

Table S3. Weight percentages of chemical elements found on samples of the lichen *Xanthoria parietina* sampled at five sites along an urban–rural gradient in the city of L’Aquila (Central Italy). Site numbers as in Table 1. Spectra are given in Figure S1.

| Site | C | O | K | S | Si | Mg | Al | P | Fe | Cl | Ca | Na | Ti | Br |
|------|------|------|-----|-----|------|-----|-----|-----|------|-----|------|-----|-----|-----|
| 1 | 52.0 | 45.9 | 0.6 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0 | 0.2 | 0.2 | 0 | 0 | 0 |
| 1 | 47.8 | 45.9 | 1.0 | 0.3 | 1.4 | 0.2 | 0.7 | 0.3 | 0.6 | 0.4 | 1.4 | 0 | 0 | 0 |
| 1 | 51.8 | 46.1 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0 | 0.3 | 0.2 | 0 | 0 | 0 |
| 1 | 41.8 | 26.8 | 7.7 | 0 | 7.5 | 1.3 | 2.3 | 0 | 11.9 | 0 | 1.7 | 0 | 0 | 0 |
| 1 | 31.3 | 49.0 | 0.6 | 0.3 | 1.5 | 0.2 | 0.9 | 0.3 | 0.6 | 0.3 | 15.0 | 0 | 0 | 0 |
| 1 | 21.3 | 37.2 | 0.4 | 0 | 0.8 | 0 | 0.3 | 0 | 39.2 | 0.6 | 0.2 | 0 | 0 | 0 |
| 1 | 23.5 | 43.3 | 0.5 | 0.2 | 0.5 | 0.2 | 0.3 | 0 | 0 | 0 | 31.4 | 0 | 0 | 0 |
| 1 | 57.3 | 39.7 | 0.7 | 0.3 | 0.5 | 0.2 | 0.4 | 0.2 | 0 | 0.4 | 0.4 | 0 | 0 | 0 |
| 1 | 58.8 | 38.8 | 0.6 | 0.3 | 0.1 | 0.2 | 0 | 0.2 | 0 | 0.3 | 0.4 | 0 | 0 | 0.3 |
| 1 | 49.1 | 41.2 | 0.8 | 0.2 | 3.1 | 0.3 | 1.7 | 0.2 | 0.9 | 0.3 | 2.1 | 0 | 0 | 0 |
| 1 | 26.9 | 53.3 | 0.4 | 0 | 0.2 | 0 | 0.2 | 0 | 0 | 0 | 18.8 | 0.3 | 0 | 0 |
| 4 | 49.4 | 49.0 | 0.5 | 0.3 | 0.4 | 0 | 0.2 | 0.2 | 0 | 0.2 | 0 | 0 | 0 | 0 |
| 4 | 45.6 | 44.9 | 0.8 | 0.3 | 3.9 | 0.4 | 1.9 | 0.3 | 1.0 | 0 | 1 | 0 | 0 | 0 |
| 4 | 45.7 | 43.1 | 0.7 | 0.4 | 4.2 | 0.5 | 2.2 | 0.4 | 1.4 | 0 | 1.6 | 0 | 0 | 0 |
| 4 | 51.0 | 46.7 | 1.5 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 44.7 | 44.5 | 2.8 | 0 | 2.1 | 0 | 0.9 | 0.5 | 2.8 | 0 | 1.7 | 0 | 0 | 0 |
| 4 | 18.8 | 50.9 | 0.3 | 0.2 | 0.5 | 6.5 | 0.2 | 0 | 0 | 0 | 22.6 | 0 | 0 | 0 |
| 4 | 42.0 | 29.7 | 0.8 | 0 | 0.9 | 0 | 0 | 0 | 26.7 | 0 | 0 | 0 | 0 | 0 |
| 4 | 33.4 | 31.2 | 1.2 | 0 | 1.6 | 0 | 0.8 | 0.4 | 18.0 | 0 | 12.9 | 0 | 0.7 | 0 |
| 4 | 34.8 | 26.8 | 8.1 | 0 | 3.6 | 0 | 0.8 | 0 | 23.5 | 0 | 0 | 0 | 2.4 | 0 |
| 6 | 58.5 | 40.0 | 0 | 0 | 1.0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 45.1 | 43.9 | 0.8 | 0 | 2.9 | 0 | 1.0 | 0 | 3.5 | 0 | 2.9 | 0 | 0 | 0 |
| 6 | 45.1 | 49.4 | 0.5 | 0.3 | 2.3 | 0.4 | 0.8 | 0 | 0.7 | 0 | 0.5 | 0 | 0 | 0 |
| 6 | 54.5 | 39.9 | 0 | 0 | 1.4 | 0 | 0.5 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 |
| 6 | 44.7 | 36.7 | 4.9 | 0 | 1.2 | 0 | 0 | 0 | 12.6 | 0 | 0 | 0 | 0 | 0 |
| 6 | 15.2 | 50.6 | 0.3 | 0 | 10.3 | 8.1 | 6.8 | 0 | 8.2 | 0 | 0.4 | 0 | 0 | 0 |
| 6 | 15.3 | 53.5 | 1.2 | 0 | 21.1 | 0.8 | 5.1 | 0 | 2.6 | 0 | 0.3 | 0 | 0.2 | 0 |
| 6 | 19.9 | 51.7 | 0.6 | 0 | 22.1 | 0.4 | 1.9 | 0 | 3.1 | 0 | 0.4 | 0 | 0 | 0 |
| 6 | 20.4 | 55.3 | 0.2 | 0 | 0.6 | 0 | 0.2 | 0 | 0 | 0 | 23.2 | 0 | 0 | 0 |
| 8 | 51.5 | 47.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 48.6 | 47.4 | 0.7 | 0.4 | 1.1 | 0.3 | 0.6 | 0 | 0.5 | 0.2 | 0.1 | 0 | 0 | 0 |
| 8 | 49.2 | 46.8 | 0.5 | 0.3 | 1.4 | 0.2 | 0.6 | 0.2 | 0.6 | 0 | 0.3 | 0 | 0 | 0 |
| 8 | 50.7 | 46.1 | 0.7 | 0.6 | 0.8 | 0.3 | 0.4 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0 |
| 8 | 28.3 | 43.3 | 1.0 | 0 | 14 | 1.1 | 2.5 | 0 | 3.2 | 0 | 6.5 | 0.3 | 0 | 0 |
| 8 | 41.2 | 26.4 | 0.4 | 0 | 11 | 2.4 | 1.0 | 0 | 10.4 | 0 | 7.4 | 0 | 0 | 0 |
| 8 | 52.5 | 42.6 | 1.4 | 0.5 | 1.2 | 0 | 0.3 | 0 | 0 | 0.6 | 1.0 | 0 | 0 | 0 |
| 8 | 32.9 | 44.1 | 1.6 | 0.2 | 10.7 | 4.0 | 3.9 | 0 | 1.9 | 0.1 | 0.3 | 0 | 0.4 | 0 |
| 8 | 52.2 | 34.9 | 0.4 | 1.7 | 9.5 | 0 | 0.6 | 0 | 0.4 | 0 | 0.4 | 0 | 0 | 0 |
| 8 | 28.7 | 46.5 | 1.7 | 0.2 | 11.3 | 1.6 | 5.7 | 0 | 3.4 | 0 | 0.3 | 0 | 0.6 | 0 |
| 9 | 41.7 | 46.1 | 0.8 | 0.2 | 4.8 | 0.7 | 2.2 | 0 | 3.2 | 0 | 0.2 | 0 | 0 | 0 |
| 9 | 60.1 | 38.4 | 0.3 | 0.7 | 0.3 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 52.8 | 45.6 | 0.3 | 0.2 | 0.7 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 55.2 | 43.3 | 0.4 | 0.2 | 0.5 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 52.7 | 46.3 | 0.3 | 0.2 | 0.3 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 50.9 | 45.0 | 0.4 | 0 | 1.8 | 0.2 | 0.9 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 |
| 9 | 51.5 | 44.8 | 0.4 | 0.2 | 1.6 | 0.2 | 0.8 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 |