

Supplemental Information

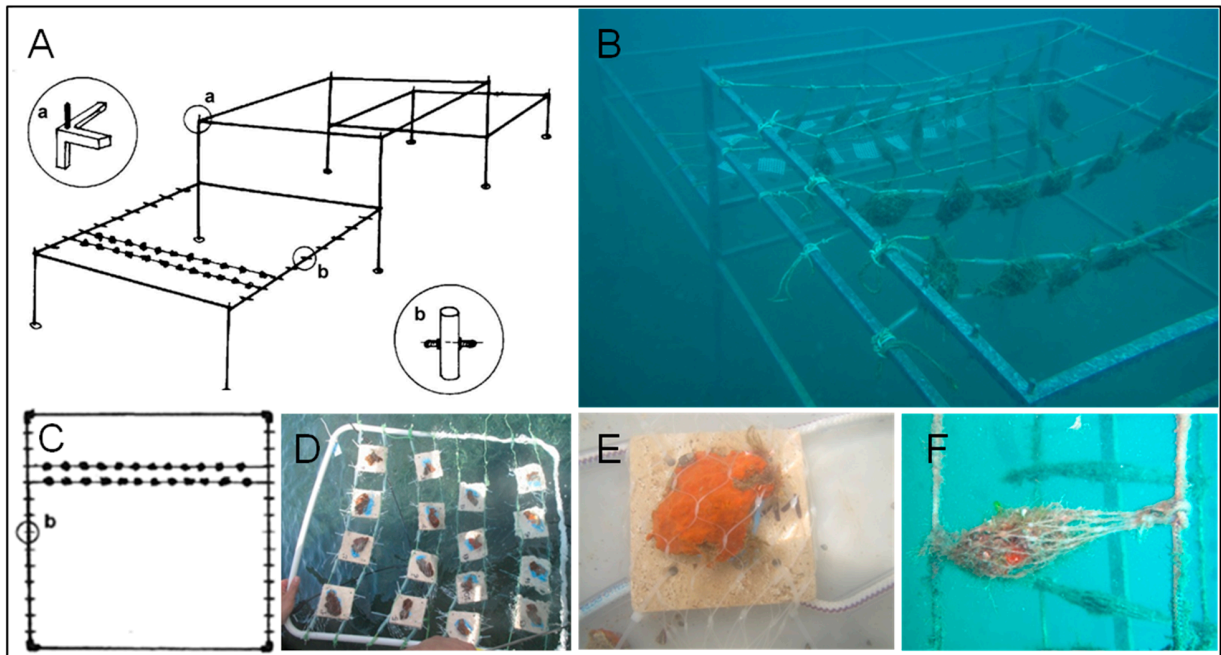


Figure 1. *Crambe crambe* farming structures - A and B: stainless steel plant, C and D: PVC structure, 'sponge necklace' methods E: Travertine Tile, F: Mesh.

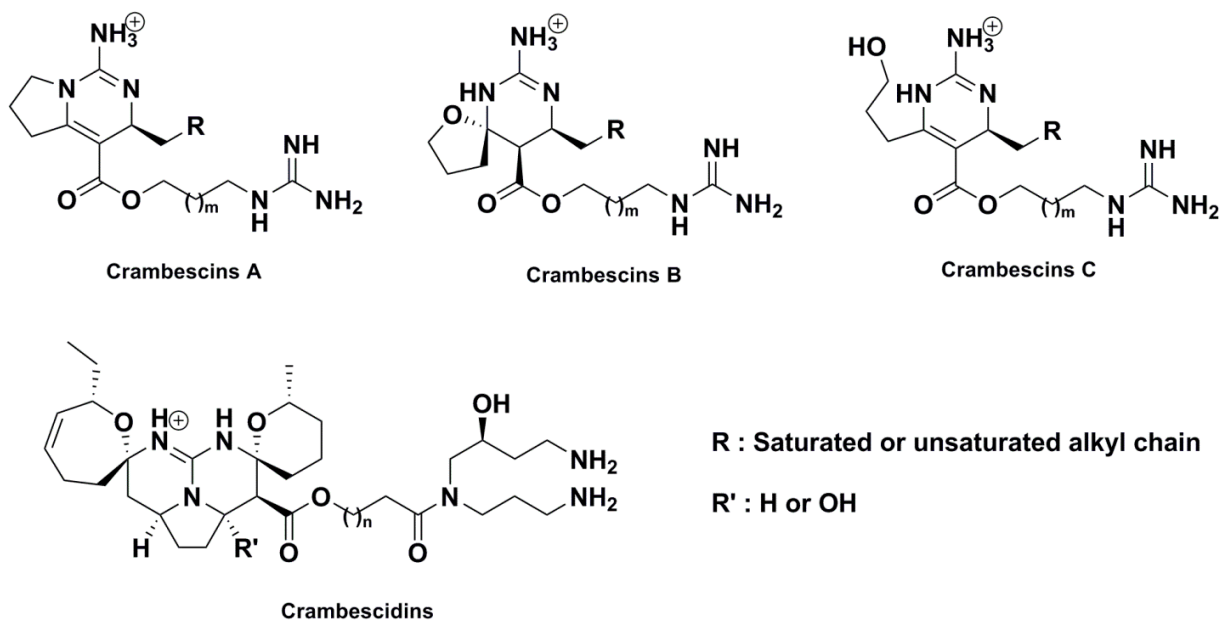


Figure S 2. Structure of the members of the two chemical families crambescins and crambescidins

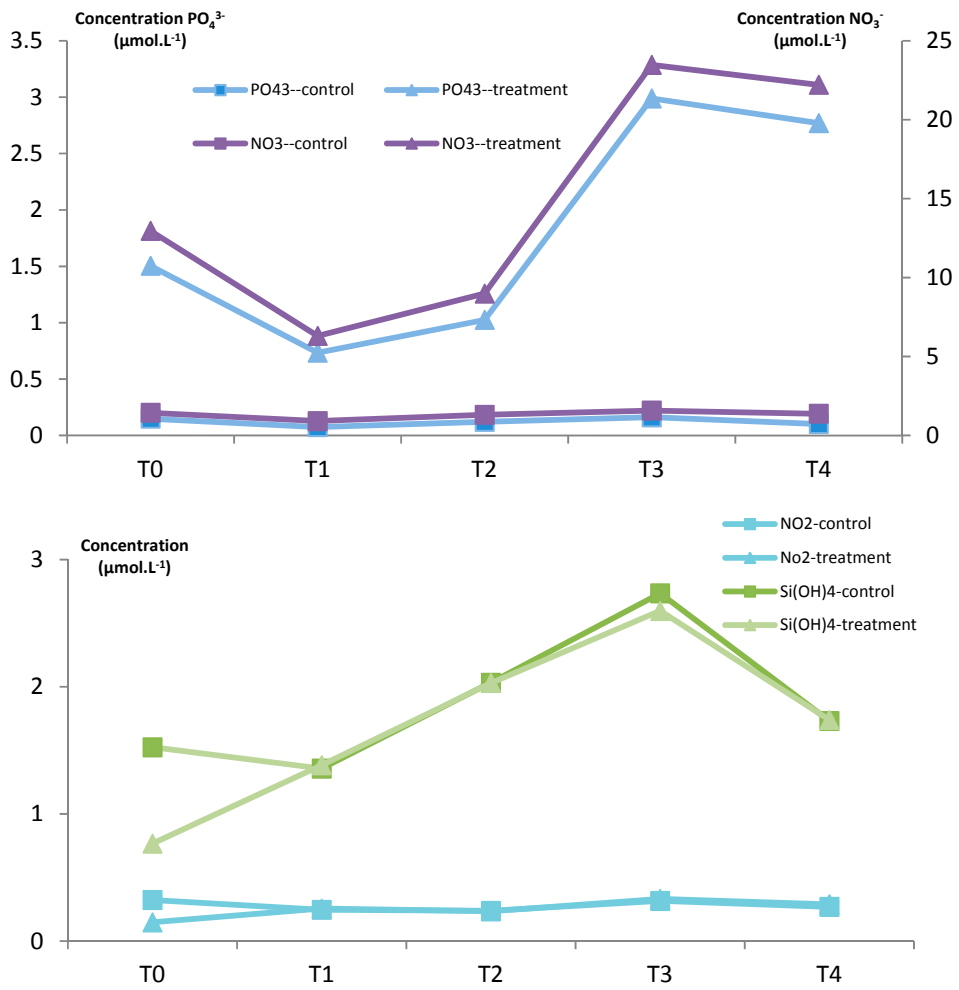


Figure 3. Evolution of the concentration ($\mu\text{mol.L}^{-1}$) of the inorganic nutrients (PO_4^{3-} , NO_3^- , NO_2^- and Si(OH)_4) in the control (square) and the treated (triangle) aquaria during the nutrients experiment.

Table 1. Theoretical m/z and associated molecular formula for quantified PGA from *C. crambe* (derived from ref.37).

		[M+H] ⁺	Empirical formula
Crambescin	A2	449.36017	C ₂₄ H ₄₅ N ₆ O ₂
	Didehydro A1	461.35976	C ₂₅ H ₄₄ N ₆ O ₂
	A2	463.37552	C ₂₅ H ₄₇ N ₆ O ₂
	B1 / C1	467.37051 / 467.37027	C ₂₄ H ₄₇ N ₆ O ₃
	A2	477.39197	C ₂₄ H ₄₉ N ₆ O ₂
	B1 / C1	481.38629 /481.3863	C ₂₅ H ₄₉ N ₆ O ₃
	B1 / C1	495.40207 / 495.40182	C ₂₆ H ₅₁ N ₆ O ₃
	A3	525.3915	C ₃₀ H ₄₉ N ₆ O ₂
	A3	539.4081	C ₃₁ H ₅₁ N ₆ O ₂
	B3 / C3	543.4016	C ₃₀ H ₅₁ N ₆ O ₃
	B3 / C3	557.4167	C ₃₁ H ₅₆ N ₆ O ₂
	Didehydro C3	555.4024	C ₃₁ H ₅₁ N ₆ O ₃
	Crambescidin	800	801.6242
816		817.6151	C ₄₅ H ₈₁ N ₆ O ₇
830		831.63	C ₄₆ H ₈₃ N ₆ O ₇