

Supplementary Data Table S1: Summary of the number of occurrences of the main keywords during the article screening that relates to mitigation strategies of seaweed aquaculture in ocean acidification scenarios. To specify the search scope, the term "management" was accounted for but this term was further contextualised to be within the scope of the other identified keywords."Management" was therefore not used as a keyword. M: Management; F: Framework; R: Regulation; A: Assessment; P: Policy; I: IMTA; MO: Monitoring; E: Evaluation; SS: Site selection; SB: Site buffering; SE: Selective breeding; GI: Genetic improvement; O: Cultivation/culture techniques/practices.

Reference	Keywords													
	M	F	R	A	P	I	MO	E	SS	SB	SE	GI	O	
Clements & Chopin (2016) [53]	2	0	0	0	0	22	19	0	3	8	7	0	1	
Stévant, et al. (2017) [54]	5	8	1	6	0	20	1	1	0	0	2	0	0	
Buchholz, et al. (2012) [133]	0	0	0	1	3	20	0	2	2	0	0	0	13	
Buck, et al. (2004) [128]	58	23	36	10	10	0	6	1	0	0	0	0	3	
Radulovich, et al. (2015) [13]	3	1	2	0	2	2	2	3	5	0	2	6	23	
FAO (2020) [14]	271	72	34	53	134	0	73	5	2	0	1	2	1	
Troell, et al. (2009) [132]	4	0	5	0	0	66	1	0	1	0	0	0	2	
UN Office of Legal Affairs. (2021) [56]	354	75	20	13	45	0	87	31	0	1	0	0	0	
Abreu, et al. (2011) [131]	3	1	1	1	0	38	4	5	0	0	0	0	0	
Ahmed, et al. (2019) [130]	6	2	0	0	0	11	0	0	0	0	0	0	0	
Al-Janabi, et al. (2021) [156]	0	0	0	0	0	0	1	0	0	4	0	0	0	
Anyanwu, et al. (2015) [129]	1	0	0	1	1	0	0	1	0	0	0	0	0	
Bixler, et al. (2011) [18]	4	0	0	0	0	1	0	0	0	0	0	0	0	
Bregnballe, et al. (2015) [50]	20	0	0	0	2	0	11	0	3	3	0	2	0	
Broch, et al. (2019) [17]	3	0	0	0	0	2	3	6	0	0	0	0	0	
Callaway, et al. (2012) [34]	3	0	1	2	1	1	6	0	0	0	2	1	2	
Chopin, et al. (2001) [16]	11	4	3	0	2	5	2	0	3	1	4	0	1	
Chopin & Sawhney (2009) [10]	4	0	1	0	0	15	0	0	0	0	1	0	5	
Chopin, et al. (1999) [88]	0	0	0	0	0	0	1	0	1	0	0	0	0	
Chopin & Tacon (2021) [11]	1	1	0	0	0	6	0	0	0	0	0	0	1	
Chung, et al. (2017) [4]	1	1	0	0	0	1	0	1	1	0	2	0	1	
Duarte, et al. (2017) [3]	0	1	0	2	1	0	0	1	0	1	0	0	1	

Friedlander (2007) [123]	0	0	0	0	0	0	0	0	0	0	1	1	1
Froehlich, et al. (2019) [8]	1	1	0	1	9	1	0	1	1	1	0	0	4
Gordillo, et al. (2016) [57]	0	0	0	0	0	0	0	1	0	0	0	0	0
Hafting, et al. (2015) [134]	5	0	2	0	0	0	0	0	4	0	2	3	8
Harley, et al. 2012 [20]	4	3	0	0	0	0	0	0	0	0	0	0	0
Hoegh-Guldberg, et al. (2019) [35]	0	2	0	0	1	0	0	0	0	0	0	0	0
Kang & Chung (2018) [62]	0	0	0	0	0	3	0	0	0	0	0	0	0
Kim, et al. (2017) [136]	2	0	0	0	0	4	1	0	3	0	3	2	5
Krause-Jensen, et al. (2018) [145]	9	4	1	6	4	0	0	1	0	0	0	0	0
San (2012) [25]	10	0	0	2	1	5	5	0	1	0	0	0	17
Sondak, et al. (2017) [7]	0	0	0	0	1	1	0	0	0	0	0	0	0
Xiao, et al. (2021) [135]	0	0	0	0	0	0	30	1	1	3	0	0	0
Xu, et al. (2017) [74]	1	0	0	0	0	0	0	1	0	1	0	0	0