

Photosynthetic pigment changes and adaptations in biofilms in response to flow intermittency

Aquatic Sciences

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Supplementary Table S1

a) Pigment composition upstream reach on epilithic (EL), epipsammic (ES) and hyporheic (H) biofilms (numbers indicate the different sampling date) for each hydrological phase.

Values are pigment concentration in ng cm^{-2}

PIGMENT	<i>Drying</i>								<i>Non-flow</i>						
	1 EL	2 EL	3 EL	4 EL	5 EL	6 EL	7 EL	8 EL	9 EL	10 EL	11 EL	12 EL	13 EL	14 EL	15 EL
B,B-carotene	22.2	14.8	25.0	13.9	24.4	25.0	26.8	8.7	14.7	9.8	3.5	7.1	12.7	26.1	19.7
car-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.2	0.0	0.0	1.8
Chlorophyll-a	240.1	318.6	765.5	227.6	380.3	742.7	416.1	42.5	119.3	115.8	44.6	19.2	31.7	273.3	56.7
Chlorophyll-a allomer 1	0.0	5.1	18.7	9.1	6.8	13.3	11.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-b	162.2	293.4	119.3	129.7	150.0	149.4	177.1	51.9	131.8	79.9	29.0	27.2	25.7	173.3	86.5
Chlorophyll-c ₁	5.4	0.0	12.3	6.8	6.7	12.5	26.1	3.1	5.2	10.1	0.0	0.0	0.0	0.0	0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-c ₂	3.1	0.0	8.8	4.8	5.3	8.8	16.0	2.6	3.1	3.8	0.0	0.0	0.0	0.0	0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diadinoxanthin	0.0	0.0	7.1	0.0	3.3	7.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diatoxanthin	0.0	0.0	1.6	0.0	1.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	5.3
Echinenone	0.0	0.0	0.0	0.0	7.4	7.4	6.2	0.0	0.0	5.3	3.5	9.9	8.1	17.4	10.3
Fucoxanthin	57.1	11.9	120.7	69.4	76.1	121.6	205.6	48.9	98.1	106.4	9.0	0.0	11.9	7.4	4.1
Lutein	59.2	61.8	36.6	27.7	44.8	38.6	33.1	10.0	33.2	31.6	7.7	10.7	8.7	58.9	24.0
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	12.5	8.4
Neoxanthin	19.8	9.5	4.9	5.7	9.4	8.7	11.2	8.7	20.9	13.4	2.2	0.0	0.0	12.4	5.1
Phaeophorbide-a ₁	50.6	25.3	14.3	10.8	26.1	16.3	15.9	9.7	0.0	19.1	12.4	0.0	14.2	16.3	11.3
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophythin-a ₁	425.4	423.3	173.3	363.1	447.8	242.4	664.1	279.0	422.6	418.9	104.2	171.6	265.7	482.8	486.9
Phaeophythin-a ₂	27.2	25.3	21.6	31.3	34.2	16.5	45.7	22.8	24.5	26.3	12.1	30.5	18.5	41.0	23.4
Phaeophythin-b ₁	27.2	25.3	21.6	31.3	34.2	16.5	45.7	22.8	24.5	26.3	12.1	30.5	18.5	41.0	23.4
Phaeophythin-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scytonemin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	20.5	12.0	21.8	0.0
Violaxanthin	10.7	9.5	4.3	2.5	2.8	6.9	2.0	0.0	0.9	0.0	0.0	0.0	0.0	1.7	1.1
Zeaxanthin	34.8	0.0	28.1	7.9	28.6	25.0	20.4	5.3	14.1	16.6	4.3	0.0	0.0	21.8	7.8

PIGMENT	<i>Non-flow</i>							<i>Rewetting</i>						
	9 ES	10 ES	11 ES	12 ES	13 ES	14 ES	15 ES	16 ES	17 ES	18 ES	19 ES	20 ES	21 ES	22 ES
B,B-carotene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-11	0.0	1.5	1.4	0.0	1.4	1.3	1.0	0.0	1.1	0.0	0.7	1.0	2.0	0.7
car-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-a	74.4	120.3	73.6	82.1	104.5	115.3	22.0	157.7	45.0	93.6	24.3	53.9	45.8	13.7
Chlorophyll-a allomer 1	0.0	0.0	11.4	11.7	3.9	5.0	0.0	12.7	0.0	9.7	0.0	0.0	0.0	0.0
Chlorophyll-b	26.9	20.7	16.0	11.7	22.2	28.4	17.6	40.8	23.2	23.8	16.0	20.7	33.8	12.1
Chlorophyll-c ₁	0.0	7.1	4.1	5.8	6.8	6.4	0.0	5.5	2.0	4.5	1.5	2.0	3.3	0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	2.7	2.2	2.7	0.0	1.9	0.0	2.1	0.0	0.0	0.0	0.0
Chlorophyll-c ₂	0.0	3.7	1.9	3.3	3.4	3.6	0.0	2.9	1.4	2.3	0.8	0.8	2.2	0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diadinoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diatoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Echinenone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fucoxanthin	30.0	59.7	55.0	77.6	68.9	82.5	5.1	71.8	46.9	78.5	22.3	40.5	46.5	6.6
Lutein	11.7	11.5	9.9	7.2	22.3	13.6	5.1	27.3	7.0	6.9	6.5	9.3	10.4	3.8
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophorbide-a ₁	20.4	39.1	17.3	30.8	120.0	41.8	11.6	159.6	27.3	26.1	36.8	30.5	24.3	11.2
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	0.0	0.0	5.8	0.0	0.0	0.0
Phaeophythin-a ₁	146.1	238.4	210.9	222.3	338.2	253.7	56.7	262.1	177.6	166.2	122.3	186.3	235.7	78.3
Phaeophythin-a ₂	9.8	22.3	0.0	0.0	0.0	0.0	2.2	15.2	12.2	10.1	7.9	8.8	10.6	5.5
Phaeophythin-b ₁	10.6	12.0	19.6	24.5	37.0	12.8	5.5	91.4	13.6	8.1	9.6	21.7	13.6	4.4
Phaeophythin-b ₂	0.0	0.0	13.1	10.2	20.8	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scytonemin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violaxanthin	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zeaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PIGMENT	<i>Drying</i>								<i>Non-flow</i>						
	1 H	2 H	3 H	4 H	5 H	6 H	7 H	8 H	9 H	10 H	11 H	12 H	13 H	14 H	15 H
B,B-carotene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-11	0.0	0.0	0.2	1.4	0.6	1.2	1.1	0.0	0.0	2.7	1.5	1.2	1.3	0.7	0.0
car-8	0.0	0.0	0.0	0.9	0.0	0.5	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-a	52.0	39.7	83.4	40.3	31.6	46.8	71.9	10.9	10.6	38.5	26.8	25.8	23.6	14.6	8.6
Chlorophyll-a allomer 1	4.3	0.0	3.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-b	8.3	14.3	11.0	15.1	12.4	13.9	17.6	5.0	4.6	29.4	17.4	12.7	17.0	8.9	11.3
Chlorophyll-c ₁	1.1	1.8	3.4	2.3	1.0	2.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-c ₂	0.4	1.4	1.9	0.9	0.4	1.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diadinoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diatoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Echinenone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fucoxanthin	14.2	31.2	37.1	22.4	9.8	21.6	32.5	3.2	1.7	9.0	8.0	8.6	3.8	7.3	0.0
Lutein	2.3	5.5	4.4	9.3	4.0	6.3	7.9	2.0	0.0	13.8	10.9	7.5	9.6	5.9	1.6
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophorbide-a ₁	4.6	8.9	22.1	24.6	11.7	12.8	22.4	5.8	5.3	16.6	23.3	18.9	11.4	14.4	4.9
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophythin-a ₁	40.6	74.4	76.4	186.7	78.5	110.2	94.1	18.2	1.8	151.9	113.4	105.0	99.9	83.5	31.0
Phaeophythin-a ₂	8.9	3.7	1.6	13.4	5.7	8.5	8.8	1.4	1.8	13.1	0.0	0.0	0.0	0.0	2.0
Phaeophythin-b ₁	3.4	5.9	7.8	13.9	8.9	9.3	6.8	1.3	14.0	16.5	10.8	11.8	12.5	8.6	4.3
Phaeophythin-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	8.5	5.4	5.6	0.0
Scytonemin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violaxanthin	3.3	0.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zeaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Supplementary Table S1

b) Pigment composition downstream reach on epilithic (EL), epipsammic (ES) and hyporheic (H) biofilms (numbers indicate the different sampling date) for each hydrological phase.

Values are pigment concentration in ng cm^{-2}

PIGMENT	<i>Drying</i>								<i>Non-flow</i>						
	1 EL	2 EL	3 EL	4 EL	5 EL	6 EL	7 EL	8 EL	9 EL	10 EL	11 EL	12 EL	13 EL	14 EL	15 EL
Aphanizophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
B,B-carotene	26.1	21.9	18.6	11.0	6.9	8.1	17.5	9.4	0.0	0.0	0.0	14.7	6.4		9.2
car-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-10	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-11	0.0	5.6	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	2.8	0.0		0.0
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	1.9	0.0	2.4	0.0	0.0	0.0	0.0	2.2		1.1
Chlorophyll-a	152.1	472.6	386.7	472.6	118.0	111.1	390.2	148.2	20.9	26.5	11.8	107.2	43.8		49.4
Chlorophyll-a allomer 1	0.0	0.0	0.0	11.9	0.0	0.0	7.2	6.3	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-b	149.7	225.2	152.7	76.7	43.0	54.3	119.0	38.8	17.3	12.6	11.7	47.7	20.3		24.5
Chlorophyll-c ₁	27.4	23.7	6.2	18.0	6.2	3.7	7.4	8.4	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-c ₂	21.4	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Diadinoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Diatoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Echinenone	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.9	0.0	0.0	0.0	5.6	5.4		3.6
Fucoxanthin	310.5	169.3	53.9	224.9	85.7	43.4	79.8	184.2	26.7	12.9	7.0	9.9	4.4		4.3
Lutein	72.2	45.9	66.8	26.6	11.4	24.6	20.5	13.7	4.4	2.0	2.7	15.6	5.9		10.0
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	5.4		4.9
Neoxanthin	6.5	4.4	7.4	0.0	2.4	2.3	9.0	0.0	0.0	0.0	0.0	2.0	0.0		0.9
Phaeophorbide-a ₁	264.2	171.6	43.0	76.2	39.6	58.2	50.4	81.7	0.0	0.0	0.0	21.4	21.9		24.3
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophorbide-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophythin-a ₁	828.9	762.8	426.7	282.6	172.8	207.2	283.8	167.0	96.2	48.0	54.1	219.7	125.6		155.0
Phaeophythin-a ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophythin-b ₁	65.5	51.4	14.3	13.5	6.7	11.8	15.3	11.7	7.8	0.0	0.0	33.4	10.7		34.9
Phaeophythin-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Scytonemin	0.0	11.7	11.5	27.0	30.3	49.0	27.5	44.3	76.6	31.7	14.5	53.1	93.9		29.9
Violaxanthin	0.0	0.0	2.5	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Zeaxanthin	31.2	16.4	0.0	15.2	5.4	0.0	6.2	6.1	0.0	0.0	0.0	7.4	3.5		0.0

PIGMENT	<i>Drying</i>								<i>Non-flow</i>						
	1 H	2 H	3 H	4 H	5 H	6 H	7 H	8 H	9 H	10 H	11 H	12 H	13 H	14 H	15 H
Aphanizophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
B,B-carotene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0	0.0		0.0
car-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
car-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.4	0.0		0.5
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-a	12.1	20.3	30.8	36.5	37.1	14.4	16.3	39.8	29.6	44.8	18.3	51.5	21.4		13.9
Chlorophyll-a allomer 1	0.0	0.0	0.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0		0.0
Chlorophyll-b	5.7	7.3	9.4	7.3	5.4	4.5	4.7	15.4	18.4	37.4	10.4	38.0	12.4		0.0
Chlorophyll-c ₁	0.0	0.8	1.7	1.0	1.4	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyll-c ₂	0.0	0.3	0.8	0.4	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Diadinoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Diatoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Echinenone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Fucoxanthin	3.6	9.0	15.3	10.7	19.5	6.7	7.6	7.2	7.6	9.4	9.8	13.7	9.1		5.7
Lutein	1.1	3.0	3.0	1.9	2.6	1.3	1.0	7.6	6.8	32.0	3.2	11.3	5.9		5.8
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Neoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophorbide-a ₁	0.0	17.3	12.9	12.4	13.8	9.7	6.7	31.2	28.2	161.1	28.9	44.9	22.7		39.9
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophorbide-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Phaeophythin-a ₁	25.9	52.1	50.0	42.9	35.5	29.2	34.9	90.4	140.6	171.5	112.8	176.1	92.3		75.2
Phaeophythin-a ₂	0.0	3.0	2.5	2.8	3.0	2.7	3.5	8.8	10.0	6.7	7.1	14.5	4.0		4.3
Phaeophythin-b ₁	0.0	4.5	3.7	2.8	3.4	3.8	2.9	8.4	15.3	10.1	10.6	20.9	11.3		12.3
Phaeophythin-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Scytonemin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Violaxanthin	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Zeaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

PIGMENT	<i>Rewetting</i>						
	16 H	17 H	18 H	19 H	20 H	21 H	22 H
Aphanizophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B,B-carotene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
car-11	0.0	0.0	0.0	0.0	3.1	0.9	0.8
Canthaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-a	5.2	11.8	6.4	4.2	13.9	16.9	18.8
Chlorophyll-a allomer 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-b	0.0	11.0	5.1	5.2	10.4	12.3	16.4
Chlorophyll-c ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-c ₂ R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyll-c ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chlorophyllide-a	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diadinoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diatoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Echinenone	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fucoxanthin	0.0	0.0	1.1	0.0	1.5	2.5	1.1
Lutein	0.8	3.4	0.9	0.9	17.3	5.6	4.2
Myxoxanthophyll	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neoxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophorbide-a ₁	0.0	6.6	6.0	5.6	8.3	20.0	14.8
Phaeophorbide-b ₁	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophorbide-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phaeophythin-a ₁	24.1	51.7	24.9	24.7	66.7	49.2	65.0
Phaeophythin-a ₂	2.0	3.0	1.7	1.3	4.7	3.0	3.9
Phaeophythin-b ₁	2.7	5.4	2.7	3.1	7.3	4.8	6.5
Phaeophythin-b ₂	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scytonemin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zeaxanthin	0.0	0.0	0.0	0.0	0.0	0.0	0.0