S2 Table. Pfams associated with photosynthesis.

Feature	Name	Description
PF10643.9	Cytochrome-c551	Photosystem P840 reaction-centre cytochrome c-551
PF02276.18	CytoC_RC	Photosynthetic reaction centre cytochrome C subunit
PF11947.8	DUF3464	Photosynthesis affected mutant 68
PF01716.18	MSP	Manganese-stabilising protein / photosystem II polypeptide
PF00124.19	Photo_RC	Photosynthetic reaction centre protein
PF03967.13	PRCH	Photosynthetic reaction centre, H-chain N-terminal region
PF00223.19	PsaA_PsaB	Photosystem I psaA/psaB protein
PF02605.15	PsaL	Photosystem I reaction centre subunit XI
PF07465.13	PsaM	Photosystem I protein M (PsaM)
PF05479.11	PsaN	Photosystem I reaction centre subunit N (PSAN or PSI-N)
PF00737.20	PsbH	Photosystem II 10 kDa phosphoprotein
PF02532.14	PsbI	Photosystem II reaction centre I protein (PSII 4.8 kDa protein)
PF02533.15	PsbK	Photosystem II 4 kDa reaction centre component
PF05151.12	PsbM	Photosystem II reaction centre M protein (PsbM)
PF02468.15	PsbN	Photosystem II reaction centre N protein (psbN)
PF04725.12	PsbR	Photosystem II 10 kDa polypeptide PsbR
PF01405.17	PsbT	Photosystem II reaction centre T protein
PF06514.11	PsbU	Photosystem II 12 kDa extrinsic protein (PsbU)
PF07123.12	PsbW	Photosystem II reaction centre W protein (PsbW)
PF06596.11	PsbX	Photosystem II reaction centre X protein (PsbX)
PF06298.11	PsbY	Photosystem II protein Y (PsbY)
PF00421.19	PSII	Photosystem II protein
PF14870.6	PSII_BNR	Photosynthesis system II assembly factor YCF48
PF13326.6	PSII_Pbs27	Photosystem II Pbs27
PF18240.1	PSII_Pbs31	Photosystem II Psb31 protein
PF05969.11	PSII_Ycf12	Photosystem II complex subunit Ycf12
PF00796.18	PSI_8	Photosystem I reaction centre subunit VIII
PF02427.17	PSI_PsaE	Photosystem I reaction centre subunit IV / PsaE
PF02507.15	PSI_PsaF	Photosystem I reaction centre subunit III
PF03244.14	PSI_PsaH	Photosystem I reaction centre subunit VI
PF01701.18	PSI_PsaJ	Photosystem I reaction centre subunit IX / PsaJ
PF01241.18	PSI_PSAK	Photosystem I psaG / psaK
PF10657.9	RC-P840_PscD	Photosystem P840 reaction centre protein PscD

The table lists all Pfams that match the search terms "photosynthesis", "photosynthetic", or "photosystem". The columns contain Pfam feature ID ('Feature'), feature name ('Name'), and feature description ('Description'; the DESC line from the Pfam HMM database). Given the occurrence of three of these Pfams in the photosynthetic organism *Bradyrhizobium* sp. ORS 278, photosynthesis capability was assigned to organisms with at least three of these Pfams.