

Supplementary Materials: S1. Background information on use of soil improvers and chemicals on allotments included in the NABS study. (All percentages reported are of the total number of gardeners in the study (n = 43)). A share of 28% of gardeners reported use of chemicals on their gardens; pesticide sprays (5%), slug killers (9%), herbicide treatments (9%), fungicide treatment (2%) and chemical fertiliser (5%). Five percent used chemical fertiliser and pesticide spray, 2% used herbicide and fungicide and 5% used both metaldehyde and ferric phosphate slug killer. Gardeners using pesticide either used it once a year or when needed between June and September. Those using slug killer reported using it either once a month or three times a year. Herbicides were applied twice a year, fungicides only in spring, and chemical fertiliser once a week in the season between June and September. For soil improvement, 37% of gardeners reported adding compost, 70% manure and 70% soil improver. Where the compost source was specified 26% used “homemade” compost, 7% purchased it from a garden centre and 11% purchased it from the local authority or allotment association. Manure sources were either not specified (12%) or the allotment association (14%). Seven percent of gardeners used cow manure, 40% used horse manure. Reported soil improver sources were the local authority (9%) and the allotment association (5%). Compost and manure were usually added once a year (both 47%), alternatives being every two years or one to two years (4% and 17% for compost and manure, respectively), every two years or two to three years (2% and 19%), or with every new crop (2% manure only) or growing season (2% both). Soil improver was usually added every two to three years (7%) alternatively with each new crop (2%). Other natural soil amendments used were “poultry concentrate” (5%) “blood, fish and bone” (5%), stables straw (2%), biochar (2%) and rock dust (2%). Specific details on each of the allotments (1, 2 and 3) and the sampled plot (X.1) investigated in this study are provided in Table S1.

Table S1. Specific details on the use of chemicals, soil improvers and other common activities at urban agricultural sites (UAS) for each of the soils investigated in this study.

Soil Sample	Chemical / Pesticide			Compost/ Soil Improver/ Manure 1			Compost/ Soil Improver / Manure 2			Compost/ Soil Improver / Manure 3			Do poultry have free access to soil?		Bonfires Held on Site?	old window frames on site?
	D = description F = Frequency T = time period			M = material S = source F = Frequency			M = material S = source F = Frequency			M = material S = source F = Frequency			Y= yes N = No			
	D	F	T	M	S	F	M	S	F	M	S	F		species		
1.1				compost	garden centre	annually	manure	horse	2x year	Soil improver	garden centre	annually	N		none	none
1.2	weedol	2x year	10 years	manure	horse	annually	Straw	Stables	annually	Compost	Homemade	annually	Y	hen	frequent	a few

1.3	N/A			manure	horse	annually	Poultry Concentrate Blood, fish and Bone		annually	Compost	homemade	annually	Y	hen	frequent	unknown
1.4	N/A			manure	horse	annually	Poultry Concentrate Blood, fish and Bone		annually	Compost	homemade	annually	Y	hen	frequent	unknown
1.5	Roundup	2x year	one spraying	rock dust	rock dust	annually							N		unknown	unknown
2.1				manure	allotment association	1-2x year							N		a few	a few
2.2				compost	homemade	annually	manure	allotment association	annually				N		a few	a few
2.3				compost	homemade	throughout growing season	manure	chicken	throughout growing season				N		none	none
3.1													N		a few	a few
3.2				unknown	garden centre								N		a few	unknown
3.3				unknown		annually							N		a few	a few
3.4	miracle grow	1x week	june - sep	soil improver	council	2 years ago	compost	garden centre	2-4 years ago	manure	local	annually	N		a few	a few

	Bug spray	when needed						homemade	annually							
--	--------------	----------------	--	--	--	--	--	----------	----------	--	--	--	--	--	--	--