Contaminated Soil and Transmission of Influenza Virus (H5N1)

Technical Appendix

Technical Appendix Table. Physico-chemical and bacteriological parameters measured in the soils tested

		Sandy topsoil	Building	Soil-based
		(rice fields)	sand	compost
Microbiological analysis	Total aerobic plate count at 37°C, 24h (CFU/mL)	2.00×10^{2}	$8.00 imes 10^4$	2.00×10^{5}
	Total aerobic plate count at 22°C, 72h (CFU/mL)	6.00×10^{2}	$9.00 imes 10^4$	3.40×10^{5}
	Total Coliforms (CFU/100mL)	30	3.00×10^{6}	7.20×10^{6}
	Thermotolerant Coliforms (CFU/100mL)	10	1.00×10^{6}	4.00×10^{6}
	Escherichia coli (CFU/100mL)	<1	5.00×10^{2}	1.70×10^{4}
	Enterococcus faecalis (CFU/100mL)	<1	2.00×10^{2}	2.30×10^{3}
	Sulfite reducing anaerobes (CFU/20mL)	4	6.00×10^2	5.00×10^3
Physico-chemical analysis	Turbidity (NTU)	>100	>100	>100
	рН	6.4	6.3	6.3
	Chloride (mg/L)	76	41	42
	Ammonia (mg/L)	0.88	0.35	1.61
	Nitrite (mg/L)	0	0	0
	Nitrate (mg/L	1.6	0.22	0.46
	Hardness (mg/L)	7	11	9
	Iron (mg/L)	0	0	0

All analyses were conducted on water extracts obtained from mixing the soils with distilled water.



Technical Appendix Figure. Low- and high-dose contamination procotols. IU: Infectious Unit = 1g of Specific Pathogen Free ducks feces, experimentally contaminated with $10^{7.8}$ Egg Infective Dose 50% (EID50). D: Day.