The blue tags in “journals” are the ones that used to be in pete edmunds folder that I want to put in a folder in mendely…

S. caliendrum respiration – increases from~ 0.50 nmolO2/larva/min to 0.90 nmolO2/recruit/min – Edmunds et al. 2013: JEMBE 443: 33-

P. damicornis, S. hystrix, and S. pistillata respiration: 0.029-0.116 nmolO2/larva/min – Edmunds et al. 2011, JEB 214: 2873-

P. astreoides respiration ~0.90 – 0.13 nmol02/larva/min, gross photosynthes at 1165 µmol photons/m2/s ~ 0.12 – 0.2 nmolO2/larva/hour – Edmunds et al. 2001, MB 139: 981-

P. damicornis respiration ~0.75–1.02 nmol02/larva/min, Symbiodonium content ~7,000–19,000 cells/larva – Cumbo et al. 2012 MB DOI 10.1007/s00227-012-2046-y

P. damicornis respiration = ~1.6– 2.0 nmolO2/mg protein/min with protein content = 45–76 µg/larvae, and Symbiodinium ~160000–200000 cells/mg protein – Cumbo et al. 2013 JEMBE 439: 100-

P. damicornis respiration = 0.07-0.18 nmol/larva/min Edmunds et al 2011

P. damicornis larvae – total lipid content = 32-37 µg/larvae – Hofmann and Rivest 2015, JEMBE 473: 43 –

P. damicornis larvae – total lipid content = 32 µg/larvae Larvae in Moorea <- 7850 symbionts. Including 58% WE, 11% TG, and 17% PL, and a mean of 11.65 mg total protein per larva. In Taiwan: 9008 symbionts. 20.47 micrograms total lipid 39% WE, 18% TG and 6% PL, but a larger total protein fraction, a mean of 22.37 mg per larva. Rivest et al. 2017.

P. damicornis larvae energy content – 0.56–74 calories/planula – Richmond 1982 ICRS 2 Manila

P. damicornis larvae oxygen production (photosynthesis) under ~ 1100 µE/m2/s = 1.72 x 10-4 mgO2/larva/h – Richmond (1987) MB 93: 527-

Respiration – O2 to Joules conversion of 440 J/mmol O2 (see Elliott and Davison 1975)

P. damicornis larvae – energy content = 1.51 J/larva (see Edmunds et al. 2013 JEMBE 443: 33-38 <- Should it be S. caliendrum??

P. damicornis larvae 2.3–3.1 J per individual (Richmond, 1992) and are 42% larger than those of S. caliendrum (see Edmunds et al., 2011b).

Photosynthesis: Oxygen to energy in gross photosynthesis: 6 mol O2 = 1 mol glucose = 2817 KJ (See Edmunds and Davies 1986 MB 92: 339-

P. damicornis respiration = 0.087 – 0.116 (avg=0.13) nmol O2/larva/min in 415 microatm, 25C. (Putnam et al. 2013)

Notes: Energetics

The impact of autotrophic versus heterotrophic nutritional