

Table 2. Leaf absorptance (α), photon yield for O₂ evolution on the basis of incident photons (ϕ_i) and absorbed photons (ϕ_a), and chlorophyll fluorescence characteristics at 77 K for the upper leaf surfaces in 44 species of vascular plants. F_O and F_M are given in relative units. (Abbreviations: D=deep; N.a.=not available; P=partial; Sh=shade; Su=sun)

No.	Species	Exposure	α	ϕ_i	ϕ_a	692 nm			734 nm		F _M , 734 F _M , 692
						F _V /F _M	F _O	F _M	F _O	F _M	
1	<i>Aegialitis annulata</i>	Sh	0.891	0.0888	0.1034	0.807	9.8	50.8	147	205	4.04
2	<i>Aegiceras corniculatum</i>	Sh	0.870	0.0849	0.0976	0.815	10.0	53.7	103	164	3.05
3	<i>Alocasia macrorrhiza</i>	D Sh	0.778	0.0913	0.1174	0.841	9.8	61.4	188	266	4.33
4	<i>Amaranthus retroflexus</i>	Sh	0.840	0.0539	0.0642	0.778	7.9	35.8	234	286	8.00
5	<i>Argyrodendron perelatatum</i>	D Sh	0.830	0.0902	0.1093	0.838	10.5	65.1	150	226	3.47
6	<i>Arundo donax</i>	P Su	0.831	0.0873	0.1050	0.856	9.0	62.9	173	243	3.86
7	<i>Asplenium nidus</i>	Sh	0.823	0.0786	0.0955	0.782	15.6	71.4	289	364	5.10
8	<i>Atriplex rosea</i>	P Sh	0.859	0.0571	0.0665	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.
9	<i>Atriplex triangularis</i>	P Sh	0.783	0.0881	0.1125	0.805	11.0	56.4	133	173	3.07
10	<i>Avicennia marina</i>	Sh	0.890	0.0956	0.1074	0.817	10.1	54.0	96	132	2.44
11	<i>Betula pendula</i>	Sh	0.839	0.0900	0.1073	0.857	9.5	65.5	178	277	7.52
12	<i>Carica papaya</i>	Sh	0.860	0.0916	0.1065	0.808	N.a.	N.a.	N.a.	N.a.	N.a.
13	<i>Castanospermum australe</i>	D Sh	0.840	0.0924	0.1100	0.842	10.7	67.8	146	224	3.30
14	<i>Colocasia esculenta</i>	Sh	0.790	0.0841	0.1065	0.822	9.1	51.0	135	210	4.12
15	<i>Crassula multicava</i>	Sh	0.843	0.0880	0.1077	0.803	6.0	30.7	148	215	7.00
16	<i>Cymbidium sp.</i>	P Su	0.859	0.0860	0.1001	0.799	10.0	49.8	109	143	2.87
17	<i>Cyrtomium falcatum</i>	Sh	0.850	0.0916	0.1078	0.815	13.7	73.6	226	312	4.24
18	<i>Digitaria sanguinalis</i>	P Su	0.755	0.0589	0.0780	0.832	10.4	61.6	166	238	3.86
19	<i>Echinochloa crus-galli</i>	P Sh	0.812	0.0641	0.0789	0.837	10.3	62.8	138	184	2.93
20	<i>Eichhornia crassipes</i>	P Su	0.836	0.0841	0.1006	0.857	10.2	71.9	174	245	3.41
21	<i>Eucalyptus globulus</i>	P Su	0.896	0.0845	0.0943	0.826	8.5	48.7	146	219	4.50
22	<i>Ficus platypoda</i>	Sh	0.840	0.0858	0.1021	0.849	8.9	58.8	143	223	3.79
23	<i>Ginkgo biloba</i>	P Sh	0.820	0.0928	0.1132	0.856	10.8	74.7	151	228	3.05
24	<i>Glycine max</i>	P Sh	0.893	0.0904	0.1012	0.802	7.6	38.2	112	163	4.27
25	<i>Gossypium barbadense</i>	Sh	0.759	0.0848	0.1117	0.838	9.2	56.9	155	222	3.90
26	<i>Gossypium hirsutum</i>	Sh	0.754	0.0829	0.1099	0.831	9.6	56.8	162	238	4.19
27	<i>Hedera canariensis</i>	D Sh	0.880	0.0936	0.1064	0.831	11.4	67.2	106	163	2.43
28	<i>Helianthus annuus</i>	Su	0.859	0.0896	0.1043	0.837	7.7	47.8	145	206	4.31
29	<i>Heteromeles arbutifolia</i>	Sh	0.862	0.0952	0.1104	0.854	10.5	70.2	208	297	4.23
30	<i>Kalanchoe blossfeldiana</i>	Sh	0.775	0.0827	0.1067	0.825	9.0	51.7	141	183	3.54
31	<i>Liquidambar styraciflua</i>	Sh	0.814	0.0886	0.1087	0.860	10.5	74.7	145	250	3.35
32	<i>Monstera deliciosa</i>	D Sh	0.831	0.0941	0.1132	0.860	9.9	70.4	89.2	150	2.13
33	<i>Nerium oleander</i>	Sh	0.850	0.0877	0.1032	0.815	10.6	58.1	149	217	3.73
34	<i>Oxalis oregana</i>	D Sh	0.847	0.0961	0.1135	0.826	15.5	88.8	169	238	2.68
35	<i>Phaseolus vulgaris</i>	Sh	0.796	0.0915	0.1149	0.840	11.5	72.3	146	226	3.13
36	<i>Piper auritum</i>	Sh	0.846	0.0902	0.1066	0.846	10.3	67.0	157	220	3.28
37	<i>Podocarpus gracilior</i>	P Sh	0.835	0.0917	0.1098	0.849	12.1	80.3	191	283	3.52
38	<i>Rhizophora stylosa</i>	Sh	0.886	0.0940	0.1065	0.786	10.0	46.4	83	120	2.59
39	<i>Schefflera actinophylla</i>	Sh	0.880	0.0980	0.1113	0.850	9.7	64.4	159	229	3.56
40	<i>Scirpus robustus</i>	P Sh	0.775	0.0782	0.1009	0.856	11.1	76.8	141	205	2.67
41	<i>Sonneratia alba</i>	P Sh	0.80	0.0776	0.0970	0.827	9.4	54.7	196	282	5.16
42	<i>Typha latifolia</i>	P Su	0.870	0.0943	0.1083	0.834	10.3	62.1	151	223	3.59
43	<i>Vigna marina</i>	Su	0.830	0.0825	0.0970	0.834	6.4	38.4	76	116	3.02
44	<i>Zea mays</i>	Sh	0.842	0.0476	0.0565	0.854	11.9	82.0	117	174	2.12