

**Table S1** Sample sizes for each treatment combination

Focal RHP	Opponent RHP	Resource Value	No. pairs
Hypoxic	Normoxic	Flow	7
Hypoxic	Normoxic	No Flow	8
Normoxic	Hypoxic	Flow	7
Normoxic	Hypoxic	No Flow	9
Hypoxic	Hypoxic	Flow	8
Hypoxic	Hypoxic	No Flow	8
Normoxic	Normoxic	Flow	8
Normoxic	Normoxic	No Flow	11
		<i>N</i> =	66

**Table S2** Significance test from general linear models (GLMs) examining the effects of relative size difference and relative nematocyst length (escalated fights only) on contest dynamics.

<b>Relative size difference</b>			
Response variable	$\chi^2$	df	P-value
Likelihood of escalation	0.45	1	0.502
Focal outcome	0.60	1	0.438
Attack type	1.22	1	0.270
Likelihood of focal attack	1.66	1	0.198
No. peels inflicted by focal	0.12	1	0.905
Contest duration	0.14	1	0.681
<b>Relative nematocyst length</b>			
Response variable	$\chi^2$	df	P-value
Focal outcome	2.72	1	0.10
Attack type	1.07	1	0.31
Likelihood of focal attack	0.65	1	0.42
No. peels inflicted by focal	6.82	1	0.38

**Table S3** Significance test from the general linear model (GLM) to examine the effect of focal RHP, opponent RHP and resource value (RV) on the likelihood of the focal individual inflicting an attack. Marginally significant effects are printed in italics.

Effect	$\chi^2$	df	P-value
Focal RHP*Opponent RHP*RV	0.12	1	0.733
Focal RHP*RV	0.84	1	0.361
<i>Opponent RHP*RV</i>	<i>3.65</i>	<i>1</i>	<i>0.056</i>
RV	1.46	1	0.227
Focal RHP*Opponent RHP	0.84	1	0.358
Opponent RHP	0.33	1	0.567
Focal RHP	2.72	1	0.099

**Table S4** Significance test from the general linear model (GLM) to examine the effect of focal RHP, opponent RHP and resource value (RV) on the number of peels inflicted by the focal individual. Significant effects are printed in bold.

Effect	$\chi^2$	df	P-value
Focal RHP*Opponent RHP*RV	7.96	1	0.274
Focal RHP*RV	2.40	1	0.549
Opponent RHP*RV	7.60	1	0.274
<b>Focal RHP*Opponent RHP</b>	<b>42.11</b>	<b>1</b>	<b>0.010</b>
RV	3.01	1	0.491