

Table S3: Genes Found in RAST Subsystems for All Species Part 1:

(A = *P. angustum*, B = *P. damselae*, C = *A. fischeri* ES114, D = *V. gazogenes*, E = *A. logei*, F = *P. profundum*, G = *A. salmonicida*, H = *P. sp.* SKA34, I = *S. oneidensis*, J = *V. alginolyticus* 12, K = *V. anguillarum*).

RAST Subsystem	# in Fig. 7	A	B	C	D	E	F	G	H	I	J	K
Cofactors, Vitamins, Prosthetic Groups, Pigments	1	244	301	287	354	193	336	277	190	307	252	277
Cell Wall and Capsule	2	122	180	213	71	111	184	247	106	147	134	195
Virulence, Disease and Defense	3	99	89	88	94	100	113	85	82	86	87	66
Potassium Metabolism	4	35	31	28	39	26	30	30	27	30	36	20
Photosynthesis		0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	5	200	160	222	180	168	171	214	170	228	165	135
Phages, Prophages, Transposable elements, Plasmids	6	3	10	23	11	36	11	24	3	26	7	5
Membrane Transport	7	177	215	195	150	231	191	291	117	144	185	153
Iron acquisition and metabolism	8	75	38	70	11	94	49	75	84	47	69	25
RNA Metabolism	9	209	209	286	189	114	234	230	143	268	187	198
Nucleosides and Nucleotides	10	90	116	110	115	70	162	105	100	100	107	108
Protein Metabolism	11	233	265	253	171	206	198	247	191	262	139	212
Cell Division and Cell Cycle	12	43	38	44	40	48	32	48	34	36	23	32
Motility and Chemotaxis	13	149	93	115	37	120	60	109	148	123	163	138
Regulation and Cell signaling	14	98	90	108	114	108	110	107	82	66	107	92
Secondary Metabolism		0	0	0	0	0	2	0	0	0	0	3
DNA Metabolism	15	148	154	136	123	138	110	131	129	146	133	148
Fatty Acids, Lipids and Isoprenoids	16	133	116	114	160	90	158	111	125	117	110	112
Nitrogen Metabolism	17	37	35	39	6	7	83	40	30	41	49	27
Dormancy and Sporulation	18	7	4	6	2	11	2	4	7	6	3	8
Respiration	19	194	152	109	132	172	209	115	168	194	147	96
Stress Response	20	170	152	135	190	146	172	119	152	124	179	119
Metabolism of Aromatic Compounds	21	10	3	3	11	6	12	6	13	12	10	11
Amino Acids and Derivatives	22	364	357	338	486	335	492	335	316	384	459	350
Sulfur Metabolism	23	33	28	28	54	35	32	22	28	29	17	28
Phosphorus Metabolism	24	62	41	35	64	38	50	40	48	46	46	41
Carbohydrates	25	392	413	355	745	361	610	332	322	268	414	414
RNAs	26	130	223	156	121	125	161	141	148	129	70	108
coding sequences		4403	4408	3766	5616	4807	5358	4259	4175	4486	4536	3687