

Table S1. Analysis of variance for the response surface models for dry biomass, lipid content and lipid yield of *A. carneus*.

Source	Dry Biomass					Lipid Content					Lipid Yield				
	SS	df	MS	F Value	p-Value Prob.> F	SS	df	MS	F Value	p-Value Prob.> F	SS	df	MS	F Value	p-Value Prob.> F
Model	0.0322	7	0.0046	16.82	0.0015 *	2371.0	7	338.7	6.90	0.016 *	194.6	6	58.2	6.45	0.013 *
Residual	0.0016	6	0.0003			294.7	6	49.1			35.21	7	5.03		
Lack of Fit	0.0016	5	0.0003	6.36	0.292 **	293.5	5	58.7	45.49	0.112 **	34.63	6	5.77	9.79	0.24 **
Pure Error	0.0001	1	0.0001			1.3	1	1.3			0.59	1	0.59		
Correlation Total	0.0338	13				2665.8	13				229.80	13			
R²				0.952					0.889					0.847	
adjusted-R²				0.895					0.760					0.715	
predicted-R²				0.607					0.123					0.179	
Adeq. Precision				12.26					8.716					9.295	
Coefficient of variation (C.V. %)				27.42					55.28					43.76	
Mean				0.06					12.68					5.12	

df: Degree of freedom; SS: Sum of Squares; MS: Mean Square; * Significant values; ** Non-significant values.