

A *H. lacustris* NIES-144

ANOVA: single factor					
Summary					
Groups	Count	Sum	Average	Variance	
<i>H. lacustris</i> NIES-144	43	1,038.2	24.14418605	30.55776301	
<i>H. privus</i> HP138	43	1,319.4	30.68372093	70.08996678	
<i>H. privus</i> HP137	43	1,203.4	27.98604651	78.77551495	
<i>H. privus</i> HP136	43	1,374.8	31.97209302	68.52682171	

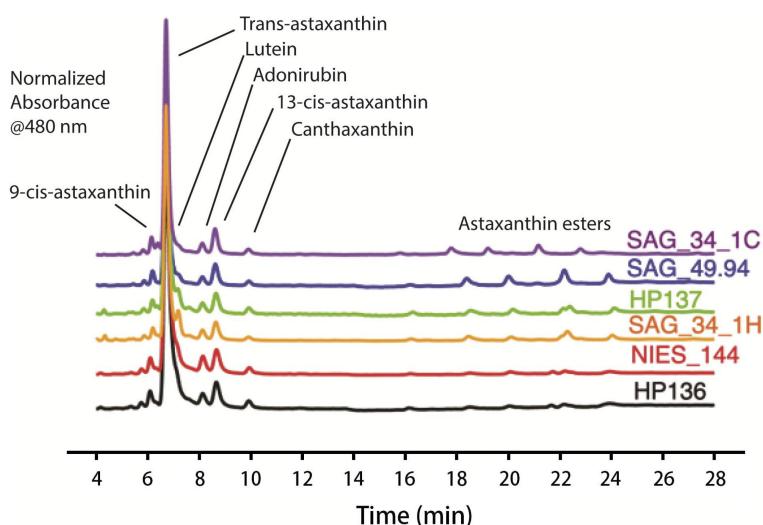
ANOVA						
Source of variation	SS	df	MS	F	p-value	F crit
Between groups	1,543.995		3 514.6650388	8.302720723	3.5064E-05	2.658398986
Within groups	10,413.9		168 61.98751661			
Total	11,957.9		171			

B *H. lacustris* SAG 49.94

ANOVA: single factor					
Summary					
Groups	Count	Sum	Average	Variance	
<i>H. privus</i> HP138	43	1,319.4	30.68372093	70.08996678	
<i>H. privus</i> HP137	43	1,203.4	27.98604651	78.77551495	
<i>H. privus</i> HP136	43	1,374.8	31.97209302	68.52682171	
<i>H. lacustris</i> SAG 49.94	43	840.6	19.54883721	15.28112957	

ANOVA						
Source of variation	SS	df	MS	F	p-value	F crit
Between groups	4,024.105		3 1,341.368295	23.06010235	1.49427E-12	2.658398986
Within groups	9,772.284		168 58.16835825			
Total	13,796.39		171			

Supplementary Fig. S9. ANOVA single factor analysis of akinete diameter variance for the three isolates of *Haematococcus privus* and *H. lacustris* (A, NIES-144; B, SAG 49.94).



Supplementary Fig. S10. Representative chromatograms from high-performance liquid chromatography analysis of six *Haematococcus* strains at 480 nm normalized to the astaxanthin peak. Putative peak identification is included. SAG_34_1C = *H. rubicundus*; SAG_49.94 = *H. lacustris*; HP137 = *H. privus* sp. nov.; SAG_34_1H = *H. rubens*; NIES_144 = *H. lacustris*; HP136 = *H. privus* sp. nov.