

Supplementary Table S2 Fitting of *Hippophae rhamnoides* L. multi-growth factor growth model.

	model	a	b	c	d	b ₀	R ²	RSS
Ground diameter、chcanopy	$W=aD+bC+b_0$	0.476	0.009			-1.098	0.707	2.07
Ground diameter、plant height	$W=aD+bH+b_0$	0.16	0.908			-0.873	0.821	1.265
plant height、chcanopy	$W=aH+bC+b_0$	0.922	0.005			-0.919	0.825	1.236
Ground diameter、plant height	$a*(D^b)*(H^c)+b_0$	0.248	-0.105	2.694		0.013	0.924	0.54
Ground diameter、plant height	$a*(D^{0.1})*(H^c)+b_0$	0.228	0.1	2.488		0.006	0.923	0.542
Ground diameter、plant height	$a*(D^{0.5})*(H^c)+b_0$	0.188	0.5	2.126		-0.001	0.921	0.556
Ground diameter、plant height	$a*(D^2)*(H^c)+b_0$	0.057	2	1.246		0.061	0.897	0.73
Ground diameter、chcanopy	$a*(D^b)*(C^c)+b_0$	2.86E-06	1	2.531		0.038	0.852	1.044
plant height、chcanopy	$a*(H^b)*(C^c)+b_0$	1.65E-01	2.487	0.094		0.004	0.924	0.54
Three growth factors	$W=aD+bH+cC+b_0$	0.092	0.85	0.004		-0.945	0.888	1.218
Three growth factors	$W=aD^b*H^c*C^d+b_0$	0.173	0.1	2.415	0.071	0.002	0.923	0.541

Where D is the ground diameter (cm); H denotes plant height (m);C denoteschcanopy(cm).