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Supplement of

Shift of seed mass and fruit type spectra along longitudinal gradient: high water availability and growth allometry

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Table S1

One-way ANOVA analysis of log seed mass of fleshy and dry fruited species for five community types

Ecosystem types	F values	<i>P</i> values
Forests	17.86	0.0133
Sparse forests	11.80	0.00093
Typical steppe	17.73	0.0001
Desert grasslands	13.08	0.0224
Desert	11.55	0.00679

Table S2

One-way ANOVA analysis of log seed mass of fleshy and dry fruited species for the 18 sampling sites having fleshy-fruited species

Sites	Average seed mass of fleshy fruited species	Average seed mass of dry fruited species	F values	<i>P</i> values
Qingyuan	179.66±437.49	26.51±112.62	17.73	7.01e-05
Liaoyuan	31.56±26.51	10.00±47.33	9.46	0.0029
Siping	27.52±21.43	12.57±67.26	21.33	8.52e-06
Kezuohouqi	22.12±7.65	2.51±3.56	8748	<2e-16
Chifeng	162.32±319.45	5.42±17.52	19.15	4.26e-05
Keqi	411.84±560.72	1.77±3.25	25.12	2.12e-06
Sanggendalai (Sparse forests)	10.74±5.97	3.71±11.74	11.80	0.00093
Sanggendalai (Typical grasslands)	10.93	3.51±6.71	-	-
Taipusiqi	5.87	2.16±4.50	-	-
Zhengxiangbaiqi	18.57±11.86	3.07±8.31	18.23	5.82e-05
Abagaqi	24.18	5.90±18.67	-	-
Huade	13.8	4.12±8.13	-	-
Xianghuangqi	31.26±26.42	3.33±6.43	10.85	0.0016
Wulanchabu	10.69±0.13	6.00±18.25	--	-
Suniteyouqi	13.81	9.00±20.44	-	-
Erlianhaote	28.64±13.62	10.12±15.97	17.73	7.01e-05
Wulatehouqi	43.48	5.81±12.09	-	-
Ejina	35.98±22.05	8.12±9.29	11.55	0.0068

Table S3

Unary linear regression analysis between proportion of 5 dispersal types (wind, unassisted, vertebrate, adhesion and ant) and longitude, MAP and MAT

	Longitude		MAP		MAT	
	R ²	<i>p</i>	R ²	<i>p</i>	R ²	<i>p</i>
Wind	0.001	0.8784	1.353	0.256	0.156	0.6976
Wind from desert to steppe	0.017	0.367	0.006	0.728	0.018	0.385
Wind from steppe to forest	0.004	0.786	0.092	0.193	0.002	0.854
Vertebrate	0.233	0.013	0.310	0.003	0.160	0.043
Vertebrate from desert to steppe	0.031	0.423	0.002	0.831	0.106	0.071
Vertebrate from steppe to forest	0.546	0.000	0.630	0.000	0.221	0.037
Ant	0.000	0.923	0.013	0.580	0.067	0.203
Ant from desert to steppe	0.013	0.605	0.000	0.957	0.048	0.913
Ant from steppe to forest	0.004	0.796	0.171	0.050	0.056	1.237
Unassisted	0.065	0.208	0.043	0.309	0.008	0.199
Unassisted from desert to steppe	0.064	0.660	0.031	0.419	0.002	0.048
Unassisted from steppe to forest	0.135	0.111	0.075	0.744	0.040	0.400
Adhesion	0.011	0.608	0.023	0.460	0.082	0.158
Adhesion from desert to steppe	0.001	0.880	0.002	0.860	0.070	0.223
Adhesion from steppe to forest	0.086	0.210	0.115	0.182	0.026	0.498

Figure S1

Proportion of species with different dispersal modes in 26 sample sites and 5 community types along longitudinal gradient

