

Supplementary Information

Table S1 Study sites geographic location and climatic data collected from the meteo stations installed by LARI.

Village Name	Location	Latitude (N)	Longitude (E)	Altitude (m a.s.l)	Temperature min-max (°C)	Annual mean Temperature (°C)	SD (±)	Annual mean rainfall (mm)	SD (±)
Bchaaleh	North Lebanon	34°12'06"	35°49'23"	1300	4-23	14	6.81	1631	110.17
Kawkaba	South Lebanon	33°23'85"	35°38'58"	672	7-27	17	6.76	1311	295.29

Table S2 Detailed synthesis of the Hg concentration values in different studies.

Table S2 in an Excel Format

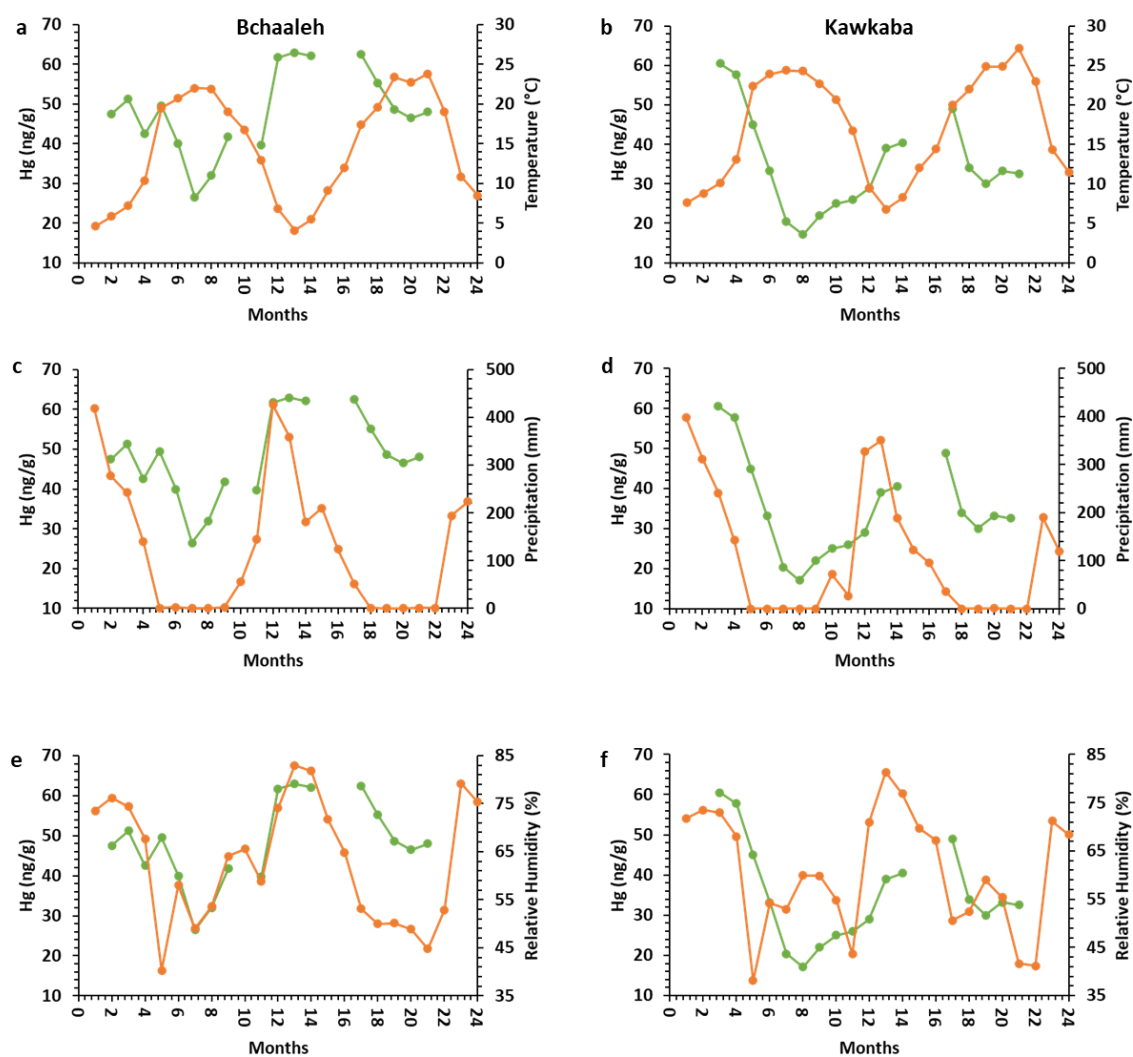
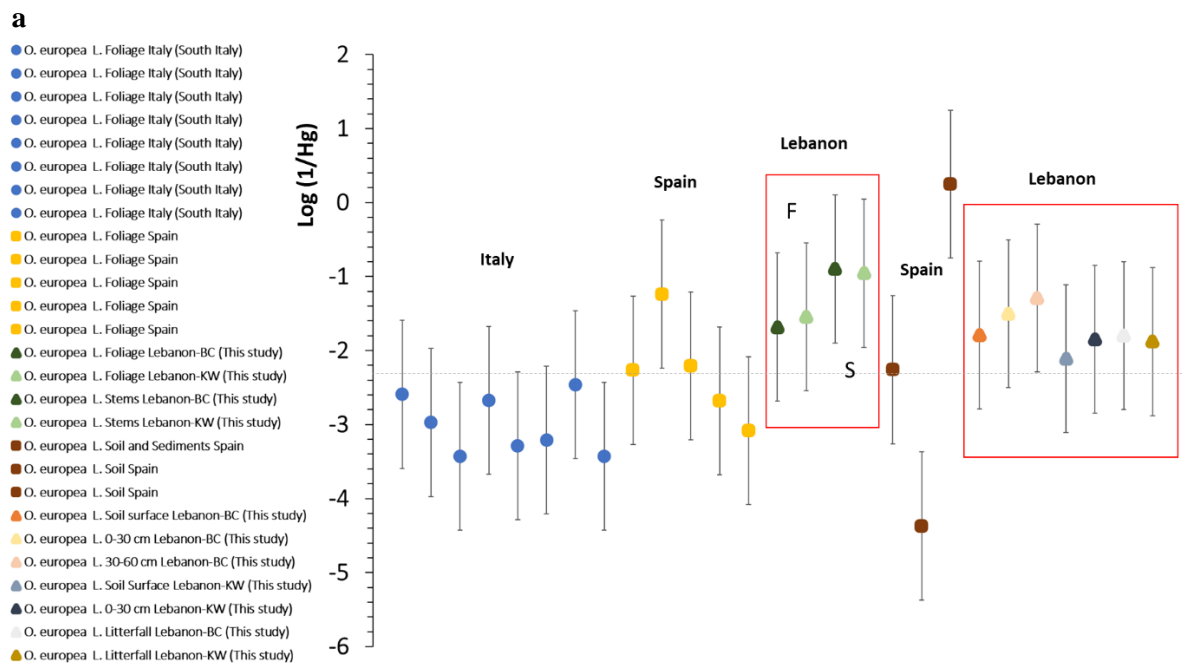


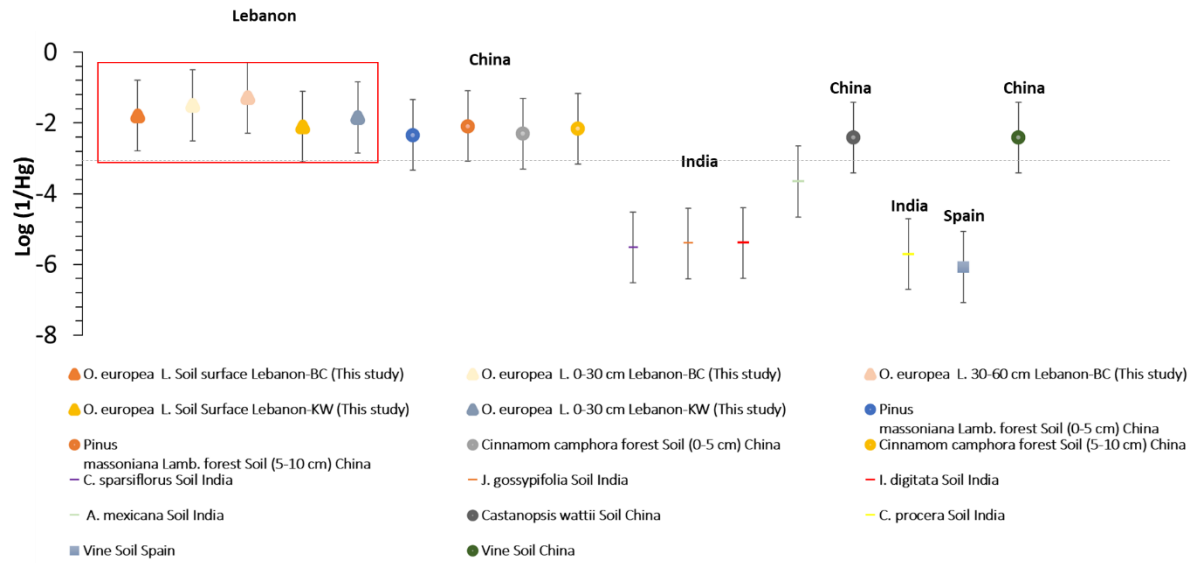
Fig. S1 Bchaaleh and Kawkaba (a) (b) Hg(ng/g) and Temperature(°C), (c) (d) Hg(ng/g) and Precipitation(mm) and (e) Hg(ng/g) and Relative Humidity (%).



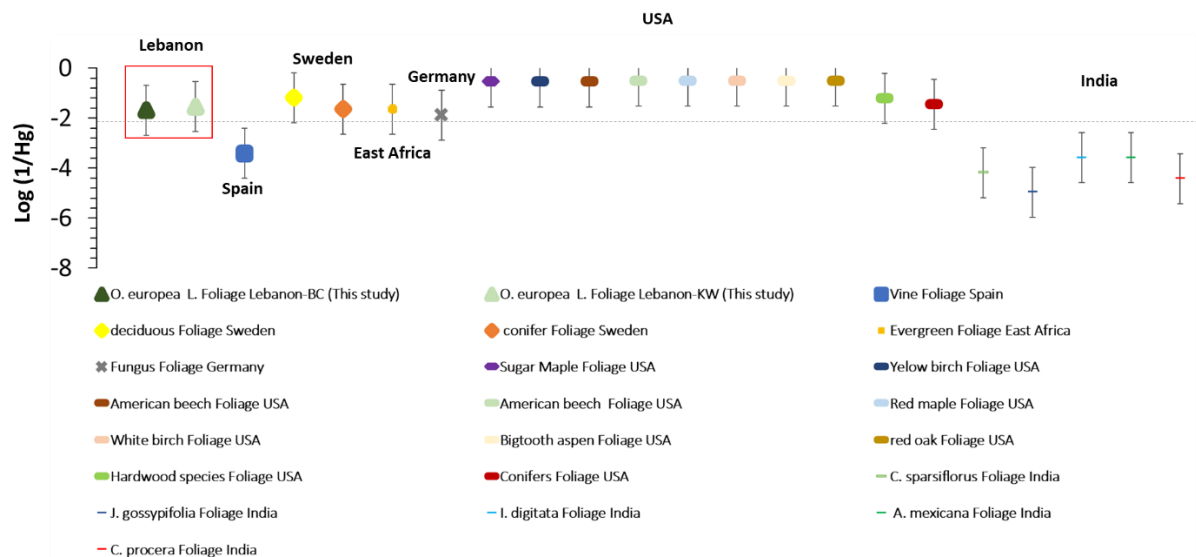
Fig. S2 Map of Bchaaleh site and sampled tree locations. Upper terrace plot 2292 are under the endowment of the church. While Lower terrace plot 549 and 547 are a private property.



b



c



d

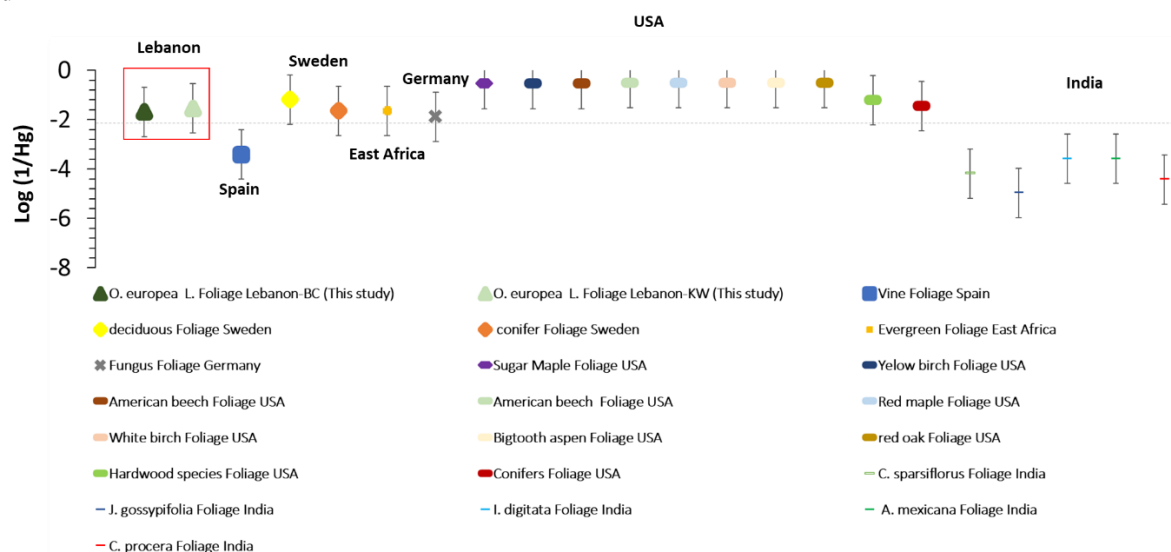


Fig. S3 Synthesis of Hg concentration for a) the Olive grove of the Mediterranean basin including foliage, stems, litter and soil. Our sites are indicated in red; b) the foliage of different species around the world; c) soil studies in different countries and d) litter, roots and stems of different species and countries. All the references are listed in Table S3. The gray dashed lines refer to the threshold limit above which soil and plants are not contaminated.

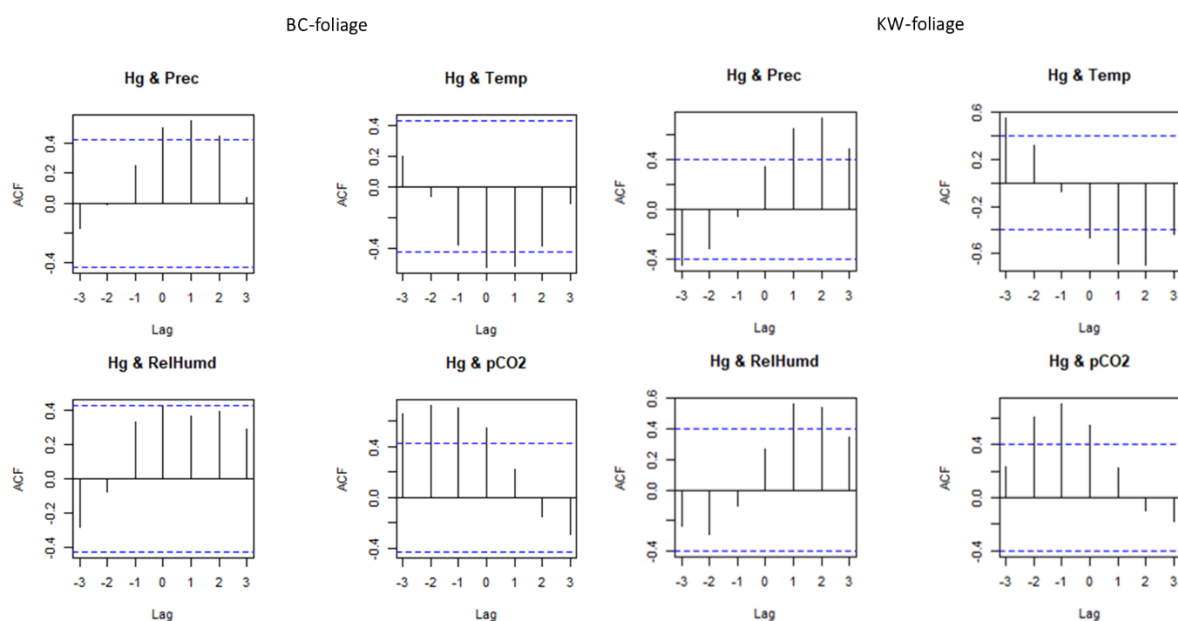


Fig. S4 Time lag test (R, Cross correlation) between the dependent variable (Hg) and the independent climatic variables in the foliage of BC and KW.

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