

SM 1

Physico-chemical properties (mean values \pm s.e.) of the three soils.

The pH was determined in a water suspension (1:50, w:v soil:water) via potentiometric method (SenselON+ PH3, Hach). Soil water content (W.C.) and organic matter (O.M.) were determined using the gravimetric method after oven-drying (105 °C for 48 h; MMM Group Ecocell) and calcination in muffle (550 °C for 4 h; Nabertherm GmbH, Controller B 170), respectively.

Table S1. Physico-chemical properties (mean values \pm s.e.) of the three soils.

	N1	N2	I
pH	6.9 \pm 0.03	6.6 \pm 0.02	7.3 \pm 0.01
W.C. (% f.w.)	30 \pm 0.14	43 \pm 0.13	24 \pm 0.10
O.M. (% d.w.)	26 \pm 0.62	38 \pm 0.35	10 \pm 0.05
Total PAHs (ng/g d.w.)	110 \pm 10	230 \pm 20	741 \pm 20
Cr (μg/g)	30	80	40
Fe (μg/g)	22	24	22
Mn (mg/g)	0.5	0.5	1.3
Cu (μg/g)	31	29	60
V (μg/g)	92	51	250
Zn (μg/g)	49	64	90

Total PAHs = sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, retene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[j]fluoranthene, benzo[k]fluoranthene, benzo[e]pyrene, benzo[a]pyrene, dibenzo[a,h]anthracene, indeno[1,2,3-cd]pyrene, benzo[ghi]perylene