Table 6. *Photosynthetic cover (based on chlorophyll* a *m^{-2}) for communities of submerged aquatic phototrophs*

Community	mg chlorophyll *a* m^{-2}	References
Freshwater epipelic	2–66	Moss (1968; data for algae other than Characeae)
Freshwater epilithic	127–1200	
Freshwater epiphytic	110–2350	
Freshwater epipsammic	86	
Freshwater algal mats	189–269	
Freshwater Characeae	5000–8000	Westlake (1975b)
Freshwater magnoliophytes	5000–8000	
Soda lake plankton (*Spirulina*)	300	Talling *et al.* (1973)
Marine, epilithic cyanobacteria (top of littoral)	270–800	Gifford & Odum (1961)
Marine epilithic *Fucus* (mid-littoral)	1470	
Marine, epilithic *Chondrus/Ceramium/Polysiphonia/Dasya* (lower littoral)	1040	
Marine, epilithic *Laminaria* (sub-littoral)	400–8000	Seybold & Egle (1938); Mann (1972a, b); Blinks, (1955)
Marine, rhizophytic *Posidonia oceanica*	2100	Drew (1978)
Marine coastal phytoplankton	40	Talling (1975)
Marine open-ocean phytoplankton	15	
Marine, epipsammic foraminifera with algal symbionts	57–907	Sournia (1976)
Marine reef corals (*Porites*) with dinophyte symbionts	2000–2500	Odum *et al.* (1959); Burkholder & Burkholder (1960)
Marine coral reef	500	Odum, McConnell & Abbot (1958)
Marine epilithic *Macrocystis* (sub-littoral)	700–900	Macfarland and Prescott (1959)
Marine epilithic *Codium* (sub-littoral)	3200	Frolick & Mathieson (1973); Head & Carpenter (1975); Wassman & Ramus (1973)
Intertidal 'ephemeral' community on cleared area (*Ulva/Porphyra/Enteromorpha/Calothrix*) on rocky shore (epilithic)	300	Niell (1979); (cf. Connell and Slatyer, 1977)
Intertidal 'canopy dominant' community re-established on cleared area after dominance of ephemerals (*Pelvetia/Fucus/Himanthalia*) on rocky shore (epilithic)	1200	
Reef corals	100–1400	Maragas (1972)

Chlorophyll *a* m^{-2} is usually higher for benthic than for planktonic communities (less disturbed environment, except for shallow East African salt lake). Among benthic communities, larger chlorophyll *a* m^{-2} is associated with less disturbed environments, i.e. where rhizophytes and haptophytes can grow to a size large enough to offset low nutrient availability by seasonal nutrient uptake and the storage and re-utilization of nutrients. Data are mainly for communities not subject to extreme light deprivation. Anderson (1967) suggests that the 'usable' chlorophyll in natural communities is 600 mg m^{-2}.