

Leaf stoichiometry of halophyte shrubs and its relationship with soil factors in the Xinjiang desert

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Table S1 Geography information and climate characteristics of the sampling sites in the deserts of Xinjiang, China.

Site	LON	LAT	ALT	MAT	MAP
1	86°16'	44°28'	365	7.26	141
2	85°01'	45°17'	270	7.94	159
3	85°51'	46°14'	526	9.07	122
4	85°09'	45°43'	366	9.20	128
5	85°23'	45°55'	207	8.70	118
6	84°43'	45°10'	270	9.40	159
7	83°29'	44°34'	365	8.89	114
8	82°26'	41°36'	997	11.09	138
9	81°05'	41°23'	1024	10.95	94
10	80°49'	41°15'	984	10.72	83
11	81°14'	40°25'	975	11.50	50
12	81°02'	40°14'	1025	11.87	45
13	80°39'	40°45'	1024	11.41	53
14	81°56'	40°40'	980	11.58	70
15	83°17'	41°31'	958	11.60	118
16	85°13'	41°21'	916	11.50	64
17	86°09'	41°10'	878	11.73	52
18	88°11'	42°15'	892	10.04	75
19	90°32'	44°11'	870	6.61	91
20	90°33'	44°02'	958	5.85	94
21	91°19'	44°45'	766	8.14	70
22	90°49'	44°24'	905	7.39	83
23	90°08'	44°10'	756	6.86	110
24	90°03'	44°48'	563	8.68	109
25	89°00'	44°56'	571	8.05	146

Note: LON (°), longitude; LAT (°), latitude; ALT (km), altitude; MAT (°C), mean annual temperature; MAP (mm), mean annual precipitation.

Table S2 List of species sampled in the deserts of Xinjiang, China.

Species	Abbreviation	Family	Life form	Group	n
<i>Calligonum leucocladum</i>	<i>Cl.</i>	Polygonaceae	Shrub	Ps	35
<i>Halimodendron halodendron</i>	<i>Hh.</i>	Leguminosae	Shrub	Ps	5
<i>Halostachys caspica</i>	<i>Hc.</i>	Chenopodiaceae	Shrub	Eu	15
<i>Haloxylon ammodendron</i>	<i>Ha.</i>	Chenopodiaceae	Shrub	Eu	50
<i>Krascheninnikovia ewersmannia</i>	<i>Ke.</i>	Chenopodiaceae	Shrub	Se	10
<i>Lycium ruthenicum</i>	<i>Lr.</i>	Solanaceae	Shrub	Eu	25
<i>Nitraria tangutorum</i>	<i>Nt.</i>	Zygophyllaceae	Shrub	Eu	10
<i>Tamarix arceuthoides</i>	<i>Ta.</i>	Tamaricaceae	Shrub	Se	10
<i>Tamarix hispida</i>	<i>Th.</i>	Tamaricaceae	Shrub	Se	10
<i>Tamarix ramosissima</i>	<i>Tr.</i>	Tamaricaceae	Shrub	Se	55

Note: Eu, euhalophytes; Se, secretohalophytes; Ps, pseudohalophytes. n, sample size

Table S3 Leaf C, N, P content and C/N, C/P, N/P ratio of plants in various regions.

Regions	C (mg g ⁻¹)	N (mg g ⁻¹)	P (mg g ⁻¹)	C/N	C/P	N/P	References
Xinjiang's desert halophytes	409.3 ± 3.7	19.9 ± 0.4	1.3 ± 0.24	22.5 ± 10.6	232 ± 145	16.5 ± 0.3	This study*
China desert plants		24.4 ± 8.1	1.7 ± 0.9			15.8 ± 7.5	Li et al (2010)
China desert halophytes	396.7 ± 45.4	28.1 ± 9.4	1.9 ± 0.5	15.7 ± 5.6	229.4 ± 63.7	15.4 ± 3.7	Wang et al (2015)
China sand plants		34.1 ± 12.9	2.5 ± 0.8			13.8 ± 3.8	Zhang et al (2016)
Sonoran desert plants	434.8 ± 1.8	25.9 ± 0.8	1.5 ± 0.1	21.4 ± 0.7	324.7 ± 13.9	17.7 ± 0.8	Castellanos et al (2018)*
China's flora		20.2 ± 8.4	1.5 ± 1.0			16.3 ± 9.3	Han et al (2005)
Global flora	464. 0 ± 32.1	20.6 ± 12.2	2.0 ± 1.5	22.5 ± 10.6	232 ± 145	12.7 ± 6.8	Elser et al (2000)

Note: (Mean ± SD) of leaf C, N, P content and C/N, C/P, N/P are shown by the studies, except those marked with * which presented the (Mean ± SE). The references here are shown after the main text.