Phytoplankton strategies to exploit nutrients in coastal lagoons with different eutrophication status during re-oligotrophication

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Table S1. Potential production coefficients due to internal stores (K_I), recycled (K_R), and external pools (K_E) estimated by mixed-effect multiple linear regressions of equation (5) according to apparent growth rates, based on chl *a* concentration from dilution experiment without N or P addition. Values obtained for total phytoplankton and decomposed for micro-, nano- and ultraphytoplankton in oligo- (AYR), meso- (IN) and hypertrophic (MW) lagoons. *n*: number of observations used to construct the model. Values of AIC_c, ΔAIC_c, and AIC_c–w describe the parsimony of the model.

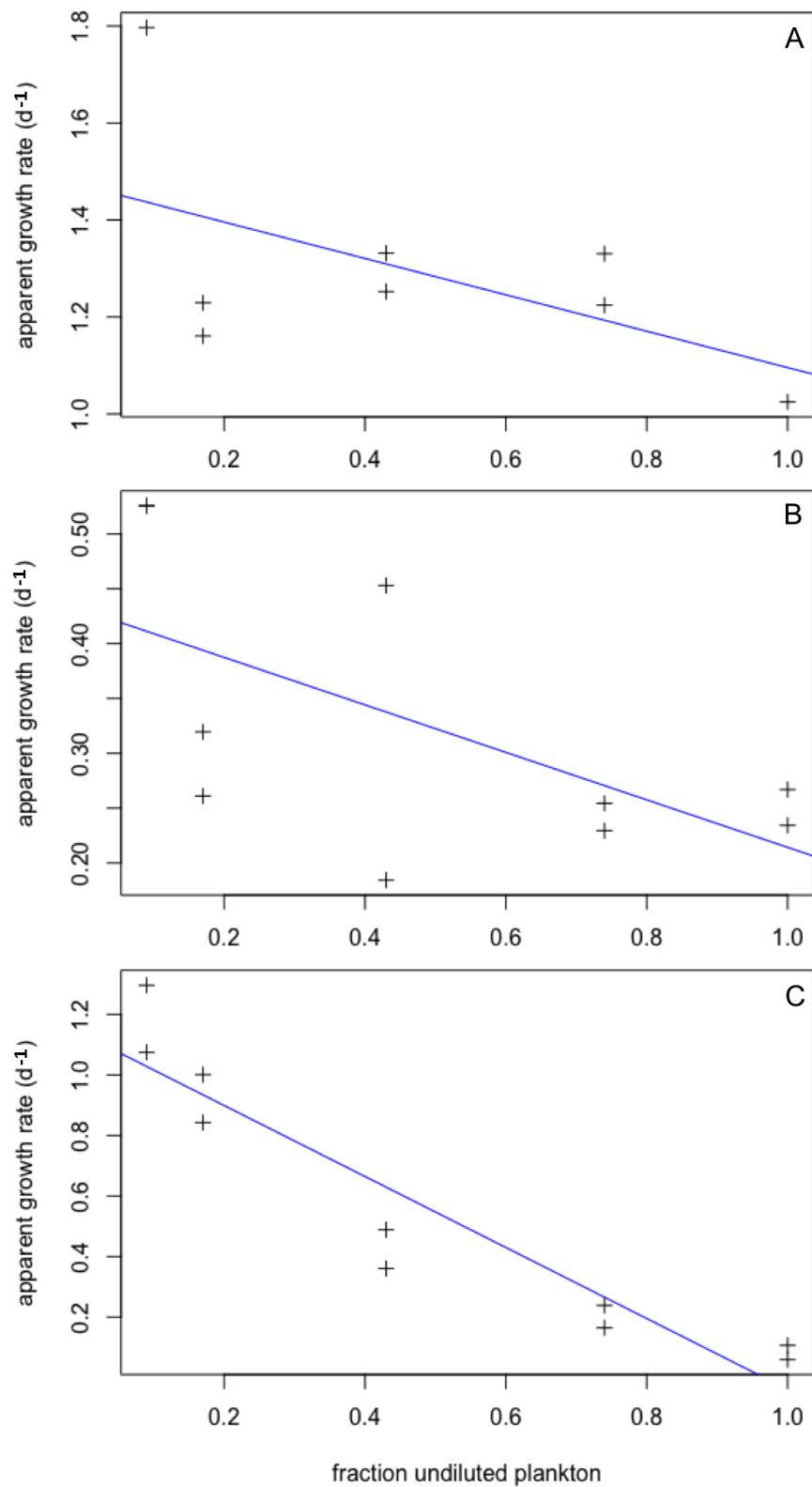| Limiting nutrient	Lagoon	Fraction	$\mu_{(-N : -P)}$	K_I	K_R	K_E	n	AIC_c	ΔAIC_c	AIC_c -w
N	AYR	Total	-1.06	-0.66	0.19	0.00	7	-9.8	0.73	0.35
		Micro-	-	-	-	-	-	-	-	-
		Nano-	1.48	11.1	0.00	0.00	10	82.5	0.00	0.54
		Ultra-	0.91	1.77	0.00	0.00	8	31.3	0.00	0.86
	IN	Total	0.21	0.09	0.00	0.02	10	-8.7	0.00	0.49
		Micro-	0.66	0.72	3.74	0.00	10	28.7	0.00	0.94
		Nano-	0.20	-0.51	0.00	0.08	10	1.8	0.00	0.88
		Ultra-	0.16	0.17	0.00	0.00	10	-5.5	0.00	0.78
	MW	Total	-0.01	-0.14	1.72	0.00	10	-0.8	0.00	0.74
		Micro-	-0.21	0.57	0.00	0.00	10	36.1	0.00	0.57
		Nano-	0.85	0.93	0.00	0.00	9	39.5	0.00	0.84
		Ultra-	0.00	-0.08	1.47	0.00	9	-6.4	0.00	0.97
P	AYR	Total	0.76	1.16	0.57	0.00	10	8.1	0.00	0.41
		Micro-	1.54	-6.79	76.9	0.00	10	75.8	0.00	0.66
		Nano-	1.18	3.60	0.00	0.00	7	52.6	0.00	0.94
		Ultra-	0.13	2.16	0.00	0.00	10	42.5	0.00	0.78
	IN	Total	0,26	-0.19	0.55	0.05	10	-5.5	0.00	0.43
		Micro-	1.52	0.29	6.10	0.36	10	32.7	0.00	0.84
		Nano-	-0.08	-0.29	0.00	0.00	10	5.7	0.00	0.54
		Ultra-	0.13	0.23	0.00	0.00	10	7.6	0.00	0.76
	MW	Total	1.25	1.00	0.00	0.17	10	27.4	0.00	0.68
		Micro-	2.10	5.07	20.8	0.00	9	73.0	0.06	0.35
		Nano-	1.35	0.31	0.00	0.00	10	56.6	0.00	0.66
		Ultra-	1.13	-0.19	0.00	0.23	10	12.6	0.00	0.83

Fig. S1. Apparent growth rate as a function of the dilution factor in bioassays with full enrichment with phosphate and ammonium in Ayrolle (A), North Ingril (B) and West Méjean (C) in September 2014. The line corresponds to the linear equation $k(x) = \mu - gx$, with k the apparent growth rate, x the fraction of undiluted plankton, μ (as Y axis intercept) the growth rate, and g the grazing rate.