

Table S2: Examples of sacoglossan molluscs, their algal prey, and their varied photosynthetic (PS) capabilities quantified by radioisotopic labeling (^{14}C), fluorometry (Fv/Fm), spectrophotometry (Chla), or oxygen evolution (O_2). Duration of chloroplast retention was based upon three categories outlined by Händeler et al. (2009): N = no functional chloroplasts, ST = 1 to 4 weeks of functional chloroplasts, LT (**bold**) = greater than 1 month functional chloroplasts. Underlined organisms are represented in Figure 2.

Division of Algal Prey	Superfamily	Genus Species	PS measured	Duration	Reference
Chlorophyta	Elysiodea	<i>Bosellia mimetica</i>	^{14}C	ST	Clark et al., 1990
		<i>Bosellia mimetica</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Bosellia sp.</i>	Fv/Fm	ST	Yamamoto et al., 2009
		<i>Elysia australis</i>	^{14}C	LT	Hinde, 1980
		<i>Elysia bennettae</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Elysia catulus</i>	^{14}C	N	Clark et al., 1990
		<i>Elysia cornigera</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Elysia crispata</i>	Chl ^a	LT	Clark and Busacca, 1978
		<i>Elysia crispata</i>	Fv/Fm	LT	Händeler et al., 2009
		<i>Elysia eveliae</i>	^{14}C	N	Clark et al., 1990
		<i>Elysia hedgpethi</i>	^{14}C	ST	Green, 1970
		<i>Elysia hedgpethi</i>	Chl ^a	ST	Green, 1970
		<i>Elysia ornata</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Elysia ornata</i>	Fv/Fm	LT	Yamamoto et al., 2009
		<i>Elysia pusilla</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Elysia sp.</i>	Fv/Fm	ST	Evertsen et al., 2007
		<i>Elysia subornata</i>	Chl ^a	ST	Clark and Busacca, 1978
		<i>Elysia subornata</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Elysia timida</i>	^{14}C	LT	Marin and Ros, 1993
		<i>Elysia timida</i>	Fv/Fm	LT	Händeler et al., 2009
		<i>Elysia timida</i>	Fv/Fm	LT	Evertsen et al., 2007
		<i>Elysia tomentosa</i>	Fv/Fm	ST	Händeler et al., 2009
		<i>Elysia tomentosa</i>	Fv/Fm	ST	Evertsen et al., 2007
<i>Elysia trisinuata</i>	Fv/Fm	LT	Yamamoto, 2009		
<i>Elysia tuca</i>	Chl ^a	LT	Clark and Busacca, 1978		

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Chlorophyta	Elysiodea	<i>Elysia viridis</i>	¹⁴ C	LT	Trench et al., 1973b	
		<i>Elysia viridis</i>	¹⁴ C	LT	Hinde and Smith, 1972, 1974	
		<i>Elysia viridis</i>	Fv/Fm	LT	Serôdio et al., 2009	
		<i>Elysia viridis</i>	Fv/Fm	ST	Händeler et al., 2009	
		<i>Elysia viridis</i>	Fv/Fm	LT	Evertsen and Johnson, 2009	
		<i>Elysia zuleicae</i>	Fv/Fm	N	Händeler et al., 2009	
		<i>Elysiella pusilla</i>	Fv/Fm	ST	Evertsen et al., 2007	
		<i>Plakobranthus ocellatus</i>	Chl ^a	LT	Green, 1970	
		<i>Plakobranthus ocellatus</i>	Fv/Fm	LT	Händeler et al., 2009	
		<i>Plakobranthus ocellatus</i>	Fv/Fm	LT	Evertsen et al., 2007	
		<i>Plakobranthus ocellatus</i>	Fv/Fm	LT	Yamamoto et al., 2009	
		<i>Thuridilla carlsoni</i>	Fv/Fm	ST	Händeler et al., 2009	
		<i>Thuridilla carlsoni</i>	Fv/Fm	ST	Evertsen et al., 2007	
		<i>Thuridilla gracilis</i>	Fv/Fm	ST	Händeler et al., 2009	
		<i>Thuridilla hopei</i>	Fv/Fm	ST	Händeler et al., 2009	
		<i>Thuridilla kathae</i>	Fv/Fm	ST	Händeler et al., 2009	
		<i>Thuridilla lineolata</i>	Fv/Fm	ST	Evertsen et al., 2007	
		<i>Thuridilla vatae</i>	Fv/Fm	ST	Yamamoto et al., 2009	
		Limapontioidea	<i>Alderia modesta</i>	¹⁴ C	ST	Clark et al., 1990
			<i>Caliphylla mediterranea</i>	¹⁴ C	ST	Clark et al., 1990
	<i>Costasiella antillensis</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Costasiella cf. kuroshimae</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Costasiella liliana</i>		¹⁴ C	LT	Clark et al., 1981	
	<i>Costasiella nonatoi</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Costasiella roshimae</i>		Fv/Fm	ST	Yamamoto et al., 2009	
	<i>Cyerce antillensis</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Cyerce nigricans</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Ercolania coerulea</i>		¹⁴ C	N	Clark et al., 1990	
	<i>Ercolania kencolesi</i>		Fv/Fm	N	Händeler et al., 2009	
	<i>Hermaea cruciata</i>		¹⁴ C	ST	Clark et al., 1990	

Division of Algal Prey	Superfamily	Genus Species	PS measured	Duration	Reference
Chlorophyta	Limapontioidea	<i>Limapontia depressa</i>	¹⁴ C		Hinde and Smith, 1974
		<i>Mourgona germainea</i>	¹⁴ C	ST	Clark et al., 1990
		<i>Placida dendritica</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Placida dendritica</i>	Fv/Fm	N	Evertsen and Johnsen, 2009
		<i>Placida</i> sp	Fv/Fm	ST	Yamamoto et al., 2009
		<i>Polybranchia orientalis</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Stiliger ornatus</i>	Fv/Fm	ST	Yamamoto et al., 2009
	Oxynooidea	<i>Ascobulla ulla</i>	Chl ^a	N	Clark et al., 1990
		<i>Julia exquisita</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Julia zebra</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Julia zebra</i>	Fv/Fm	ST	Yamamoto et al., 2009
		<i>Lobiger viridis</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Oxynoe antillarum</i>	Chl ^a	LT	Clark and Busacca, 1978
		<i>Oxynoe antillarum</i>	Fv/Fm	N	Händeler et al., 2009
		<i>Oxynoe</i> cf. <i>viridis</i>	Fv/Fm	N	Händeler et al., 2009
Heterokontophyta	Elysiodea	<i>Elysia chlorotica</i>	O ₂	LT	Rumpho et al., 2000
Rhodophyta	Elysiodea	<i>Elysia viridis</i>	¹⁴ C	LT	Trench et al., 1973b
	Elysiodea	<i>Elysia viridis</i>	¹⁴ C	LT	Hinde and Smith, 1972, 1974
	Elysiodea	<i>Elysia viridis</i>	Fv/Fm	LT	Serôdio et al., 2009
	Elysiodea	<i>Elysia viridis</i>	Fv/Fm	ST	Händeler et al., 2009
	Elysiodea	<i>Elysia viridis</i>	Fv/Fm	LT	Evertsen and Johnson, 2009
	Limapontioidea	<i>Hermaea cruciata</i>	¹⁴ C	ST	Clark et al., 1990