

Table 2. *Photosynthetic rates of benthic aquatic plants on the basis of total area exposed to the bulk water phase. Conditions : as near optimal temperature and light saturation as data are available for ; inorganic C supply saturating where data are available, otherwise as specified*

Organism	Photosynthetic rate (pmol cm ⁻² external surface s ⁻¹)	Conditions	References
<i>Laminaria hyperborea</i> (m,P,h)	280	spring; lamina of sporophyte sea water	Kain (1979); Kain, Drew and Jupp (1976)
<i>Macrocystis pyrifera</i> (m,P,h)	400	young frond of sporophyte	Wheeler (1980a)
<i>Saccorhiza bulbosa</i> (m,P,h)	380	sea water	Kain <i>et al.</i> (1976)
<i>Fucus vesiculosus</i> (m,P,h)	330 157	apex, i.e. young } base, i.e. older }	King and Schramm (1976)
		sea water	
<i>Porphyra umbilicalis</i> (m,R,h)	355	sea water	Ramus, Beale and Mauzerall (1976)
<i>Chondrus crispus</i> (m,R,h)	205	sea water	Ramus <i>et al.</i> (1976)
<i>Ulva lactuca</i> (m,Chl,h)	410	sea water	Ramus (1978); Ramus <i>et al.</i> (1976)
<i>Codium fragile</i> (m,Chl,h)	379	sea water	Ramus (1978); Ramus <i>et al.</i> (1976)
<i>Chara corallina</i> (m,Cha,r)	120	CO ₂ satn	Lucas (1975)
<i>Potamogeton polygonifolius</i> (f,M,r)	300	CO ₂ satn	Spence & Chrystal (1970); Spence (1975)
<i>Vallisneria asiatica</i> (f,M,r)	140	fresh water	Ikusima (1966)
<i>Hydrilla verticillata</i> (f,M,r)	160	fresh water	Ikusima (1966)
<i>Cymodocea nodosa</i> (m,M,r)	290	sea water	Drew (1978)
<i>Posidonia oceanica</i> (m,M,r)	170	sea water	Drew (1978)
<i>Montastrea annularis</i> (m,Co,h)	522	sea water	Spencer Davies (1977)

Taxonomy of the organisms: P = Phaeophyceae, R = Rhodophyceae, Chl = Chlorophyceae, Cha = Charophyceae; m = marine, f = freshwater, M = Magnoliophyte, Co = coral; mode of attachment; h = haptophyte, r = rhizophyte.