

韩聪, 刘鹏, 母艳梅, 原媛, 郝少荣, 田赟, 查天山, 贾昕 (2022). 黑沙蒿灌丛生态系统碳平衡对昼夜非对称增温的响应. 植物生态学报, 46, 1473-1485. DOI: 10.17521/cjpe.2021.0485

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#### 附录VI 碳平衡组分对不同增温情景的响应

#### Supplement VI Responses of carbon balance components under different warming scenarios

##### 附录 VI-1 碳平衡组分对不同增温情景的响应(平均相对变化率, %)

##### Supplement VI-1 Mean relative changes of carbon balance components under different warming scenarios

	D1.2N1.8	D2N0	D0N2	D4N0	D0N4	D6N0	D0N6
HR	8.30	5.42	5.64	10.62	11.11	15.99	16.74
AR	11.87	8.58	7.36	17.54	14.93	27.36	23.14
MR	15.15	11.13	9.19	23.01	18.87	36.13	29.39
GR	4.23	2.68	3.06	4.90	5.75	7.17	8.60
GPP	7.86	5.52	5.08	10.97	10.07	16.85	15.41
Re	10.17	7.06	6.53	14.25	13.13	21.94	20.09
NEP	-68.21	-42.17	-39.84	-102.21	-94.97	-159.95	-146.78
NPP	3.67	2.33	2.67	4.19	4.95	5.99	7.31
CUE	-3.93	-3.05	-2.32	-6.17	-4.71	-9.42	-7.17

AR, 自养呼吸; CUE, 碳利用效率; GPP, 总初级生产力; GR, 生长呼吸; HR, 异养呼吸; MR, 维持呼吸; NEP, 净生态系统生产力; NPP, 净初级生产力; Re, 生态系统呼吸。D, 日间增温幅度; N, 夜间增温幅度。

AR, autotrophic respiration; CUE, carbon use efficiency; GPP, gross primary productivity; GR, growth respiration; HR, heterotrophic respiration; MR, maintenance respiration; NEP, net ecosystem productivity; NPP, net primary productivity; Re, ecosystem respiration. D, daytime warming extent; N, nighttime warming extent.

##### 附录 VI-2 碳平衡组分对不同增温情景的响应(平均年值, g C·m<sup>-2</sup>)

##### Supplement VI-2 Mean interannual variation of carbon balance components under different warming scenarios

	D0N0	D1.2N1.8	D2N0	D0N2	D4N0	D0N4	D6N0	D0N6
HR	164.46	178.07	173.34	173.71	181.85	182.66	190.55	191.80
AR	178.77	200.03	194.11	191.92	210.20	205.54	227.82	220.21
MR	123.98	142.87	137.84	135.44	152.64	147.51	168.98	160.60
GR	54.78	57.15	56.27	56.48	57.56	58.03	58.84	59.61
GPP	362.71	391.09	382.53	380.96	402.40	399.16	423.63	418.37
Re	343.23	378.10	367.45	365.62	392.05	388.20	418.37	412.01
NEP	19.48	12.99	15.07	15.33	10.36	10.97	5.26	6.36
NPP	183.94	191.06	188.41	189.04	192.21	193.63	195.81	198.16
CUE	0.504	0.485	0.489	0.493	0.474	0.481	0.458	0.469

HR, 异养呼吸; AR, 自养呼吸; MR, 维持呼吸; GR, 生长呼吸; GPP, 总初级生产力; Re, 生态系统呼吸; NEP, 净生态系统生产力; NPP, 净初级生产力; CUE, 碳利用效率。D, 日间增温幅度; N, 夜间增温幅度。

HR, heterotrophic respiration; AR, autotrophic respiration; MR, maintenance respiration; GR, growth respiration; GPP, gross primary productivity; Re, ecosystem respiration; NEP, net ecosystem productivity; NPP, net primary productivity; CUE, carbon use efficiency. D, daytime warming extent; N, nighttime warming extent.