

**Table S2.** Confirmed DOC feeding by sponges.

class	order	species	environment	Reference
Demospongia	Agelasida	<i>Agelas oroides</i>	Mediterranean	Ribes et al. 2012
	Chondrosida	<i>Chondrosia reniformis</i> <i>Chondrilla caribensis</i> <i>Halisarca caerulea</i>	Mediterranean Caribbean; coral reef Caribbean; coral reef	Ribes et al. 2012 de Goeij et al. 2013 de Goeij et al. 2008
	Hadromerida	<i>Cliona delitrix</i>	Caribbean; coral reef	this study
	Halichondrida	<i>Higginsia thielei</i> <i>Scopalina ruetzleri</i>	NE Atlantic; deep water coral reef Caribbean; coral reef	van Duyl et al 2008 de Goeij et al. 2013
	Haplosclerida	<i>Haliclona implexiformis</i> <i>Siphonodictyon sp.</i>	Caribbean; coral reef Caribbean; coral reef	de Goeij et al. 2013 this study
	Lithistida	<i>Theonella swinhonis</i>	Red Sea; coral reef	Yahel et al. 2003
	Poecilosclerida	<i>Merlia normani</i> <i>Mycale microsigmatosa</i>	Caribbean; coral reef Caribbean; coral reef	de Goeij et al. 2008 de Goeij et al. 2008
Hexactinellida	Lyssacinosida	<i>Nodastrella nodastrella</i>	NE Atlantic; deep water coral reef	van Duyl et al 2008

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