

## Supporting Table S7

Linear discriminant analysis output for Fig. 3. According to the MANOVA test, Microalgae, Phaeophyceae, Rhodophyta and Seagrass are significantly different: Pillai Trace=1.44,  $F_{12,147}=11.24$   $P<0.001$ .

### Coefficients of linear discriminants

	LD1	LD2	LD3
Ile	0.12	-0.08	0.46
Leu	-0.49	-0.75	-0.56
Lys	0.39	0.20	-0.64
Phe	-0.78	0.43	0.21
Val	0.77	0.38	0.40

### Proportion of trace

	LD1	LD2	LD3
	0.51	0.35	0.14

### Posterior probabilities of the classifier samples.

ID	Actual	Predicted (% probability)			
		Microalgae	Phaeophyceae	Rhodophyta	Seagrass
C1	Microalgae	1.3	9.6	<b>55.8</b>	33.4
C2	Microalgae	<b>97.3</b>	0.1	2.7	0.0
C3	Microalgae	<b>73.9</b>	2.0	3.9	20.3
C4	Microalgae	34.4	6.5	<b>59.0</b>	0.0
D1	Microalgae	<b>85.2</b>	14.8	0.0	0.0
D2	Microalgae	<b>96.6</b>	0.3	3.1	0.0
D3	Microalgae	<b>84.4</b>	0.0	9.3	6.3
D4	Microalgae	<b>99.6</b>	0.1	0.3	0.0
D5	Microalgae	<b>71.3</b>	28.5	0.0	0.2
H1	Microalgae	<b>91.6</b>	0.2	2.9	5.2
H2	Microalgae	<b>87.3</b>	4.0	8.6	0.0
H3	Microalgae	<b>78.8</b>	21.1	0.0	0.1
H4	Microalgae	<b>89.5</b>	0.6	9.9	0.0
K1	Microalgae	<b>92.4</b>	7.0	0.0	0.6
K2	Microalgae	<b>94.5</b>	4.8	0.7	0.0
K3	Microalgae	2.0	<b>97.9</b>	0.1	0.0
K4	Microalgae	40.5	11.2	<b>46.0</b>	2.3
K5	Microalgae	<b>98.3</b>	0.7	1.0	0.0
K6	Microalgae	<b>97.9</b>	1.1	1.0	0.0
N1	Microalgae	<b>99.5</b>	0.2	0.2	0.0
N2	Microalgae	<b>95.8</b>	0.1	4.2	0.0
N3	Microalgae	<b>98.9</b>	0.1	1.0	0.0
X1	Microalgae	<b>90.5</b>	9.5	0.0	0.0
X2	Microalgae	<b>98.0</b>	2.0	0.0	0.0
X3	Microalgae	<b>51.1</b>	0.0	48.9	0.0
X4	Microalgae	2.3	<b>97.7</b>	0.0	0.0
Y1	Microalgae	<b>98.2</b>	0.3	1.5	0.0
P1	Phaeophyceae	31.9	<b>67.8</b>	0.1	0.2
P10	Phaeophyceae	<b>59.2</b>	35.4	5.4	0.0
P11	Phaeophyceae	29.2	<b>70.8</b>	0.0	0.0
P12	Phaeophyceae	3.8	<b>95.8</b>	0.4	0.0
P2	Phaeophyceae	6.9	<b>93.0</b>	0.0	0.0
P3	Phaeophyceae	39.2	<b>60.6</b>	0.2	0.0
P4	Phaeophyceae	22.3	<b>77.5</b>	0.2	0.0
P6	Phaeophyceae	1.7	<b>98.3</b>	0.0	0.0
P7	Phaeophyceae	4.7	<b>95.3</b>	0.0	0.0

(Table S7 continued)

ID	Actual	Predicted (% probability)			
		Microalgae	Phaeophyceae	Rhodophyta	Seagrass
P8	Phaeophyceae	0.8	<b>99.2</b>	0.0	0.0
P9	Phaeophyceae	<b>75.5</b>	24.5	0.0	0.0
R1	Rhodophyta	6.6	1.1	<b>91.5</b>	0.8
R2	Rhodophyta	0.0	0.0	<b>99.9</b>	0.0
R3	Rhodophyta	3.5	0.0	<b>96.4</b>	0.0
R4	Rhodophyta	<b>98.9</b>	0.2	1.0	0.0
R5	Rhodophyta	4.3	0.0	<b>95.7</b>	0.0
R6	Rhodophyta	7.4	0.0	<b>92.5</b>	0.0
R7	Rhodophyta	12.3	1.6	<b>86.1</b>	0.0
R8	Rhodophyta	7.6	0.0	<b>79.7</b>	12.7
R9	Rhodophyta	<b>65.2</b>	20.1	14.6	0.0
S1	Seagrass	0.0	0.0	0.0	<b>100.0</b>
S2	Seagrass	0.1	0.0	0.0	<b>99.9</b>
S3	Seagrass	0.0	0.0	0.0	<b>100.0</b>
S4	Seagrass	8.0	0.2	0.5	<b>91.3</b>
S5	Seagrass	0.6	0.0	0.0	<b>99.4</b>
S6	Seagrass	0.0	0.0	0.2	<b>99.8</b>
S7	Seagrass	0.0	0.0	0.0	<b>99.9</b>