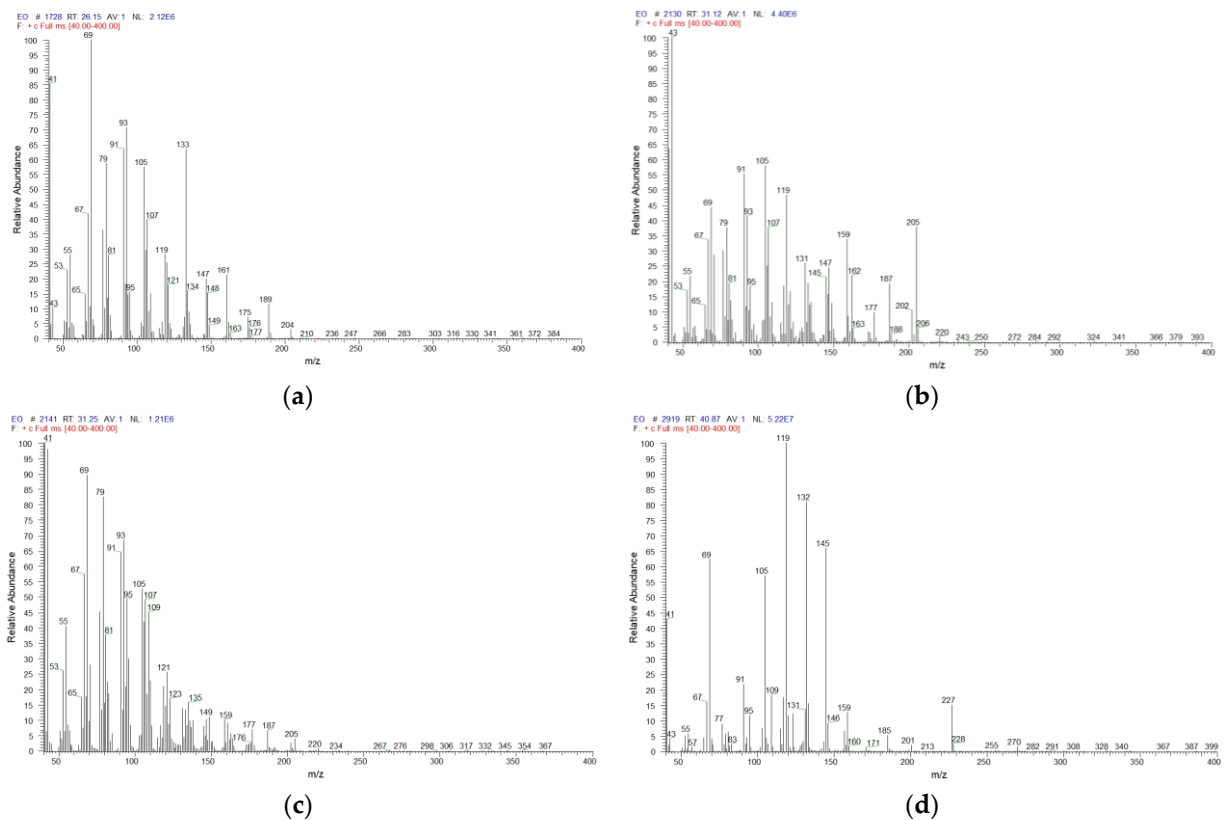


Figure S3. Fragment ions and relative abundance (m/z , %) of some characteristic volatile compounds identified in *S. sipylea* non-polar extracts. **(a)** β -Caryophyllene (% score of similarity: 35.05). tR: 26.1 min, EI-MS m/z (%): 41 (85), 53 (23), 55 (28), 67 (42), 69 (100), 77 (36), 79 (59), 81 (28), 91 (63), 93 (71), 105 (58), 106 (29), 107 (40), 119 (28), 120 (25), 133 (64), 147 (20), 161 (21), 204 (M^+ , 3). **(b)** Spathulenol (% score of similarity: 48.44). tR: 31.1 min, EI-MS m/z (%): 41 (64), 43 (100), 55 (22), 67 (33), 69 (44), 71 (29), 77 (30), 79 (38), 91 (55), 93 (41), 105 (58), 106 (25), 107 (38), 119 (48), 131 (26), 145 (21), 147 (24), 159 (34), 162 (22), 205 (38), 220 (M^+ , 2). **(c)** Caryophyllene oxide (% score of similarity: 35.01). tR: 31.2 min, EI-MS m/z (%): 41 (100), 43 (98), 53 (26), 55 (40), 67 (57), 69 (90), 71 (28), 77 (45), 79 (82), 81 (38), 91 (65), 93 (68), 95 (49), 96 (30), 105 (53), 106 (42), 107 (49), 109 (45), 110 (23), 121 (26), 220 (M^+ , 1). **(d)** Geranyl-*p*-cymene (% score of similarity: 92.68). tR: 40.9 min, EI-MS m/z (%): 41 (43), 67 (16), 69 (62), 91 (22), 95 (12), 105 (57), 109 (18), 117 (18), 119 (100), 120 (12), 123 (12), 131 (13), 132 (81), 133 (16), 145 (66), 159 (13), 227 ($[M-CH_3]^+$, 15).