

Supplementary Material

Quantitative correlations between soil and plants in reclaimed mining dumps using coupling coordination degree model

Anning Guo,¹ Zhongqiu Zhao,^{1,2,*} Ye Yuan,¹ Yangyang Wang,¹ and Xuezhen Li¹,
Ruicong Xu¹

¹College of Land Science and Technology, China University of Geosciences, Beijing, No. 29, xueyuan Road, Haidian District, Beijing 100083, China.

²Key Laboratory of Land Consolidation and Rehabilitation Ministry of Land and Resources, Beijing 100035, China

*Author for correspondence(zhongqiuzhao@163.com)

Present address: College of Land Science and Technology, China University of Geosciences, Beijing, No. 29, xueyuan Road, Haidian District, Beijing 100083, China.

Table S1. Plant properties of all plots

Plots	Trees			Herbs			Litter		
	Total canopy density/%	Diameter at breast height /cm	Tree heights/m	Tree canopy/m ²	Tree biomass/g	Herb coverage/%	Herb height/cm	Herb biomass /g	Litter biomass/g
RUA	40.00	6.92	5.25	6.13	39.38	73.33	61.67	210.34	564.16
RP	44.00	11.64	8.46	14.81	58.87	56.67	45.00	97.66	470.34
RM	24.33	8.15	5.30	7.23	33.06	33.33	25.33	99.69	106.40
PM	80.00	7.84	6.80	7.46	66.08	5.00	40.00	7.84	915.96
OP	28.50	13.26	7.47	12.13	80.13	37.50	31.50	54.84	460.95

RUA: *R. pseudoacacia*- *U. pumila*- *A. altissima*; RP: *R. pseudoacacia*- *P. tabuliformis*; RM: *R. pseudoacacia* monoculture; PM: *P. tabuliformis* monoculture; OP: original *P. simonii* monoculture.

Table S2. Soil properties of all plots

Plots	pH	Soil bulk density	Soil organic matter/g·kg ⁻¹	Total nitrogen/%	Total phosphorus/%	Total potassium /%	Available nitrogen /g·kg ⁻¹	Available phosphorus /g·kg ⁻¹	Available potassium /g·kg ⁻¹
				RUA	8.48	1.42	10.25	0.05	0.04
RP	8.43	1.47	40.79	0.19	0.06	1.83	31.60	3.77	269.00
RM	8.36	1.46	15.37	0.07	0.05	1.59	37.53	3.20	143.00
PM	8.15	1.53	35.16	0.07	0.05	1.67	33.30	4.50	145.33
OP	8.47	1.37	10.70	0.05	0.05	1.77	12.30	2.00	73.30

RUA: *R. pseudoacacia*- *U. pumila*- *A. altissima*; RP: *R. pseudoacacia*- *P. tabuliformis*; RM: *R. pseudoacacia* monoculture; PM: *P. tabuliformis* monoculture; OP: original *P. simonii* monoculture.