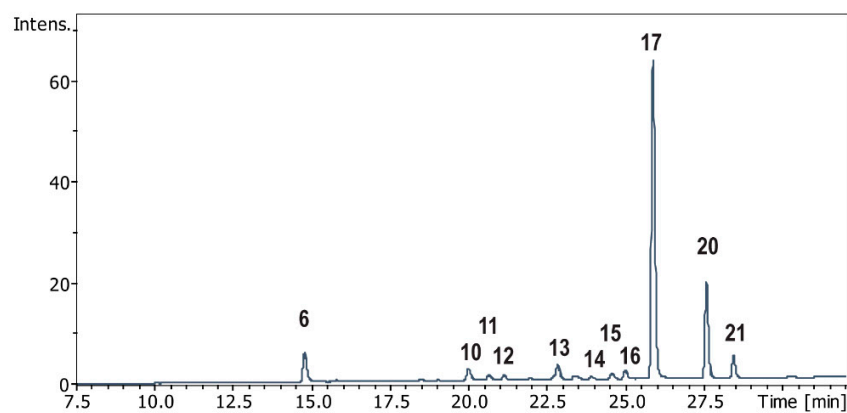
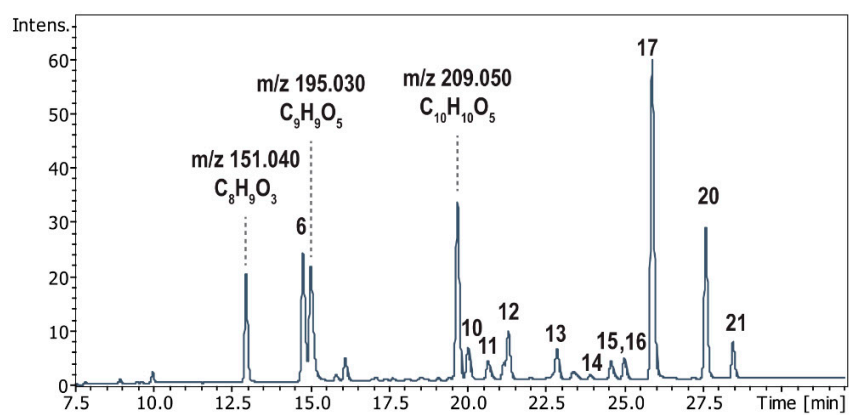


*Lecanora sulphurata*, acetone extraction



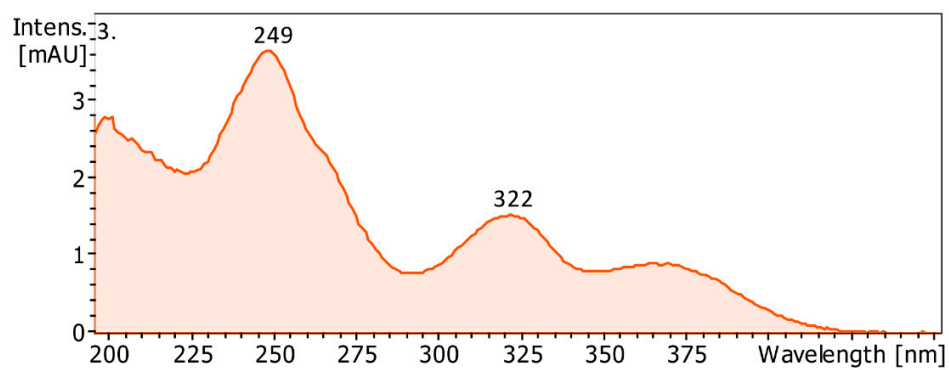
**Figure S1:** *Lecanora sulphurata* extracted with acetone.

*Lecanora sulphurata*, oxalic acid extraction

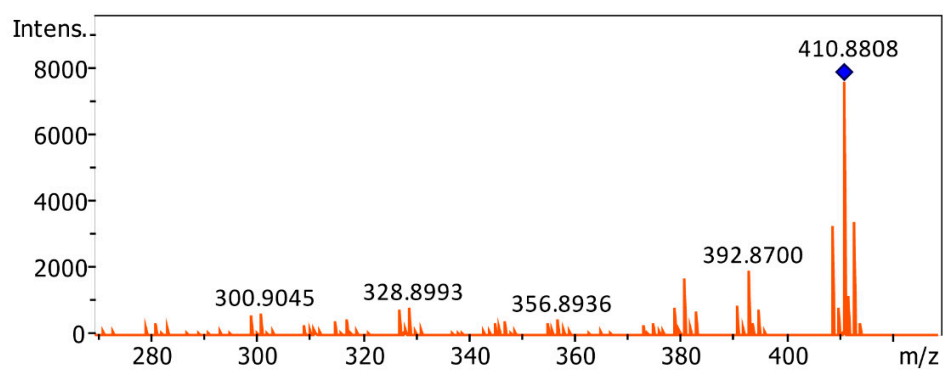


**Figure S2:** *Lecanora sulphurata* after extraction with 0.01 M oxalic acid (aqueous)/pyridine/methanol solution (3:3:4 v/v/v).

(a)

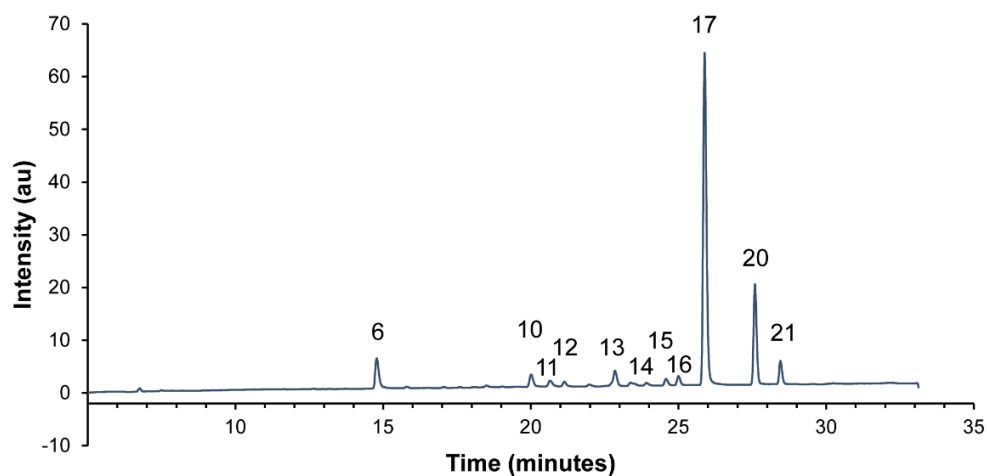


(b)

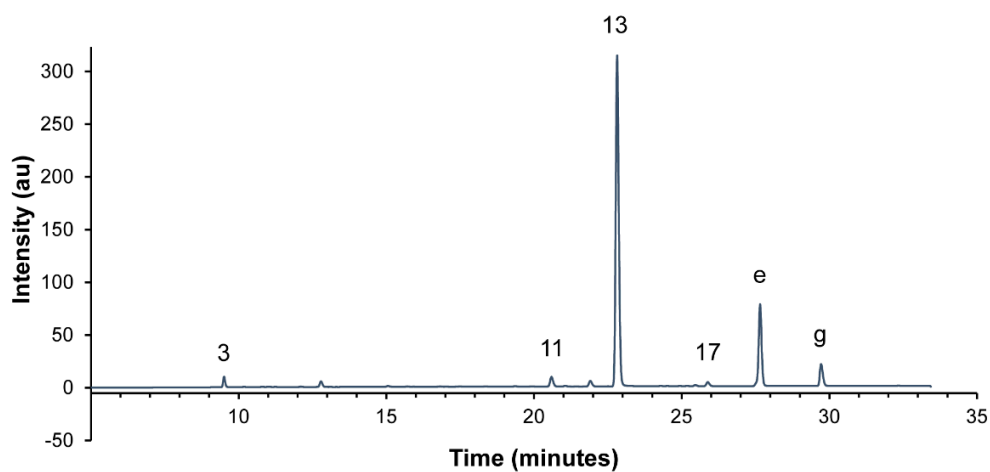


**Figure S3:** UV-visible spectrum (a) and MS/MS fragmentation spectrum (b) for the unidentified compound **10** with chemical formula  $C_{14}H_6Cl_4O_6$  at 20.2 minutes in both the tapestry, *Lecanora sulphurata*, and *Lecidella asema*.

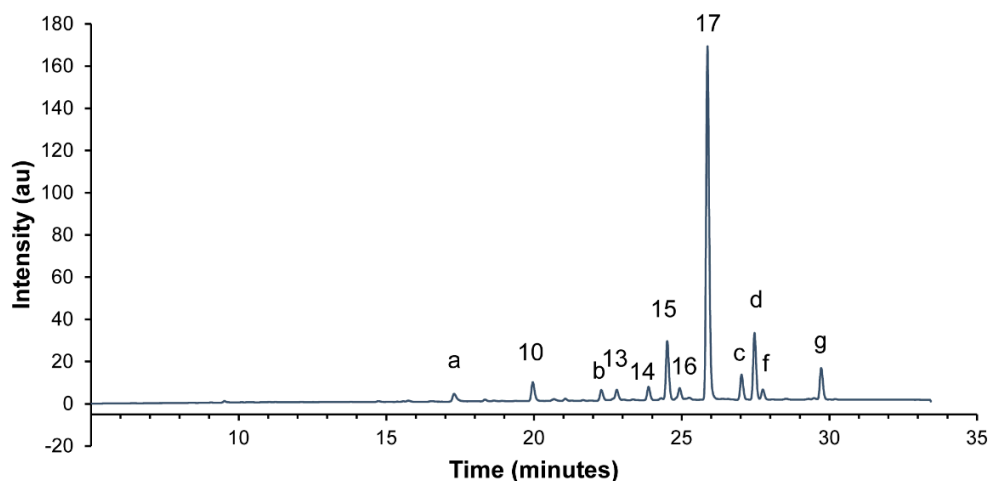
*Lecanora sulphurata*, acetone extraction



*Lecanora alboflavida*, acetone extraction



*Lecidella asema*, acetone extraction



**Figure S4:** 350 nm UV chromatograms for *Lecanora sulphurata* (top), *Lecanora alboflavida* (middle), and *Lecidella asema* (bottom) extracted with acetone. The retention times for *Lecanora alboflavida* and *Lecidella asema* have been adjusted by +0.3 minutes for comparison.

Table S1: Chemical composition of three lichen references: *Lecanora sulphurata*, *Lecanora alboflavida*, and *Lecidella asema*.

<sup>a</sup>Retention times for *Lecanora alboflavida* and *Lecidella asema* have all been adjusted by 0.3 to account for minor changes to analytical column that occurred since tapestry and *Lecanora sulphurata* were analyzed. <sup>b</sup>Hydrolysable tannins not produced by *Lecanora alboflavida*, but from *Quercus spp.* support.

	Compound name	RT (min)	[M-H] <sup>-</sup> , m/z	Product ions, m/z	$\lambda_{\max}$ , nm	Present in tapestry?	<i>Lecanora sulphurata</i>	<i>Lecanora alboflavida</i>	<i>Lecidella asema</i>
3	ellagic acid	9.6	300.999	284, 257, 245, 229, 173, 145	252, 366	Yes	-	+ <sup>b</sup>	-
4	O-methyl ellagic acid	11.3	315.015	300	-	Yes	-	Trace <sup>b</sup>	-
6	C <sub>14</sub> H <sub>4</sub> Cl <sub>4</sub> O <sub>7</sub>	14.8	422.863	381, 346, 318, 307, 289, 279, 251, 224	198, 249, 320, 366	-	+	-	trace
a	C <sub>15</sub> H <sub>7</sub> Cl <sub>3</sub> O <sub>7</sub>	17.3	402.918	359, 344, 316, 280, 252	204, 250, 318, ~360	-	-	-	+ <sup>a</sup>

10	C <sub>14</sub> H <sub>6</sub> Cl <sub>4</sub> O <sub>6</sub>	20	408.885	393, 381, 357, 329	211, 246, 317, 355	Yes	+	-	+ <sup>a</sup>
11	4,5-dichloro-norlichexanthone	20.6	324.967	290, 261, 233, 183	211, 246, 317, ~366	-	+	+ <sup>a</sup>	t
12	2,5-dichloro-norlichexanthone	21.1	324.967	290, 261, 233, 183	197, 247, 316	-	+	t <sup>a</sup>	t <sup>a</sup>
b	C <sub>15</sub> H <sub>9</sub> Cl <sub>3</sub> O <sub>6</sub>	22.3	388.939	376, 347, 310, 282, 246, 218	200, 250, 320, ~360	-	-	-	+ <sup>a</sup>
13	2,4,5-trichloro-norlichexanthone (arthothelin)	22.7	358.929	323, 295, 267, 259, 231	212, 249, 315	Yes	+	+ <sup>a</sup>	+ <sup>a</sup>
14	4,5,7-trichloronorlichexanthone (asemone)	23.8	358.929	324, 295, 267.0	248, 314, 352 (sh)	Yes	+	-	+ <sup>a</sup>

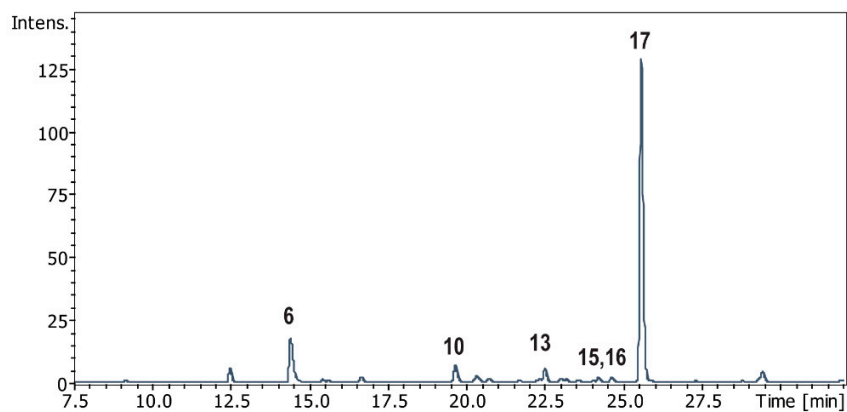
15	2,5,7-trichloro-norlichexanthone (isoarthothelin)	24.5	358.929	324, 295, 267, 181, 163.0 137.1	201, 250, 315, 350 (sh)	Yes	+	trace	+ <sup>a</sup>
16	2,4,7-trichloro-norlichexanthone	25.0	358.929	323, 295, 287, 267, 259, 231, 177, 149	201, 247, 314, 350 (sh)	-	+	-	+ <sup>a</sup>
17	2,4,5,7-tetrachloronorlichexanthone (thiophanic acid)	25.8	392.89	360, 329, 321, 301, 293, 264 303, 265, 149	200, 250, 316, 355 (sh)	Yes	+	+ <sup>a</sup>	+ <sup>a</sup>
18	C <sub>15</sub> H <sub>9</sub> Cl <sub>3</sub> O <sub>5</sub> A	26.4	372.944	358, 330, 294, 266, 97	-	Yes	-	-	-

c	C <sub>15</sub> H <sub>10</sub> Cl <sub>2</sub> O <sub>5</sub>	27.0	338.983	324, 296, 260, 232	201, 247, 311, ~350	-	-	-	+ <sup>a</sup>
20	atranorin	27.5	373.093	177, 163, 133, 119, 105	208, 250, 319	-	+	-	-
d	3- <i>O</i> -methyl-2,5,7-trichloro- norlichexanthone	27.5	372.944	358, 330, 294, 266	199, 250, 314, ~351	tentative	-	-	+ <sup>a</sup>
e	3- <i>O</i> -methyl-2,4,5- trichloronorlichexanthone (thuringione)	27.6	372.944	360, 332, 294, 266, 177, 163, 133, 119, 105	195, 217, 314	-	-	+ <sup>a</sup>	-
f	C <sub>15</sub> H <sub>9</sub> Cl <sub>3</sub> O <sub>5</sub>	27.7	372.944	358, 330, 294, 266	199, 246, 314, 355	-	-	-	+ <sup>a</sup>
21	chloroatranorin	28.5	407.054	211, 167, 163, 139, 131, 119	211, 248, ~350	-	+	-	-

g	$C_{15}H_8Cl_4O_5$	29.7	406.905	394, 366, 330, 302	195, 218, ~310, ~355	-	-	+ <sup>a</sup>	+ <sup>a</sup>
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*Lecanora sulphurata*-dyed wool, boiled 3 hours, oxalic acid extraction



**Figure S5:** 350 nm UV chromatograph of *Lecanora sulphurata* after boiling with wool for 3 hours followed by mild extraction with oxalic acid.