Supplementary Materials

Changes in fungal community structure in freshwater canals across a gradient of urbanization

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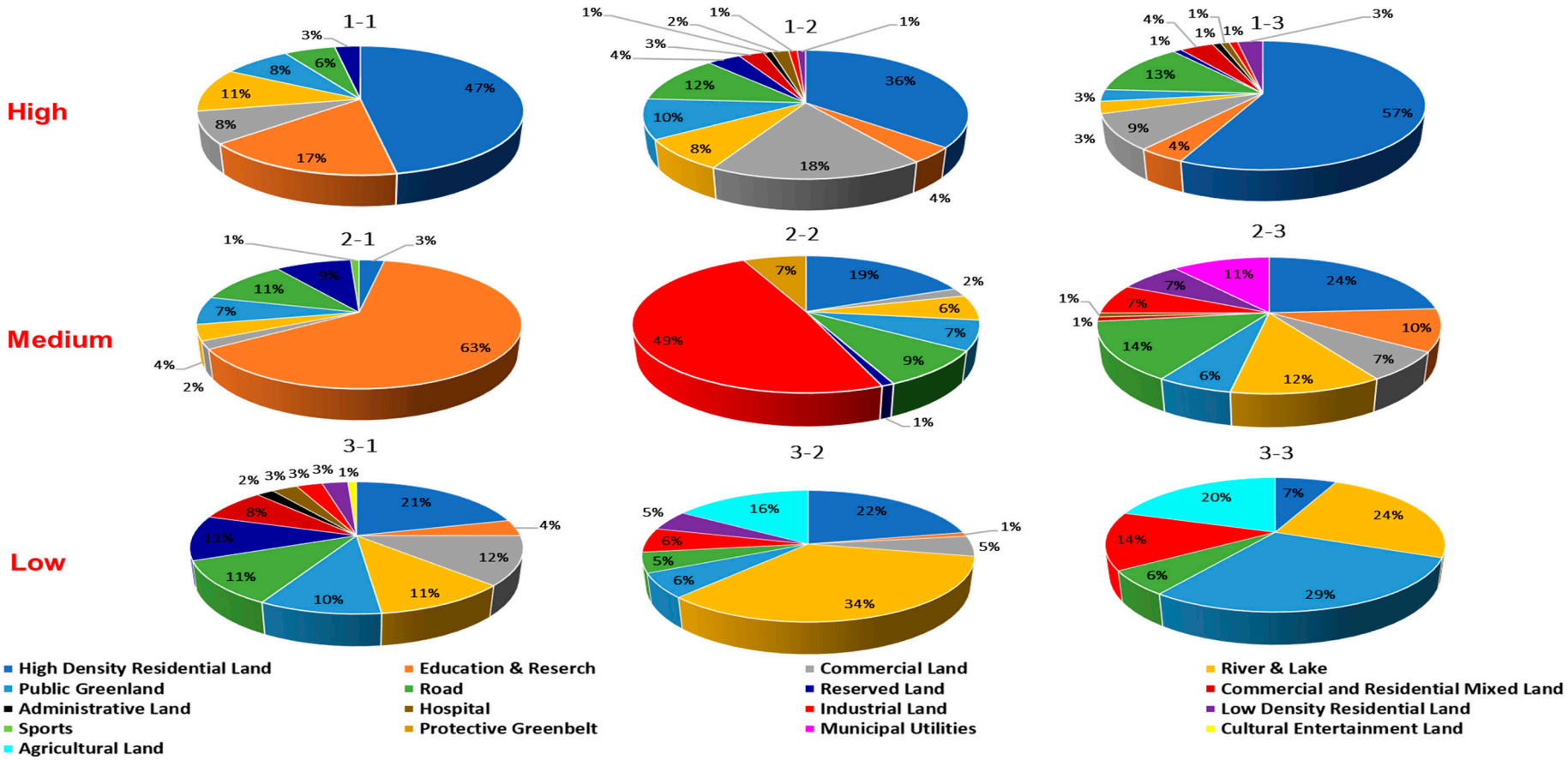


Figure S1. Land use types in high (1-1 to 1-3), medium (2-1 to 2-3) and low (3-1 to 3-3) urbanization locations. The land use type reported is for 1 km buffer zone.

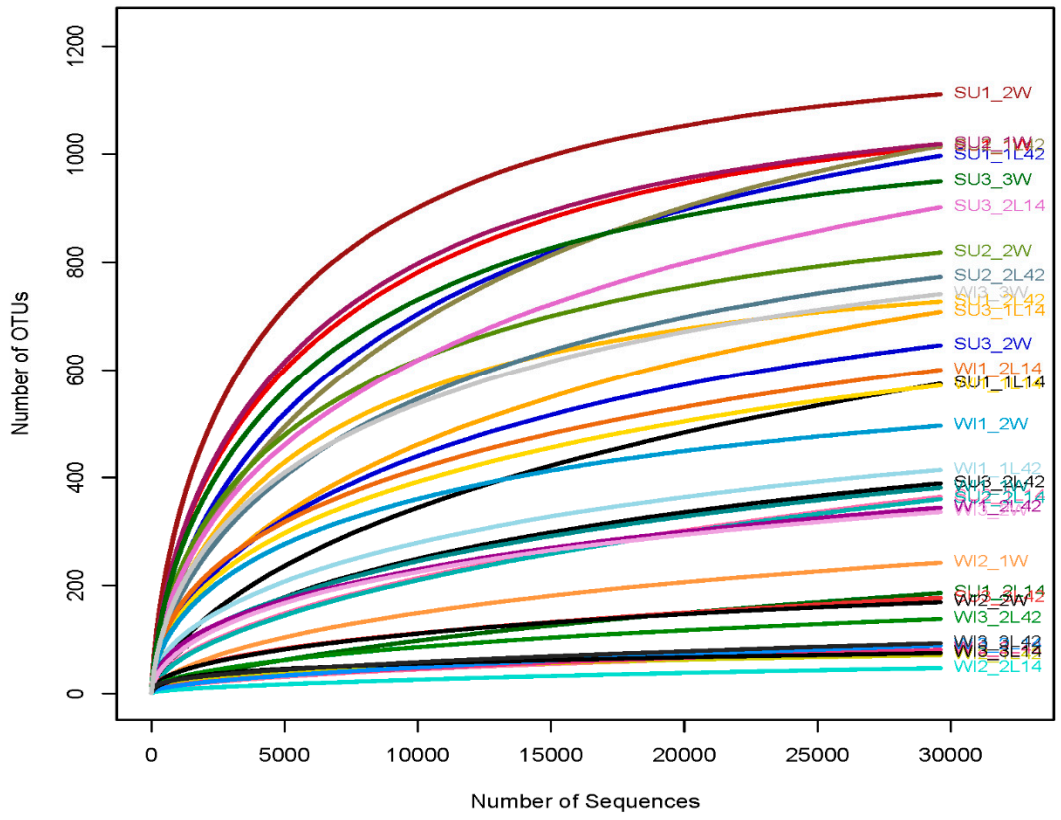
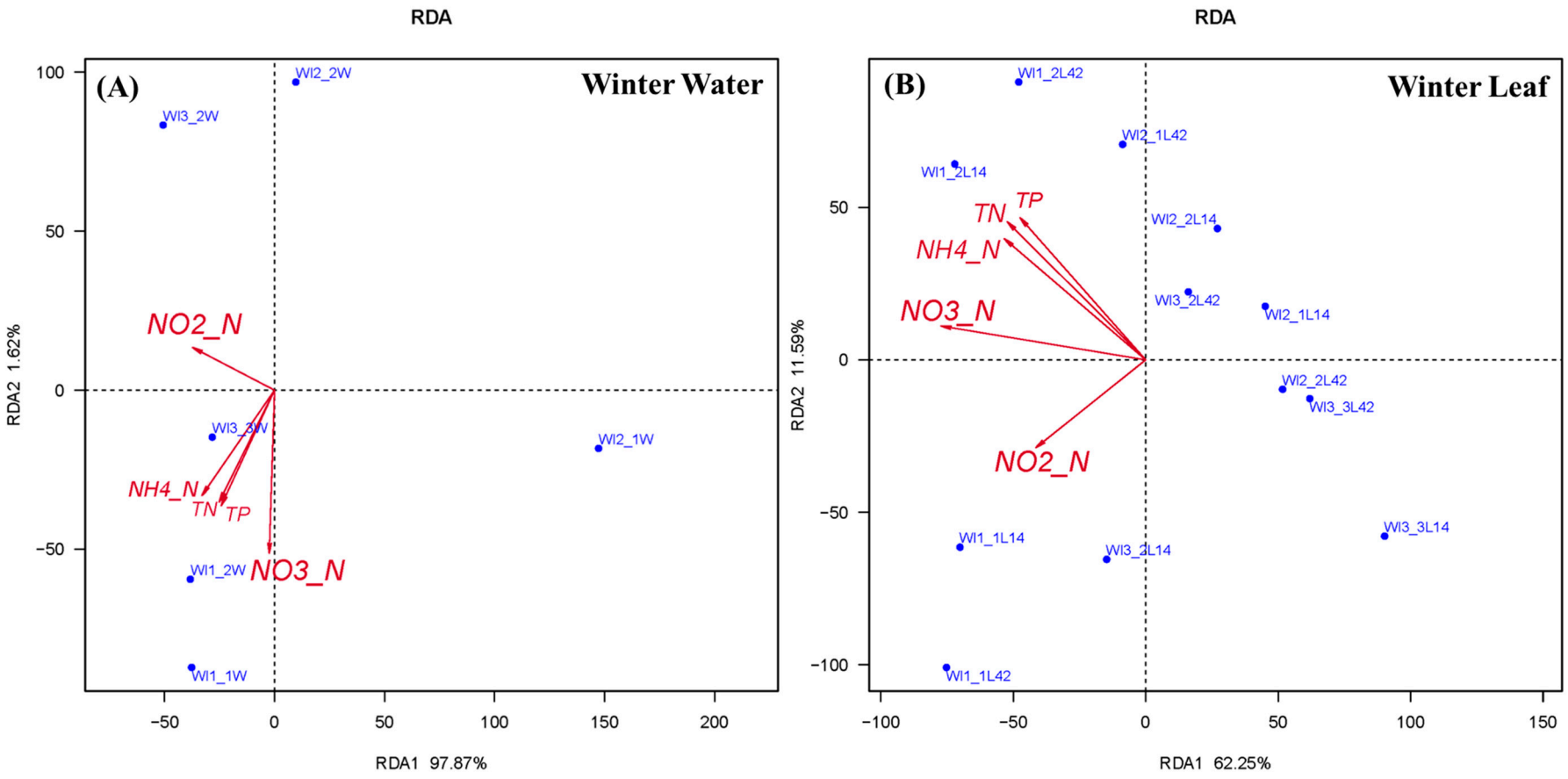


Figure S2. Rarefaction curves generated with normalized sequence reads (n=29600) for water and leaf samples collected in winter and summer. (WI=Winter; SU=Summer; 1-1 to 3-3=Sampling locations in high to low urban gradients, respectively; W=Water samples; L14 and L42=Leaf samples collected on 14th and 42nd day, respectively)


RDA
(A)
Winter Water
WI2_2W
WI3_2W
NO2_N
WI3_3W
WI2_1W
NH4_N
TN
TP
WI1_2W
NO3_N
WI1_1W
RDA2 1.62%
RDA1 97.87%
RDA
(B)
Winter Leaf
WI1_2L42
WI2_1L42
WI1_2L14
TN
TP
WI2_2L14
NH4_N
WI3_2L42
WI2_1L14
NO3_N
WI2_2L42
WI3_3L42
NO2_N
WI1_1L14
WI3_2L14
WI3_3L14
WI1_1L42
RDA2 11.59%
RDA1 62.25%

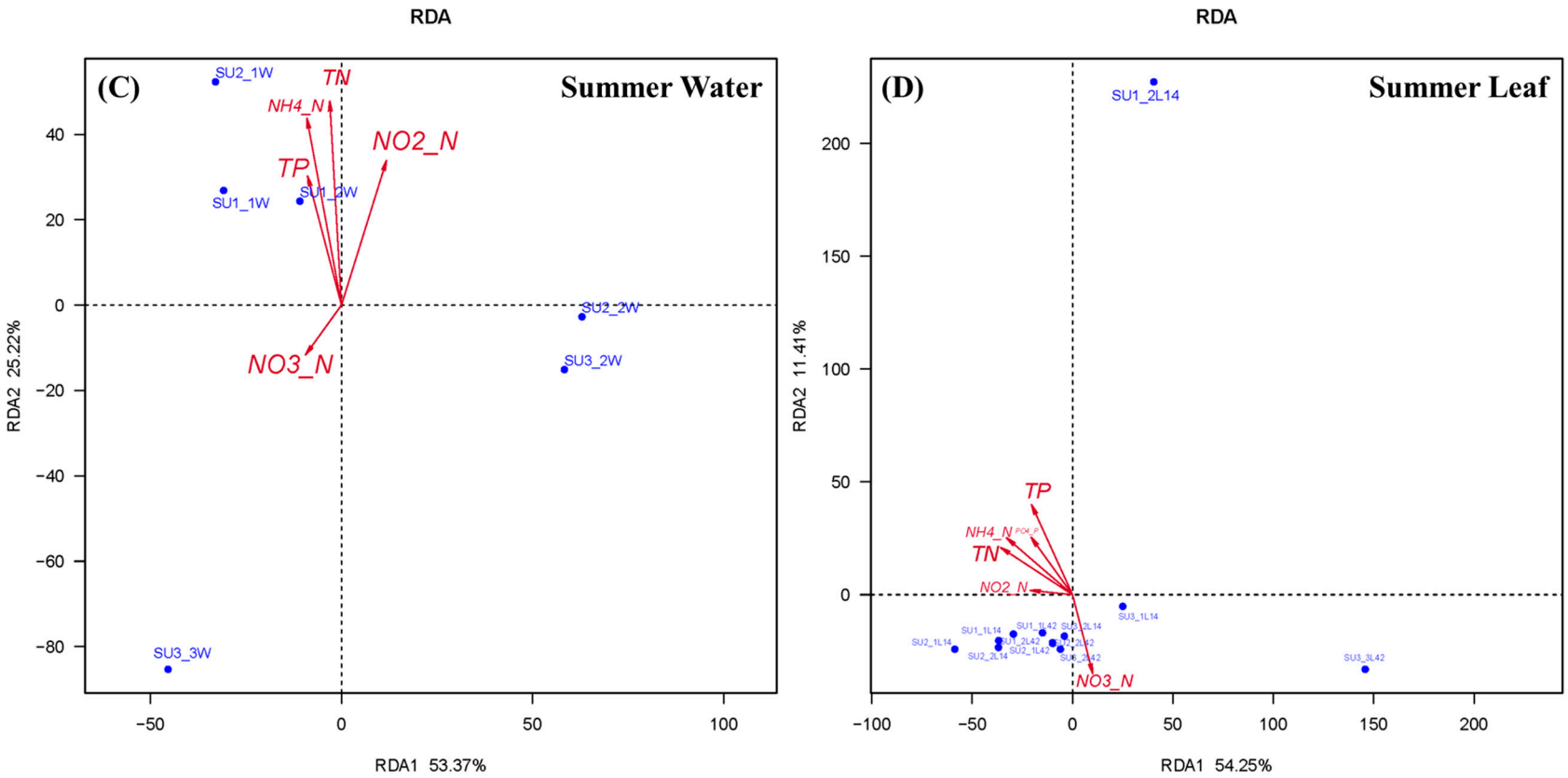


Figure S3. Redundancy analysis (RDA) showing correlation of nutrient parameters with fungal community composition in water (A, C) and leaf samples (B, D) collected from different sampling locations in winter and summer.

Table S1. Range values of physico-chemical parameters of water samples collected from Suzhou canals in winter and summer.

Season	Location	WT (°C)	TN (mg/L)	TP (mg/L)	NO_3-N (mg/L)	NO_2-N (mg/L)	PO_4-P (μg/l)	NH_4-N (mg/l)	TOC (PPM)
Winter	**1-1**	7-8	3.81-4.93	0.248-0.345	2.46-2.74	0.037-0.073	153.6-177.6	1.01-1.64	8.47-8.72
	1-2	9-11	11.08-16.49	1.122-2.101	1.68-3.42	0.014-0.062	48.0-496.6	1.16-7.84	12.71-42.26
	1-3	7-8	4.36-4.85	0.239-0.300	2.24-2.26	0.051-0.052	135.0-135.5	1.29-1.69	7.93-10.39
	2-1	6.5-7	2.58-2.64	0.076-0.100	1.90-2.06	0.024-0.033	19.6-61.7	0.18-0.28	9.03-9.48
	2-2	6.5-7	2.31-3.08	0.106-0.186	1.32-1.42	0.022-0.038	52.2-60.7	0.49-0.88	11.03-11.56
	2-3	7-8	3.85-4.49	0.128-0.164	2.10-2.34	0.062-0.063	41.0-73.1	1.32-1.44	9.62-9.64
	3-1	7.5-8	2.06-4.10	0.111-0.261	0.83-1.38	0.019-0.048	19.3-46.5	0.64-1.47	10.19-10.95
	3-2	8-9	2.95-3.93	0.080-0.137	1.64-1.75	0.071-0.080	18.4-28.1	0.72-1.23	13.40-13.81
	3-3	8-9.5	1.89-2.31	0.105-0.129	0.93-1.00	0.013-0.028	11.7-20.1	0.41-0.42	11.12-11.59
Summer	**1-1**	28.2-29.5	2.62-4.67	0.293-0.534	0.46-0.60	0.058-0.059	202.2-315.3	1.35-2.40	7.70-9.30
	1-2	28-30	3.44-3.71	0.406-0.446	0.25-0.55	0.075-0.152	121.8-252.4	1.39-1.94	12.42-20.81
	1-3	28.8-29.8	3.66-3.80	0.446-0.483	0.17-0.28	0.131-0.198	213.7-278.8	1.95-2.01	8.39-12.46
	2-1	26-29.5	3.49-3.56	0.154-0.195	1.11-1.24	0.167-0.188	64.5-92.1	1.25-1.48	15.07-15.58
	2-2	27.4-29.2	2.17-3.87	0.156-0.237	0.65-1.20	0.065-0.157	44.6-117.4	0.55-1.46	11.92-22.99
	2-3	28.5-29	1.93-2.51	0.131-0.175	0.46-1.03	0.061-0.085	37.4-87.9	0.51-0.80	4.61-10.41
	3-1	28.8-29.7	3.73-4.64	0.200-0.206	1.13-1.32	0.137-0.265	78.2-88.8	1.42-2.05	5.40-9.84
	3-2	31-31	2.35-2.57	0.133-0.153	0.61-0.63	0.115-0.118	31.8-49.4	0.56-0.61	15.23-15.63
	3-3	29.8-30.5	1.53-1.75	0.073-0.080	0.88-1.25	0.030-0.058	23.3-27.4	0.07-0.13	13.58-13.69