

Sample s	Seqs	Sites	Province	Location	Area	Compartment	Soiltype	Fertilization	Croppingsystems	pH	watercontent	SO M	TN	NO3-N	NH4-N
FJ01	3794 2	Site 1	Jilin	changchun	NorthEast Semihumid Plain	BulkSoil	black	NPK	Grennhouse Eggplant	7.3 7	0.235	29.7 4	1.6 6	0.94	1.28
FJ02	2891 3	Site 1	Jilin	changchun	NorthEast Semihumid Plain	BulkSoil	black	NPK	Grennhouse Eggplant	7	0.222	32.6 9	1.8 4	2.64	2.25
FJ03	2652 4	Site 1	Jilin	changchun	NorthEast Semihumid Plain	BulkSoil	black	NPK	Grennhouse Eggplant	7.0 1	0.254	35.1 7	1.7 6	1.24	1.68
FJ04	2250 3	Site 2	Jilin	nongan	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.3 9	0.16	17.7	2.4	10.73	1.39
FJ05	3074 8	Site 2	Jilin	nongan	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.5 4	0.147	17.8	2	7.73	1.7
FJ06	1908 2	Site 2	Jilin	nongan	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.4 6	0.139	18.2	2.1 7	5.15	1.4
FJ07	3616 7	Site 3	Jilin	gongzhuling_hebei	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.1 9	0.156	4.74	0.6 3	2.1	2.62
FJ08	4279 5	Site 3	Jilin	gongzhuling_hebei	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.3 5	0.155	3.63	0.5 9	3.74	1.33
FJ09	2498 7	Site 3	Jilin	gongzhuling_hebei	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.3 6	0.146	5.84	0.6 6	3.92	2.3
FJ10	3173 2	Site 4	Jilin	gongzhuling_kemao	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	7.9 9	0.2	22.1 3	1.0 2	2.07	1.45
FJ11	3390 9	Site 4	Jilin	gongzhuling_kemao	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.1 1	0.2	17.3 9	0.9 8	11.17	1.81
FJ12	3801 2	Site 4	Jilin	gongzhuling_kemao	NorthEast Semihumid Plain	BulkSoil	black	NPK	SpringMaize	8.0 4	0.2	17.8 3	1.0 1	4.96	2.08
FSB01	2703 4	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	PK	SpringMaize	8.2 1	0.12	14.7 8	0.8 4	3.33	1.08
FSB02	2453 2	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	PK	SpringMaize	8.1 9	0.128	14.8 7	0.8 4	4.37	1.16
FSB03	2299 8	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	PK	SpringMaize	8.1 6	0.124	14.9 6	0.8 7	3.87	0.98
FSB04	2940 5	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	SpringMaize	8.2 6	0.096	15.1	0.8 7	4.97	1.62
FSB05	2801 5	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	SpringMaize	8.2 3	0.112	15.2	0.9	4.8	1.35
FSB06	3142 4	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	SpringMaize	8.2 7	0.101	15.2 6	0.8 5	5.12	1.48
FSB07	1053 9	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	1/2NPK+1/2 M	SpringMaize	8.1 9	0.109	16.5 1	0.9 5	6.23	2.3
FSB08	2111 9	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	1/2NPK+1/2 M	SpringMaize	8.2 2	0.095	16.2 9	0.9 6	6.65	2.49
FSB09	2776 2	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	1/2NPK+1/2 M	SpringMaize	8.2 3	0.103	16.8 4	1.0 7	5.88	2.31
FSB10	2354 6	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	M	SpringMaize	8.1 2	0.111	16.8 2	1.2 6	5.43	1.79

FSB11	3020 6	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	M	SpringMaize	8.1 4	0.115	16.3 4	1.4 2	4.85	1.69
FSB12	2193 1	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	M	SpringMaize	8.1 4	0.076	16.2 8	1.2 7	5.41	1.89
FDB01	2181 0	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	WheatMaizeRotation	8.8 2	0.191	15.4 4	0.7 3	1.35	1.53
FDB02	3009 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	WheatMaizeRotation	8.8 2	0.189	15.6 5	0.8 5	1.65	1.58
FDB03	1697 7	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	WheatMaizeRotation	8.8 3	0.186	15.8 4	0.8 6	1.49	1.86
FDB04	2066 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	WheatMaizeRotation	8.7 1	0.19	17.6 5	0.8 5	4.04	1.44
FDB05	2090 9	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	WheatMaizeRotation	8.6 7	0.194	18.9 9	0.9 2	3.28	1.52
FDB06	2377 0	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK	WheatMaizeRotation	8.6 5	0.193	18.0 3	0.9 5	3.85	1.27
FDB07	1718 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+S	WheatMaizeRotation	8.5 1	0.187	19.3 6	1.1 2	23.02	1.7
FDB08	2337 1	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+S	WheatMaizeRotation	8.6 1	0.181	20.3 20	0.9 2	14.83	1.58
FDB09	2453 3	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+S	WheatMaizeRotation	8.5 3	0.187	20.3 5	0.9 9	15.47	1.77
FDB10	2908 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+M	WheatMaizeRotation	8.0 6	0.217	28.9 3	1.8 7	25.88	1.84
FDB11	8165	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+M	WheatMaizeRotation	7.9 9	0.21	29.0 5	1.7 3	40.92	2.46
FDB12	2549 1	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+M	WheatMaizeRotation	7.7 7	0.215	30.7 4	1.9 8	52.23	2.7
FDB13	3400 3	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+1.5M	WheatMaizeRotation	7.8 1	0.231	38.7 5	2.3 4	47.9	2.39
FDB14	3254 5	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+1.5M	WheatMaizeRotation	7.6 1	0.227	39.8 3	2.6 6	49.32	2.16
FDB15	3354 3	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	NPK+1.5M	WheatMaizeRotation	7.2 8	0.234	42.3 6	2.7 5	46.48	1.67
FDB16	2956 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	Fallow	8.7 2	0.166	21.3 9	1 1	1.36	1.77
FDB17	2385 5	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	Fallow	8.7 1	0.171	21.8 6	1.1 3	1.56	1.62
FDB18	2820 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	BulkSoil	cinnamon	Control	Fallow	8.7 3	0.171	21.1 2	1.1 3	1.71	1.99
FH01	3293 4	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotation	7.7 3	0.143	23.1 6	2.1 8	104.2	0.5
FH02	3247 1	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotation	7.7 7	0.171	42.3 7	1.7 7	120.5	0.95
FH03	3179 1	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotation	7.7 7	0.166	26.2 4	1.8 4	78.63	3.69

FH04	2697 1	Site 8	Henan	yuanyang	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	7.3 2	0.185	12.4 1	2.7 7	3.01	1.93
FH05	5731 9	Site 8	Henan	yuanyang	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	7.1 6	0.185	15.4 4	2.7 9	7.09	2.18
FH06	2034 9	Site 8	Henan	yuanyang	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	7.1 3	0.185	15.0 7	2.9 4	12.08	1.62
FH07	1742 4	Site 9	Henan	kaifeng	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	5.2 2	0.173	13.8	1.6	2.36	1.74
FH08	1843 4	Site 9	Henan	kaifeng	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	5.4 6	0.162	19	1.9	2.93	1.43
FH09	2225 2	Site 9	Henan	kaifeng	Huanghuaihai Semihumid Plain	BulkSoil	fluvo-aquic	NPK	WheatMaizeRotati on	5.3 3	0.153	28.4	1.4	1.08	0.99
GJ01	4017 5	Site 1	Jilin	changchun	NorthEast Semihumid Plain	Rhizospher e	black	NPK	Grennhouse Eggplant	8.0 1	0.111	31.2 2	2.1 6	0.92	1.33
GJ02	2541 1	Site 1	Jilin	changchun	NorthEast Semihumid Plain	Rhizospher e	black	NPK	Grennhouse Eggplant	5.7 5	0.116	41.2 6	1.6	0.34	1.58
GJ03	4948 2	Site 1	Jilin	changchun	NorthEast Semihumid Plain	Rhizospher e	black	NPK	Grennhouse Eggplant	5.6 3	0.135	30.1 5	1.3 7	1.13	1.48
GJ04	3276 6	Site 2	Jilin	nongan	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	5.4 9	0.102	27.0 4	1.3 3	1.02	1.3
GJ05	2940 2	Site 2	Jilin	nongan	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	7.2 4	0.11	23.4	1.4 1	1.52	1.28
GJ06	3275 9	Site 2	Jilin	nongan	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	7.3 8	0.143	30.2 6	1.4 4	2.96	1.82
GJ07	5188 1	Site 3	Jilin	gongzhuling_heb ei	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	7.1 7	0.099	30.5 1	1.4	1.22	1.48
GJ08	5216 8	Site 3	Jilin	gongzhuling_heb ei	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	8.1 6	0.125	32.1 5	1.2 5	0.41	1.22
GJ09	4832 4	Site 3	Jilin	gongzhuling_heb ei	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	8.4 6	0.132	25.7 8	1.1 4	0.41	1.98
GJ10	3771 2	Site 4	Jilin	gongzhuling_kem ao	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	8.3 8	0.12	23.6 9	1.1 2	0.65	1.64
GJ11	2136 4	Site 4	Jilin	gongzhuling_kem ao	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	8.1 5	0.129	16.2 3	0.9 8	0.84	1.22
GJ12	2636 1	Site 4	Jilin	gongzhuling_kem ao	NorthEast Semihumid Plain	Rhizospher e	black	NPK	SpringMaize	8.3 9	0.128	20.8 2	0.8	0.73	1.19
GSB01	2954 2	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizospher e	cinnamon	PK	SpringMaize	8.3 6	0.128	17.0 9	0.8 7	1.53	1.61
GSB02	2870 1	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizospher e	cinnamon	PK	SpringMaize	8.4 5	0.131	17.5 8	0.8 8	3.13	1.58
GSB03	3464 0	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizospher e	cinnamon	PK	SpringMaize	8.4 2	0.126	16.3 6	0.8 3	2.09	1.56
GSB04	3008 7	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizospher e	cinnamon	NPK	SpringMaize	8.4 1	0.157	19.7 3	1.0 9	7.38	2.71
GSB05	2484 2	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizospher e	cinnamon	NPK	SpringMaize	8.4 1	0.162	21.4 3	0.8 8	4.32	1.8

GSB06	2720 6	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK	SpringMaize	8.4 6	0.149	17.3 8	0.9 1	6.31	2.4
GSB07	2841 1	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	1/2NPK+1/2 M	SpringMaize	8.2 8	0.158	19.6 5	1.0 3	12.31	1.77
GSB08	2431 8	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	1/2NPK+1/2 M	SpringMaize	8.2 7	0.163	20.0 5	1.0 7	19.24	2.54
GSB09	2647 6	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	1/2NPK+1/2 M	SpringMaize	8.2 7	0.16	20.2 2	1.0 9	23.79	2.42
GSB10	2487 6	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	M	SpringMaize	8.0 2	0.213	25.3 9	1.2 9	22.3	1.2
GSB11	2762 5	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	M	SpringMaize	8.0 6	0.178	24.5 8	1.2 8	31.38	1.65
GSB12	3177 8	Site 5	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	M	SpringMaize	8.1 2	0.158	22.4 8	1.1 9	45	2.33
GDB0 1	3145 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	Control	WheatMaizeRotati on	8.5 2	0.176	17.7 1	0.8 1	3.23	2.08
GDB0 2	2338 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	Control	WheatMaizeRotati on	8.4 9	0.166	16.4 1	0.8 7	2.9	2.73
GDB0 3	3047 3	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	Control	WheatMaizeRotati on	8.4 6	0.183	20.8 4	0.7 9	3.65	2.13
GDB0 4	2352 5	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK	WheatMaizeRotati on	8.3 4	0.196	21.8 8	0.9 1	0.85	2.64
GDB0 5	2424 2	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK	WheatMaizeRotati on	8.3 4	0.193	17.9 3	0.9 3	1.01	2.88
GDB0 6	2141 4	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK	WheatMaizeRotati on	8.2 9	0.183	17.6 4	0.9 5	3.9	8.85
GDB0 7	2242 3	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+S	WheatMaizeRotati on	8.3 3	0.196	21.8 2	1.1 1	1.24	2.64
GDB0 8	2217 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+S	WheatMaizeRotati on	8.2 6	0.196	22.0 5	1.1 1	1.73	2.78
GDB0 9	2400 5	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+S	WheatMaizeRotati on	8.2 8	0.209	21.5 8	1.1 3	1.23	2.88
GDB1 0	2918 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+M	WheatMaizeRotati on	7.6 4	0.173	23.1 3	1.9 8	33.19	3.09
GDB1 1	3177 6	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+M	WheatMaizeRotati on	7.5 6	0.172	36.9 2	1.9 5	97.63	8.75
GDB1 2	3077 8	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+M	WheatMaizeRotati on	7.5 6	0.159	34.3 6	1.9 8	13.69	1.79
GDB1 3	3103 9	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+1.5M	WheatMaizeRotati on	7.4 3	0.161	45.4 3	2.3 6	10.76	1.23
GDB1 4	3089 6	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+1.5M	WheatMaizeRotati on	7.4 3	0.146	41.3 1	2.2 6	15.81	1.61
GDB1 5	3475 2	Site 6	Beijing	changping	Huanghuaihai Semihumid Plain	Rhizosphere	cinnamon	NPK+1.5M	WheatMaizeRotati on	7.3 9	0.148	40.4 5	2.2 6	11.38	2.32
GH01	3470 7	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	Rhizosphere	fluvo- aquic	NPK	WheatMaizeRotati on	7.6 7	0.127	38.7 6	2.2 9	0.5	1.4

GH02	3361 6	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	Rhizosphere	fluvo- aquic	NPK	WheatMaizeRotati on	7.6 5	0.134	38.4 1	2.0 6	0.32	1.38
GH03	3432 0	Site 7	Henan	huaxian	Huanghuaihai Semihumid Plain	Rhizosphere	fluvo- aquic	NPK	WheatMaizeRotati on	7.4 8	0.132	36.9 3	2.6 7	0.42	1.78
GH05	3273 2	Site 8	Henan	yuanyang	Huanghuaihai Semihumid Plain	Rhizosphere	fluvo- aquic	NPK	WheatMaizeRotati on	7.8 7	0.116	44.9 7	1.7	1.02	1.29
GH06	4986 5	Site 8	Henan	yuanyang	Huanghuaihai Semihumid Plain	Rhizosphere	fluvo- aquic	NPK	WheatMaizeRotati on	7.7 8	0.121	32.3 1	1.6 1	0.48	1.4