

Sense Seq.		P_3		$G_3/(G_3+C_3)$			$A_3/(A_3+T_3)$			Midpoint		Difference in PR2-bias				
Chromosome	#lead	#lagg	Lead	Lagg	Sig.	x_l	x_2	Sig.	y_l	y_2	Sig.	x_c	y_c	B_I	B_{II}	B_I %
B. hal	2689	869	0.404	0.402	ns	0.530	0.438	***	0.478	0.477	ns	0.484	0.477	0.092	0.028	76.9
B. sub	2705	924	0.422	0.429	*	0.504	0.428	***	0.473	0.480	**	0.466	0.476	0.076	0.041	64.9
B. bur	505	267	0.192	0.205	***	0.626	0.280	***	0.362	0.555	***	0.453	0.459	0.397	0.063	86.3
Buch	298	225	0.122	0.124	ns	0.473	0.380	***	0.442	0.485	***	0.426	0.464	0.102	0.082	55.5
C. cre	1861	1596	0.860	0.853	**	0.435	0.405	***	0.303	0.361	***	0.420	0.332	0.065	0.186	26.0
C. jej	914	583	0.172	0.181	***	0.542	0.309	***	0.415	0.453	***	0.425	0.434	0.236	0.100	70.3
C. mur	403	340	0.313	0.321	**	0.598	0.346	***	0.409	0.449	***	0.472	0.429	0.255	0.076	77.0
C. pne	532	436	0.323	0.342	***	0.505	0.360	***	0.421	0.454	***	0.433	0.437	0.149	0.092	61.8
C. pneAR39	468	385	0.323	0.341	***	0.506	0.364	***	0.423	0.454	***	0.435	0.439	0.145	0.089	61.9
C. pneJ138	541	441	0.323	0.342	***	0.503	0.360	***	0.420	0.454	***	0.431	0.437	0.147	0.093	61.2
C. tra	453	381	0.324	0.336	***	0.585	0.356	***	0.419	0.448	***	0.471	0.434	0.231	0.073	76.1

D. rad1	1261	1162	0.804	0.798	ns	0.444	0.449	ns	0.428	0.463	***	0.447	0.446	0.035	0.076	31.6
D. rad2	207	139	0.818	0.832	ns	0.440	0.448	ns	0.435	0.440	ns	0.444	0.438	0.009	0.084	10.1
E. col	2146	1768	0.533	0.535	ns	0.503	0.453	***	0.397	0.410	***	0.478	0.403	0.052	0.099	34.3
E.colEDL	2707	1927	0.526	0.527	ns	0.512	0.454	***	0.398	0.415	***	0.483	0.406	0.060	0.095	38.9
E.colRIMD	2733	1890	0.527	0.528	ns	0.512	0.453	***	0.399	0.415	***	.483	.407	.061	.095	39.2
H. inf	809	696	0.257	0.275	***	0.484	0.403	***	0.451	0.473	***	0.444	0.462	0.084	0.068	55.3
H. pyl	805	587	0.404	0.403	ns	0.478	0.419	***	0.439	0.441	ns	0.449	0.440	0.060	0.079	42.9
H. pylJ99	782	590	0.413	0.408	ns	0.479	0.415	***	0.441	0.441	ns	0.447	0.441	0.064	0.079	44.6
L.lac	1628	391	0.226	0.242	***	0.468	0.343	***	0.452	0.425	***	0.406	0.439	0.128	0.113	53.1
M.lep	1473	958	0.640	0.635	ns	0.487	0.418	***	0.384	0.505	***	0.453	0.445	0.139	0.073	65.6
M. tub	2153	1535	0.786	0.788	ns	0.467	0.423	***	0.412	0.476	***	0.445	0.444	0.078	0.079	49.9
M.tubCDC	2153	1499	0.782	0.784	ns	0.470	0.424	***	0.412	0.476	***	0.447	0.444	0.079	0.077	50.5
M. gen	358	93	0.225	0.205	**	0.429	0.419	ns	0.430	0.439	ns	0.424	0.435	0.014	0.100	11.9
M. pne	520	139	0.404	0.401	ns	0.427	0.410	**	0.435	0.442	ns	0.419	0.438	0.019	0.102	15.6
M.pul	459	242	0.138	0.143	*	0.339	0.330	ns	0.475	0.468	*	0.335	0.472	0.011	0.168	6.4

N. menA	880	873	0.596	0.601	ns	0.423	0.348	***	0.466	0.522	***	0.385	0.494	0.094	0.115	44.9
N. menB	910	716	0.578	0.610	***	0.434	0.327	***	0.454	0.536	***	0.381	0.495	0.135	0.120	53.0
P.mul	1111	795	0.318	0.330	***	0.515	0.395	***	0.456	0.470	***	0.455	0.463	0.121	0.058	67.5
P. aer	2920	2335	0.861	0.881	***	0.433	0.376	***	0.408	0.539	***	0.404	0.474	0.143	0.099	59.0
P. aby	965	798	0.512	0.511	ns	0.535	0.507	***	0.451	0.515	***	0.521	0.483	0.070	0.027	72.4
P. hor	1098	875	0.429	0.428	ns	0.525	0.469	***	0.444	0.490	***	0.497	0.467	0.073	0.033	68.7
R. pro	476	297	0.165	0.171	**	0.572	0.407	***	0.425	0.455	***	0.490	0.440	0.168	0.061	73.4
S.aur	1760	568	0.201	0.220	***	0.494	0.341	***	0.486	0.469	***	0.417	0.477	0.154	0.086	64.3
S.aurN315	1744	553	0.200	0.217	***	0.496	0.335	***	0.485	0.470	***	0.415	0.477	0.162	0.087	64.9
S.pyo	1196	314	0.294	0.308	***	0.461	0.329	***	0.430	0.424	ns	0.395	0.427	0.132	0.128	50.8
T. aci	763	625	0.557	0.560	ns	0.476	0.453	***	0.446	0.455	**	0.465	0.451	0.025	0.061	28.8
T. mar	905	781	0.524	0.523	ns	0.480	0.443	***	0.499	0.531	***	0.461	0.515	0.049	0.041	54.4
T. pal	596	321	0.527	0.558	***	0.610	0.435	***	0.343	0.439	***	0.522	0.391	0.200	0.112	64.2
U. ure	384	176	0.109	0.119	***	0.426	0.362	***	0.450	0.450	ns	0.394	0.450	0.064	0.117	35.3
V. cho1	1418	947	0.464	0.481	***	0.505	0.414	***	0.413	0.439	***	0.460	0.426	0.095	0.084	52.9

V. cho2	516	354	0.443	0.478	***	0.513	0.419	***	0.415	0.441	***	0.466	0.428	0.098	0.080	55.1
X. fas	1190	851	0.541	0.568	***	0.549	0.351	***	0.332	0.528	***	0.450	0.430	0.279	0.086	76.4

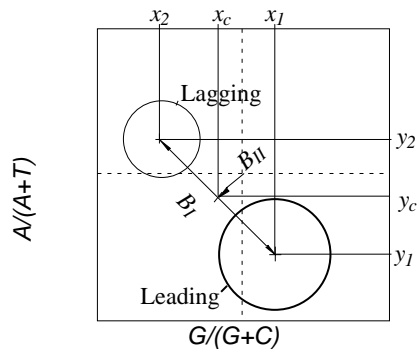
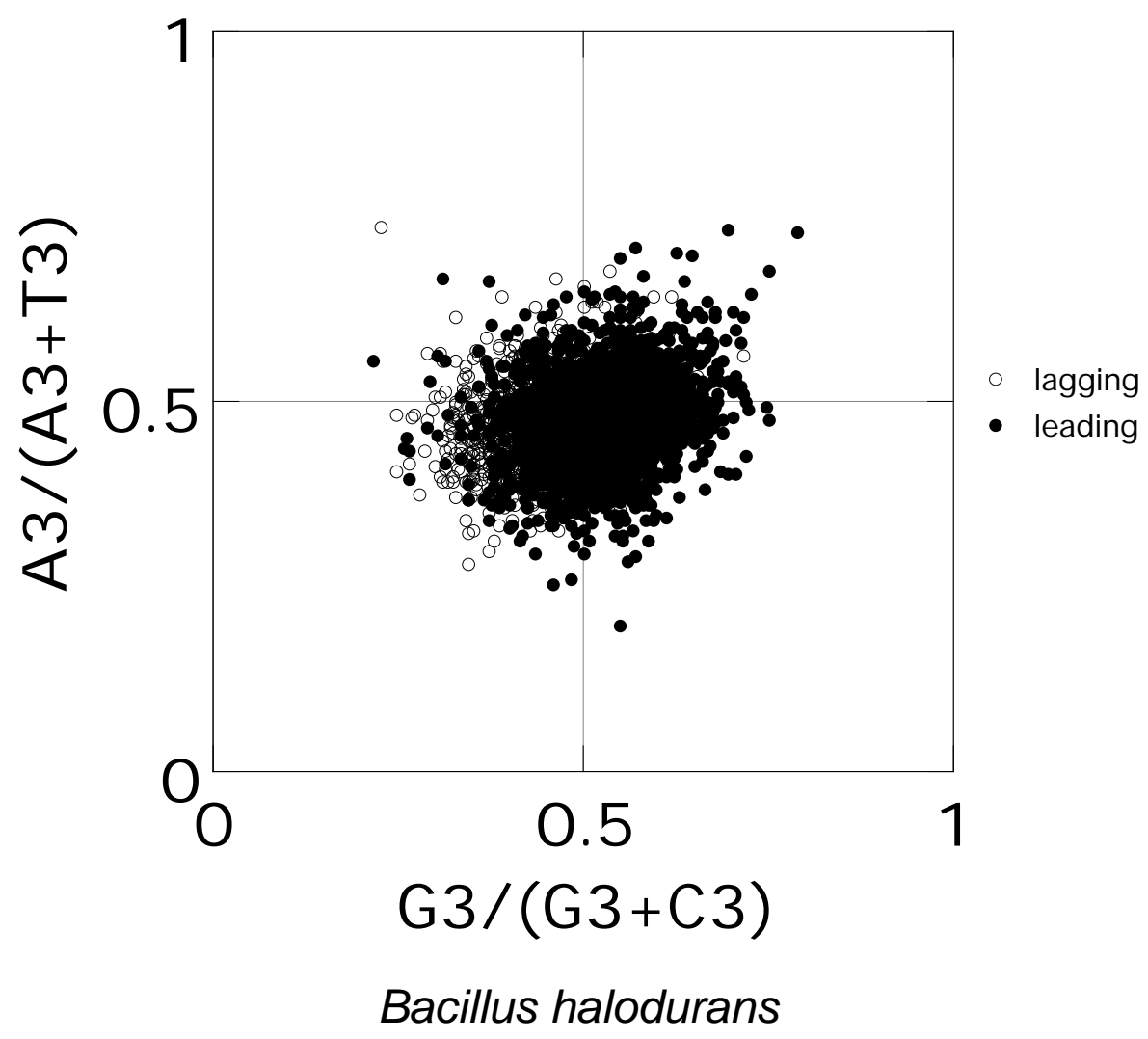
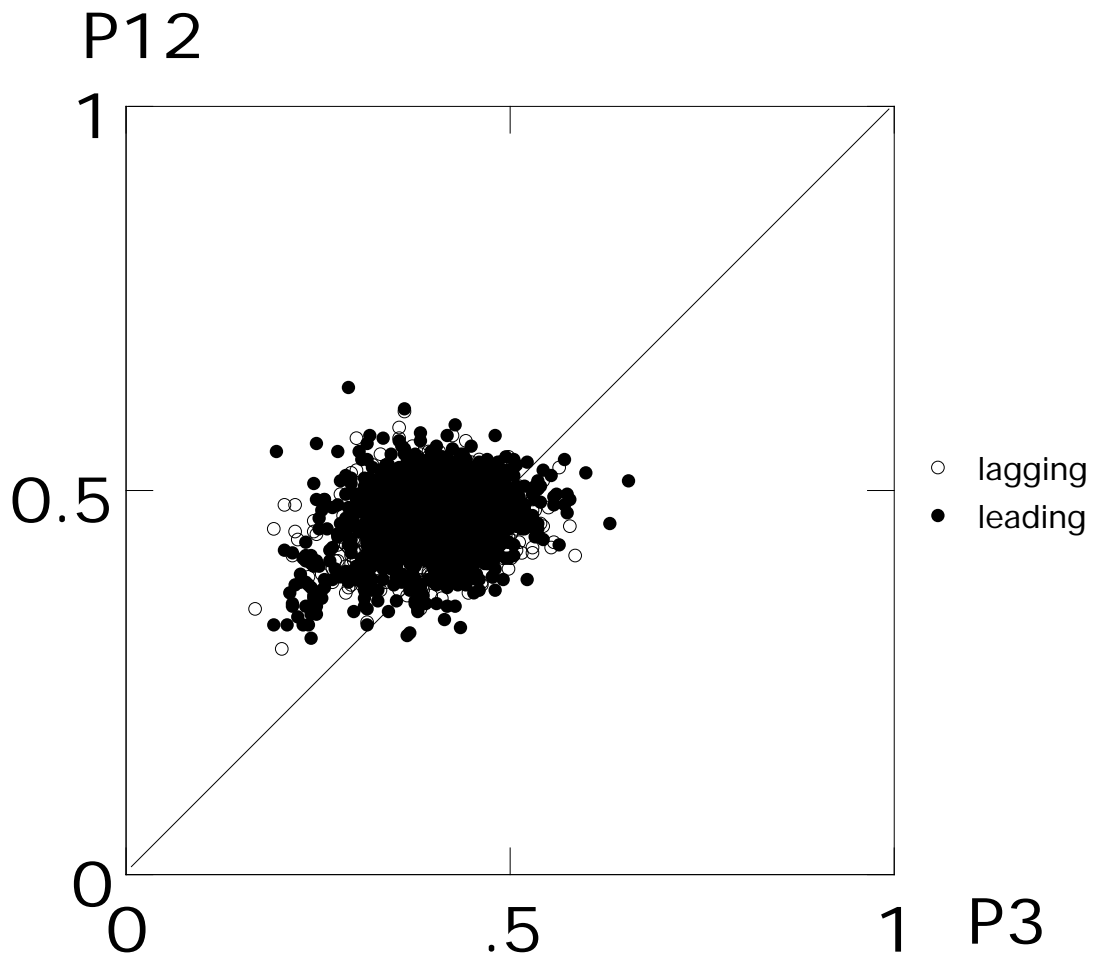
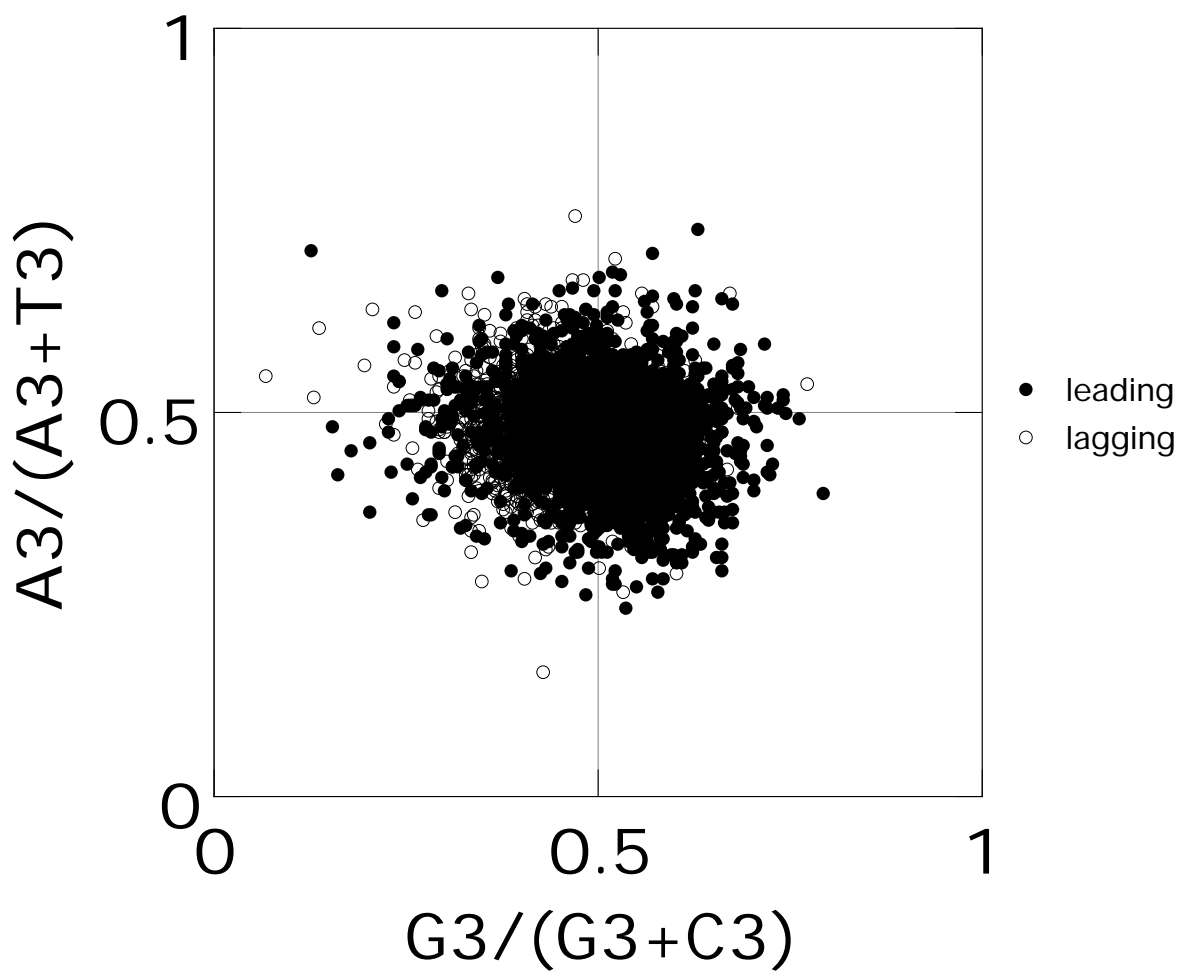
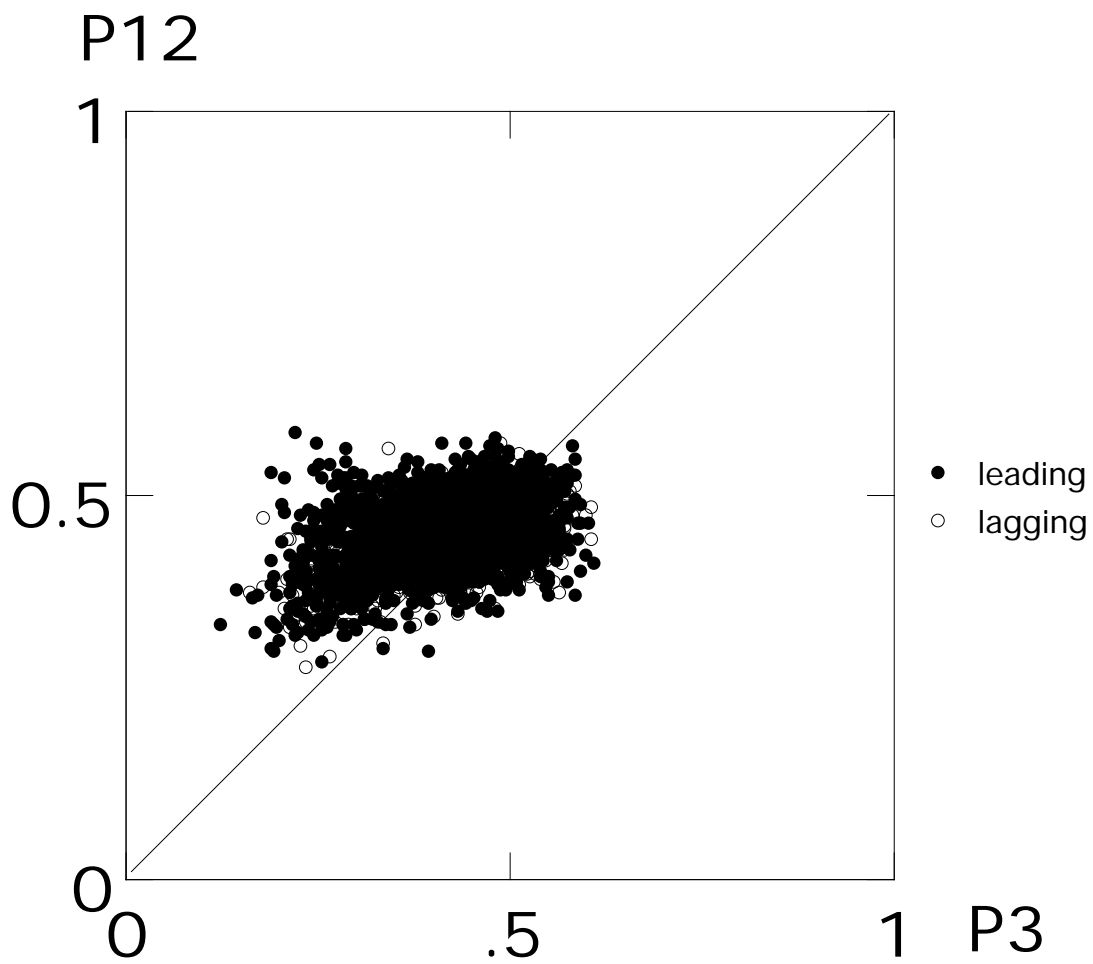
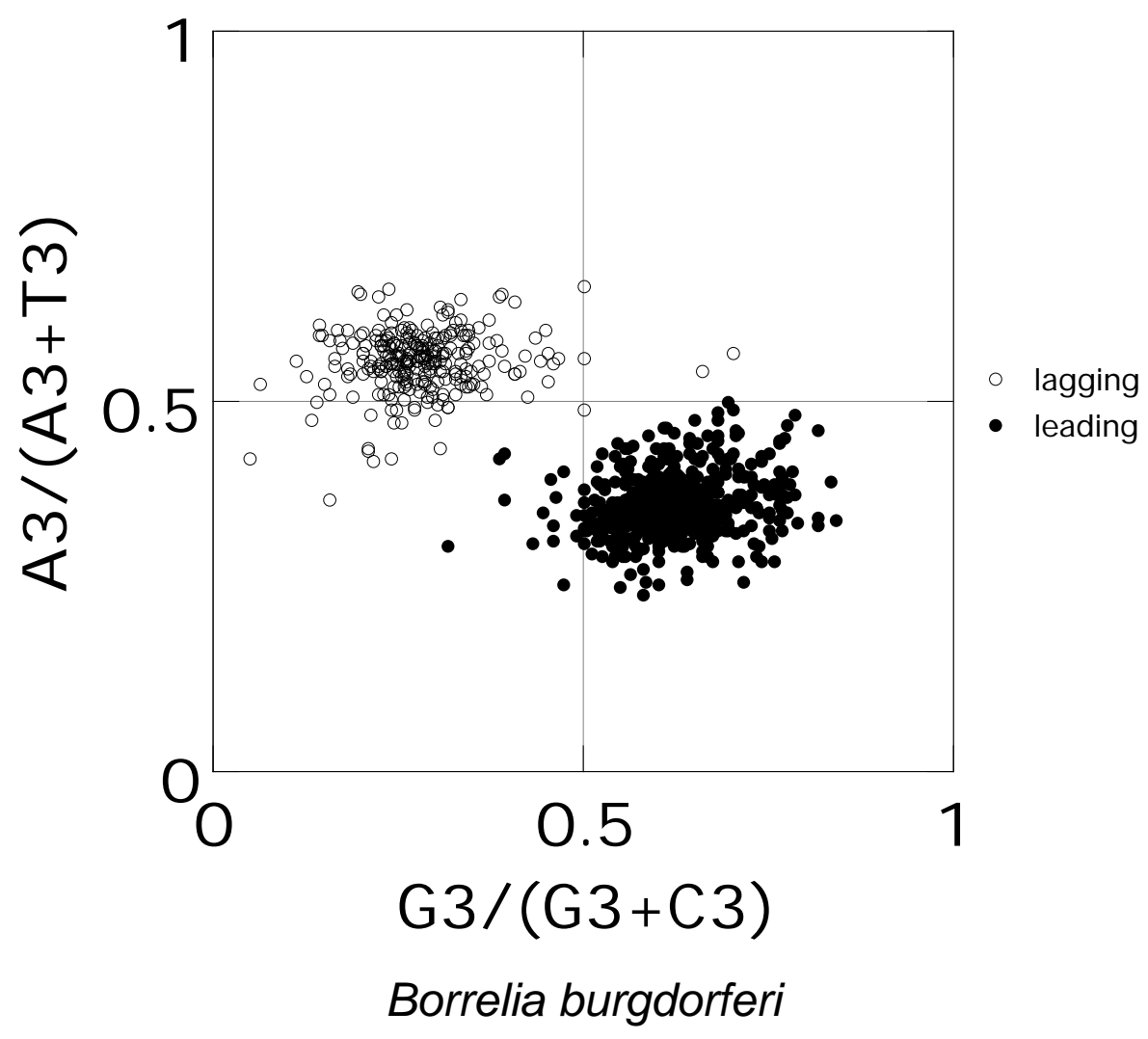
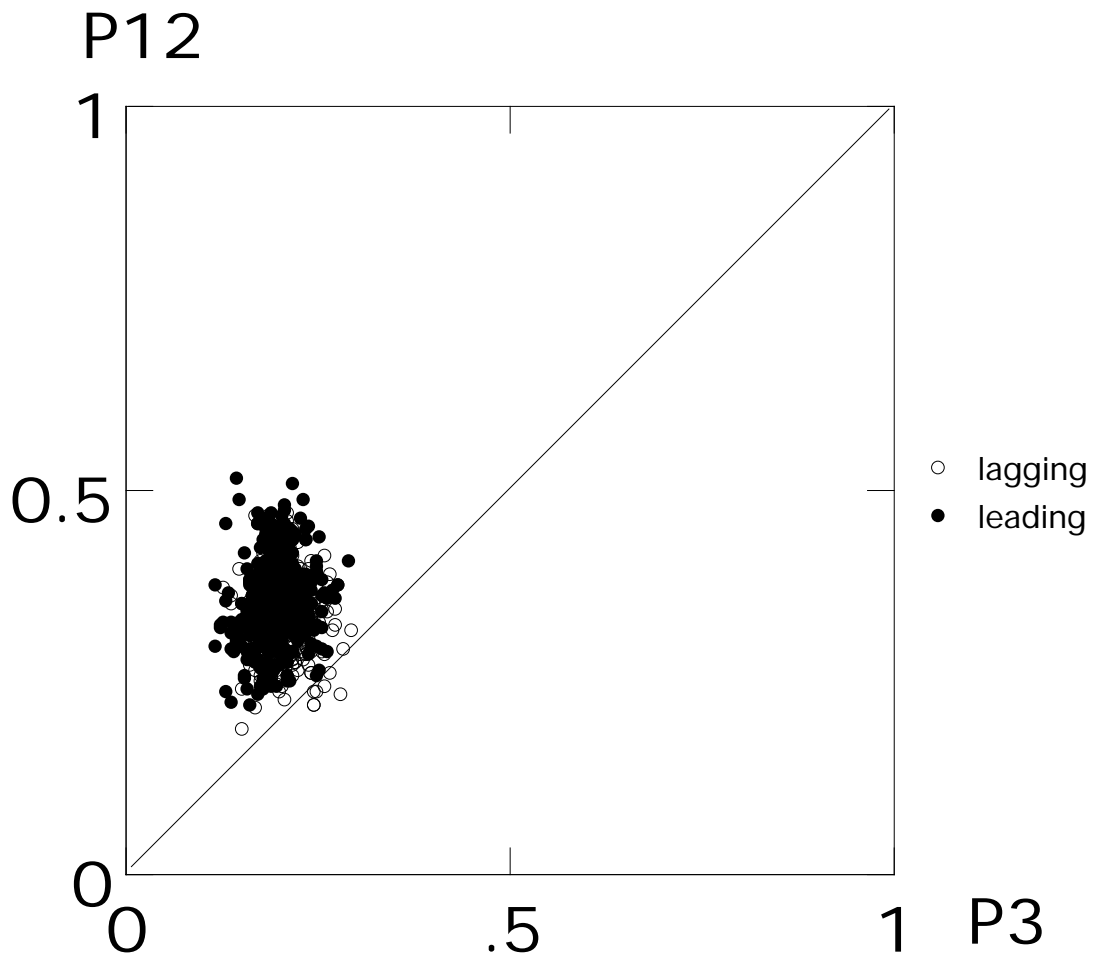


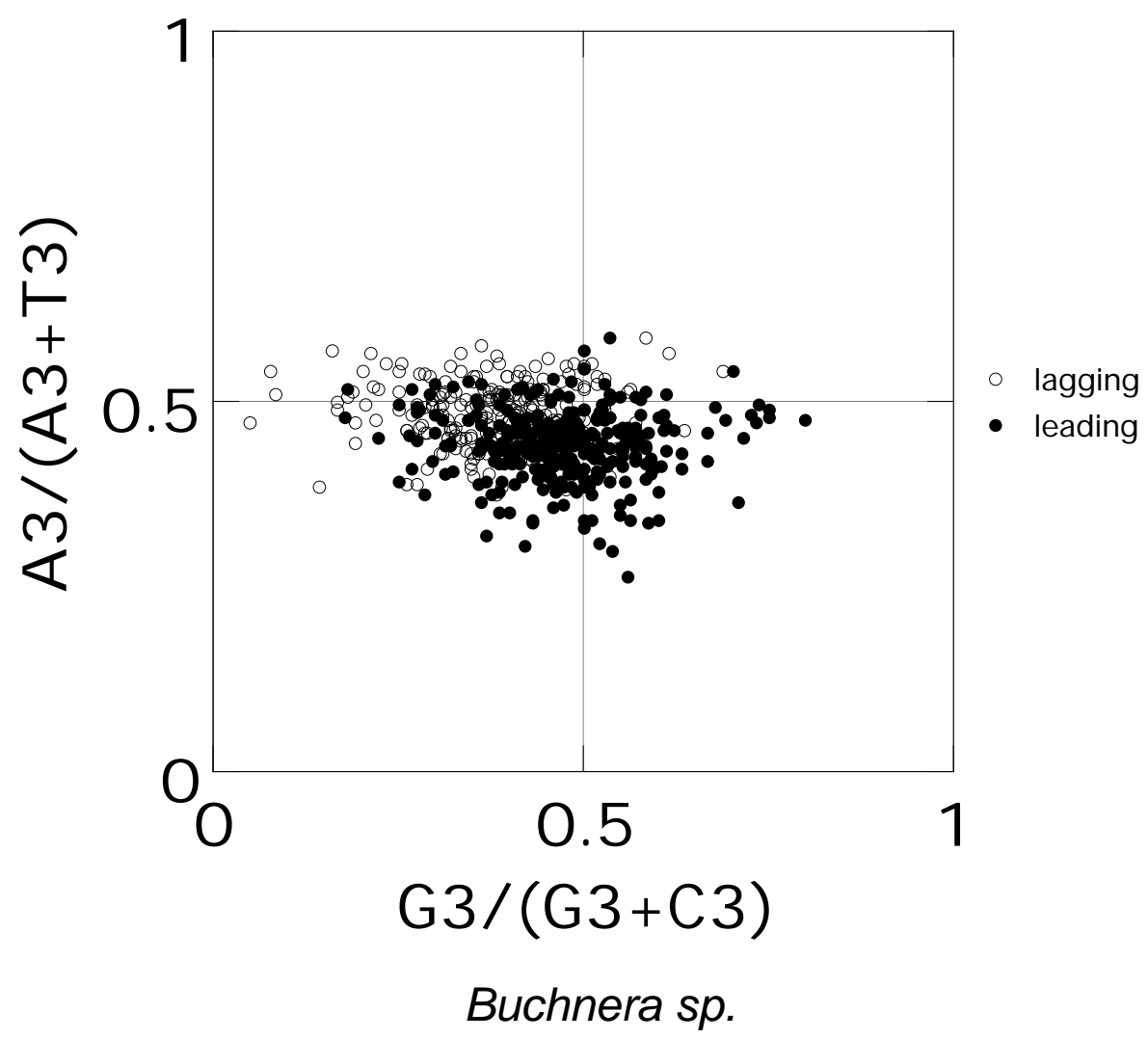
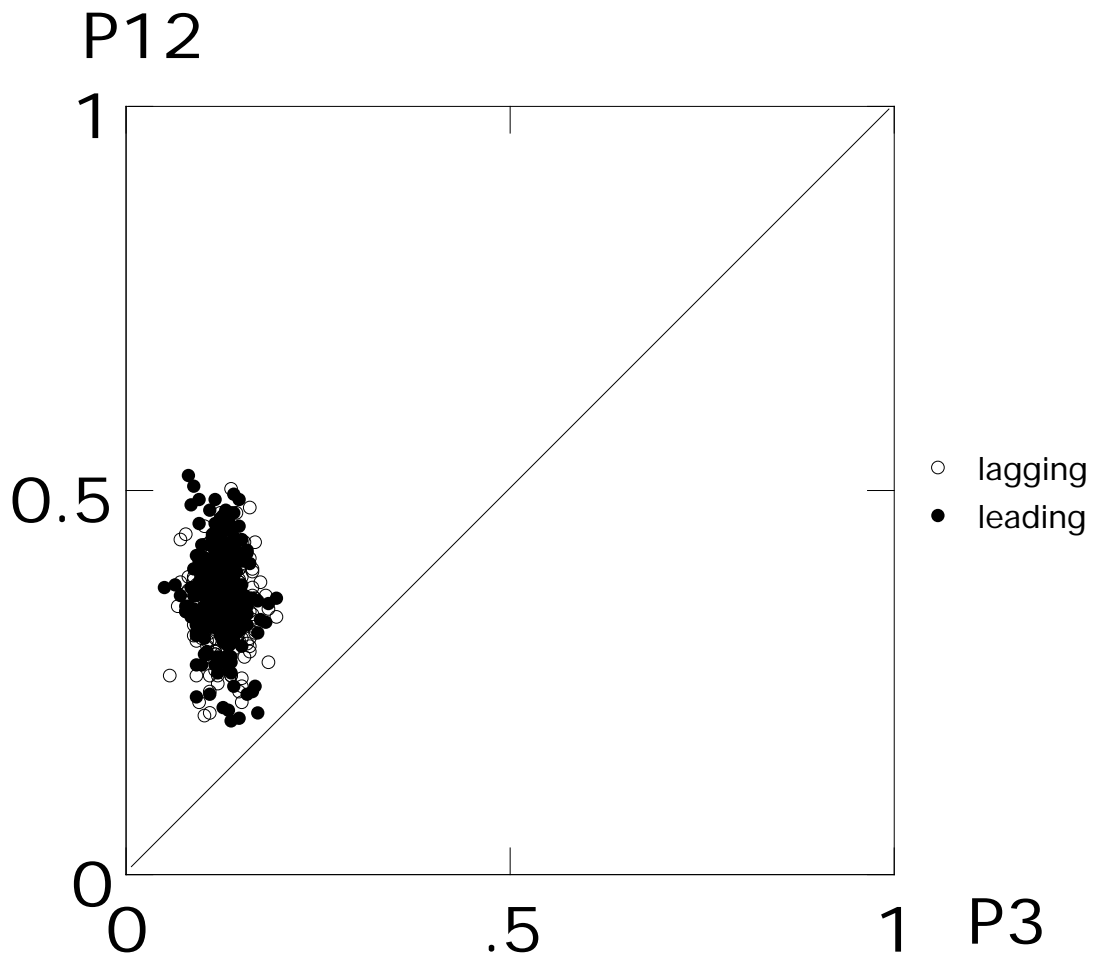
Table 2. Base composition in third codon positions between the leading and the lagging strands. Indices are defined in the material and method section. #lead and #lag are the number of genes in the leading and the lagging strand. The significance level (Sig.) for a difference between the two groups are: ns (not significant, $p > 0.05$); * ($0.01 < p < 0.05$); ** ($0.001 < p < 0.01$); *** ($p < 0.001$). The contribution in percent of replication-associated effects to PR2 deviations (B_l %) is given in **bold** when both differences $x_l - x_2$ and $y_l - y_2$ are highly significant ($p < 0.01$). When a difference is significant between the two groups a red color outlines the **highest** value and a blue color the lowest **value**.

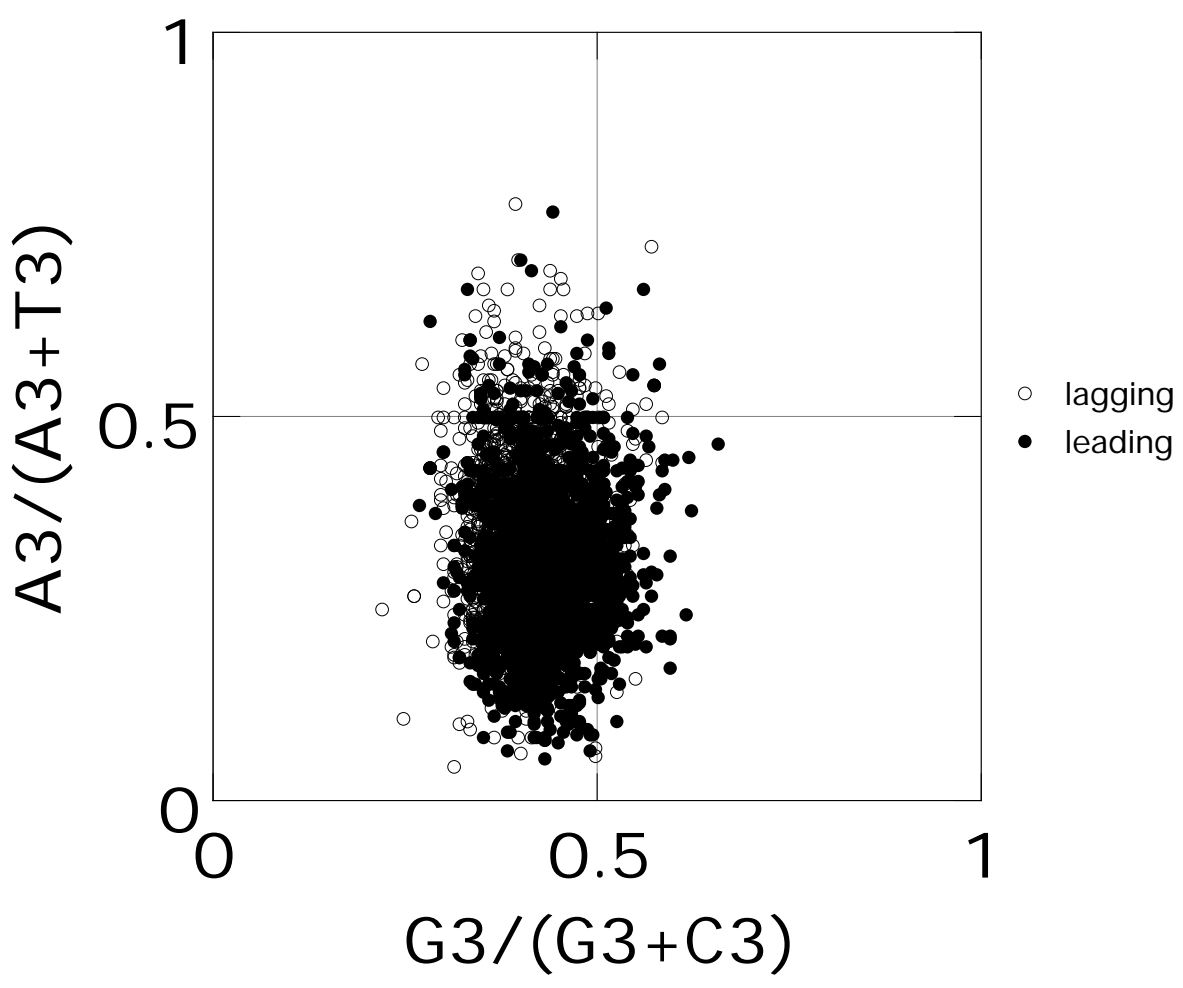
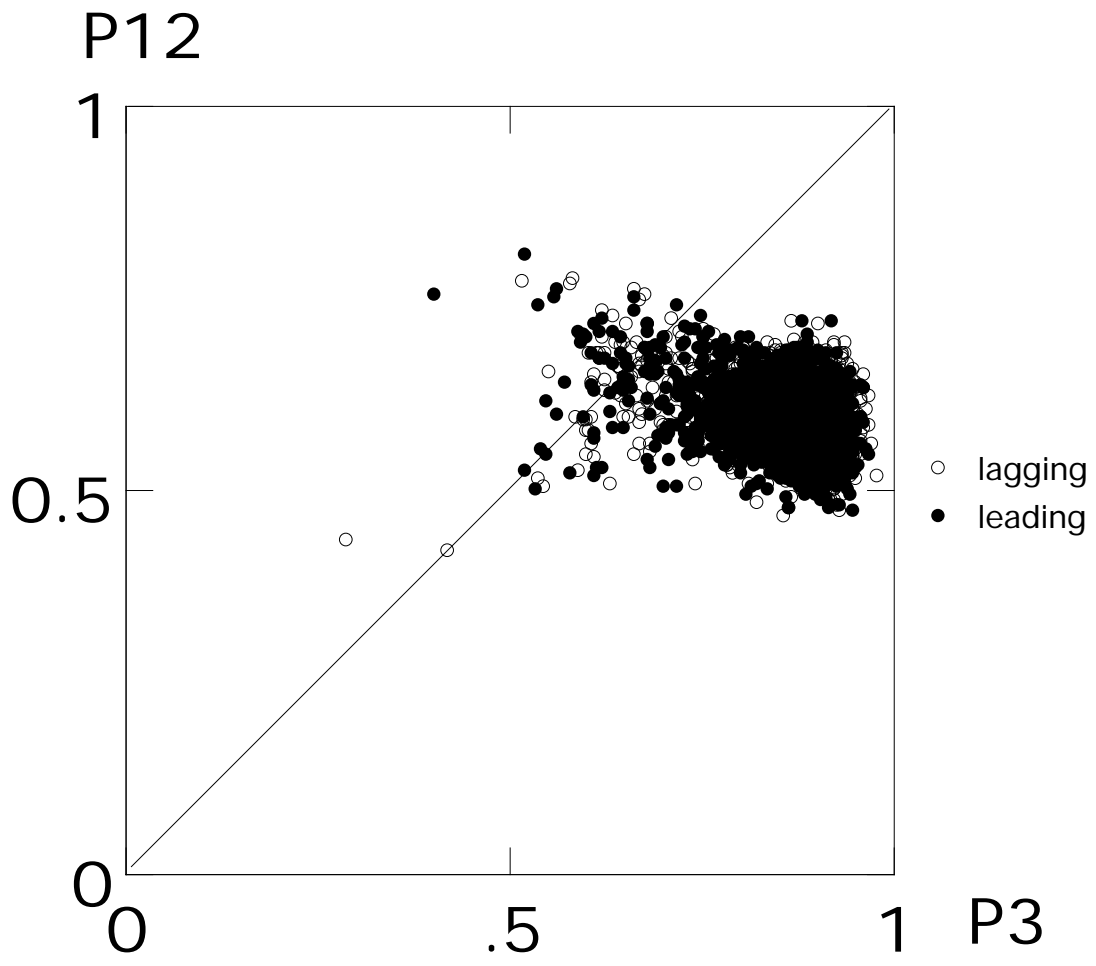




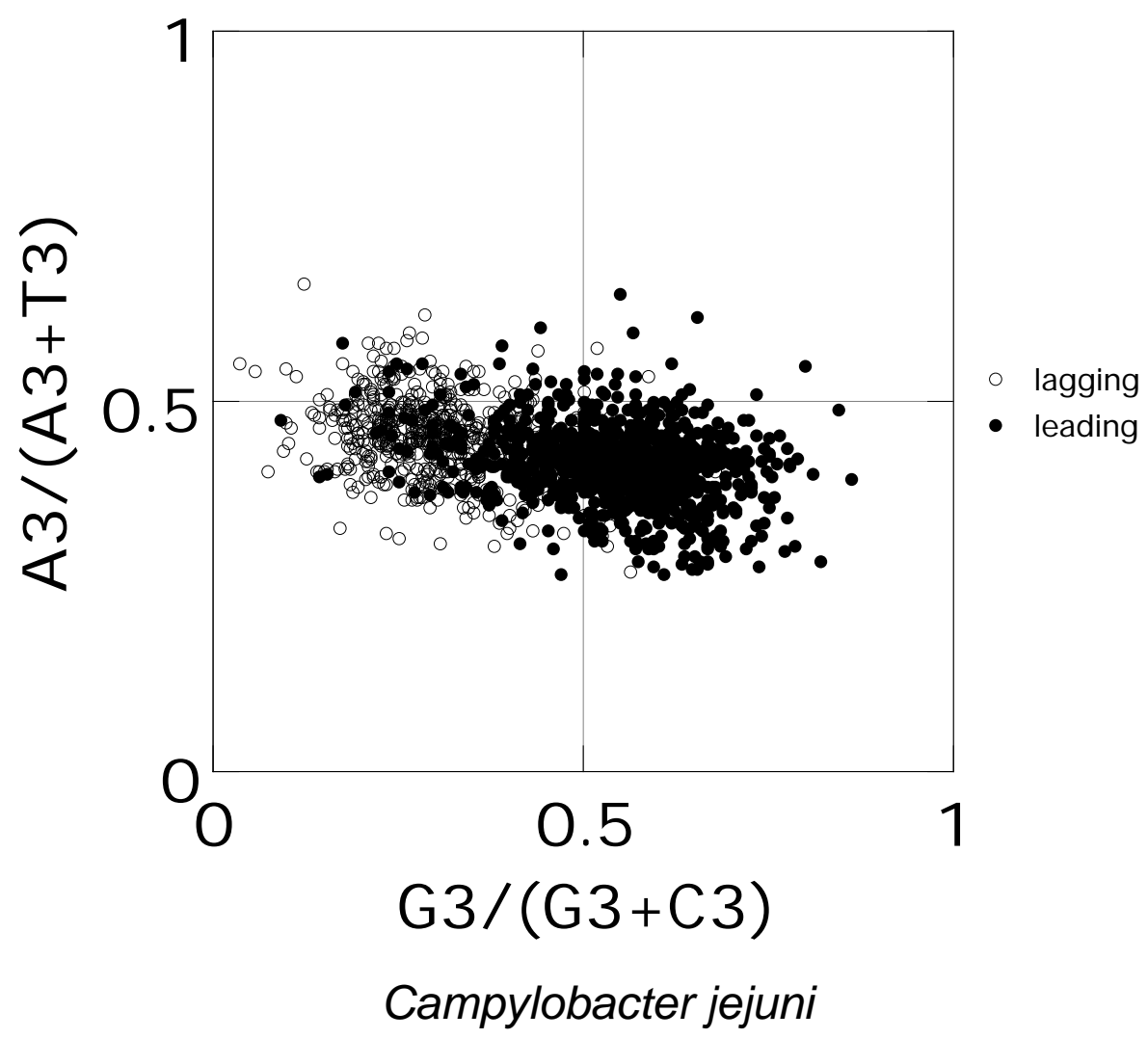
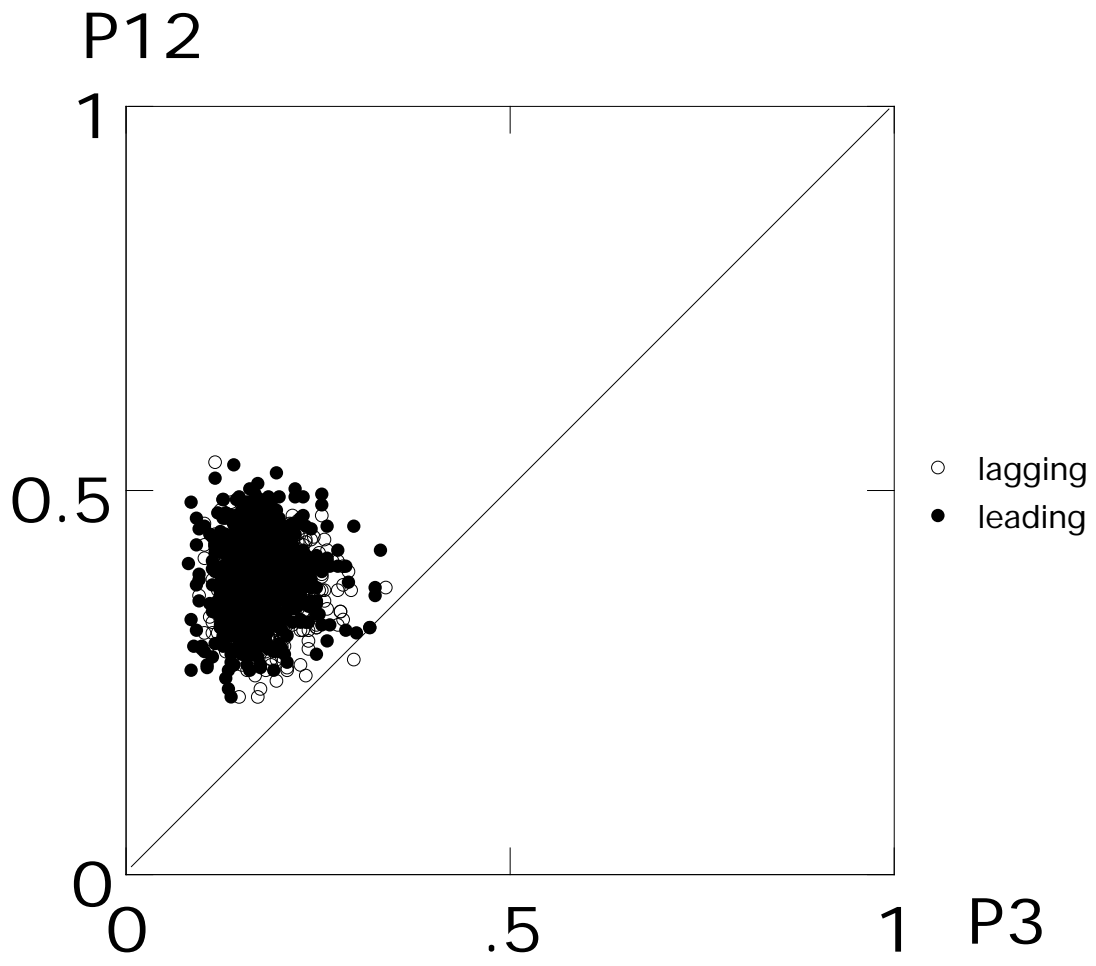
Bacillus subtilis

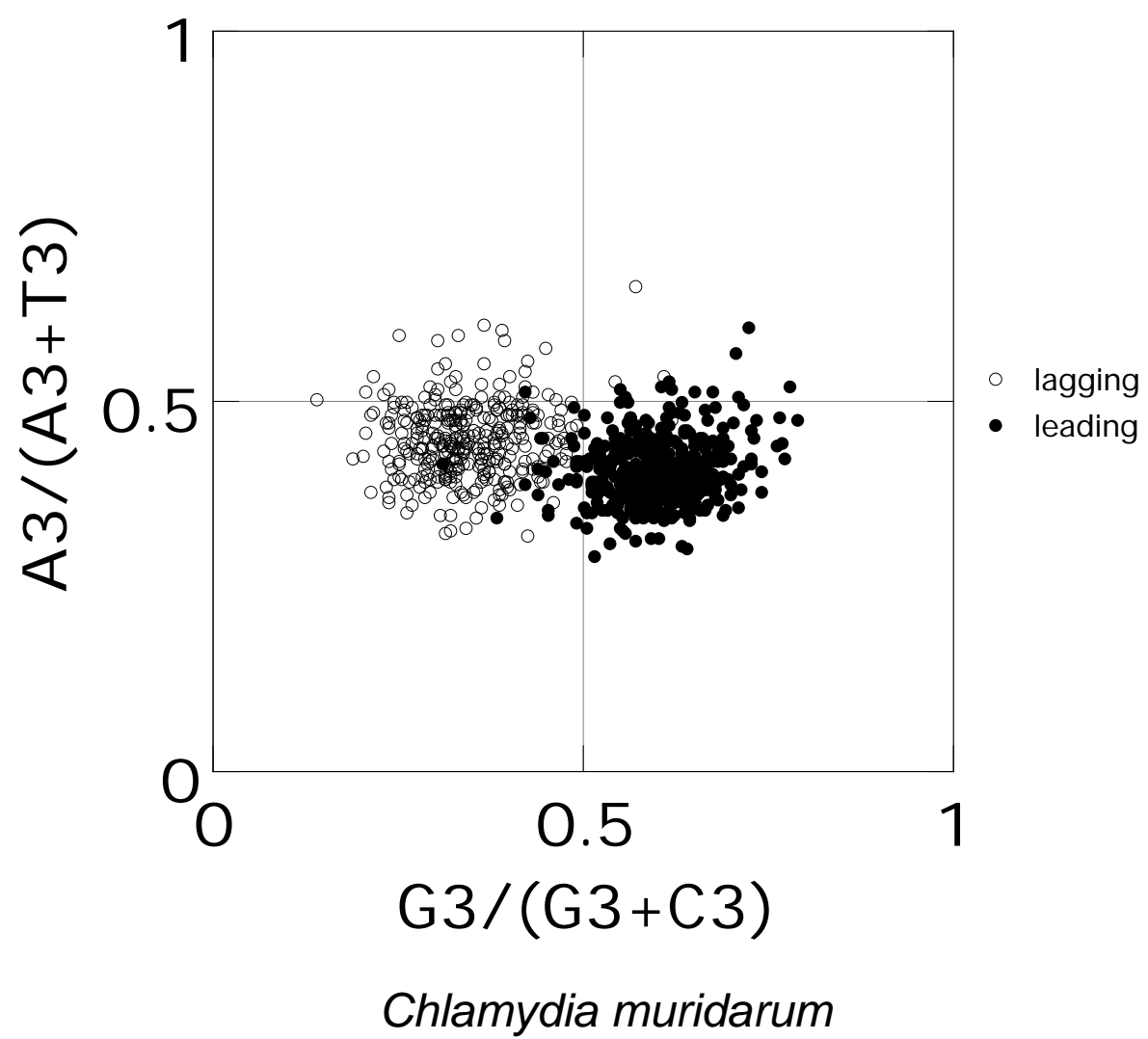
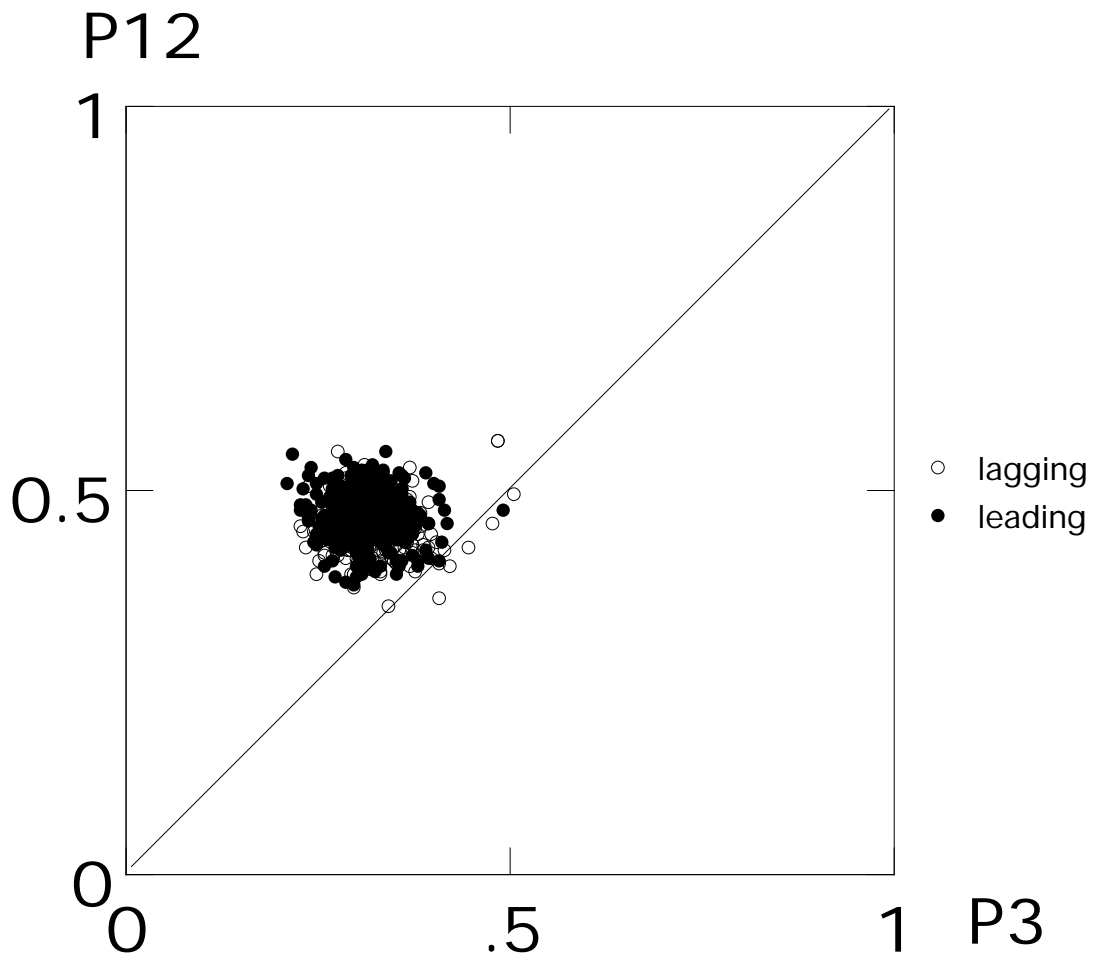


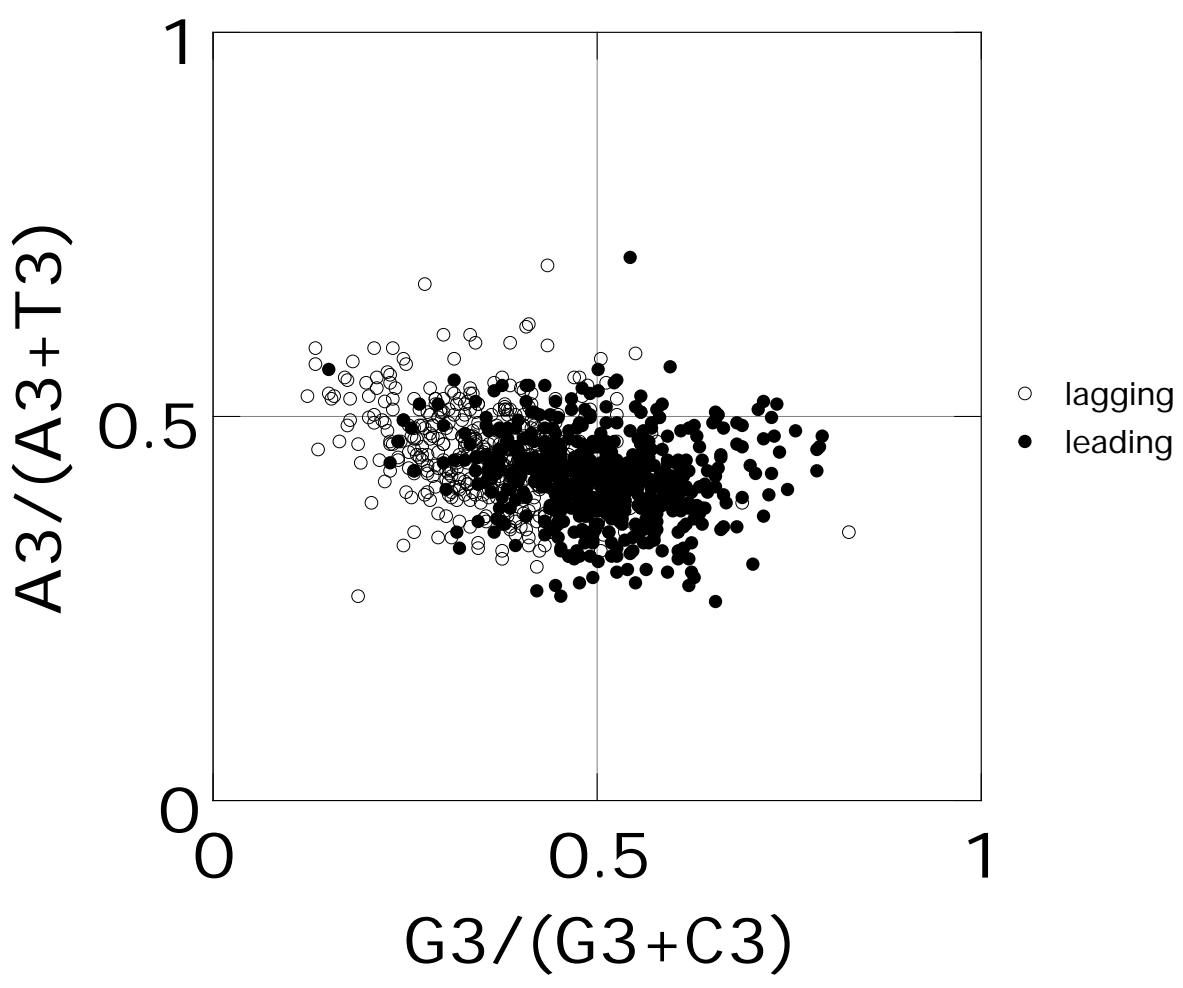
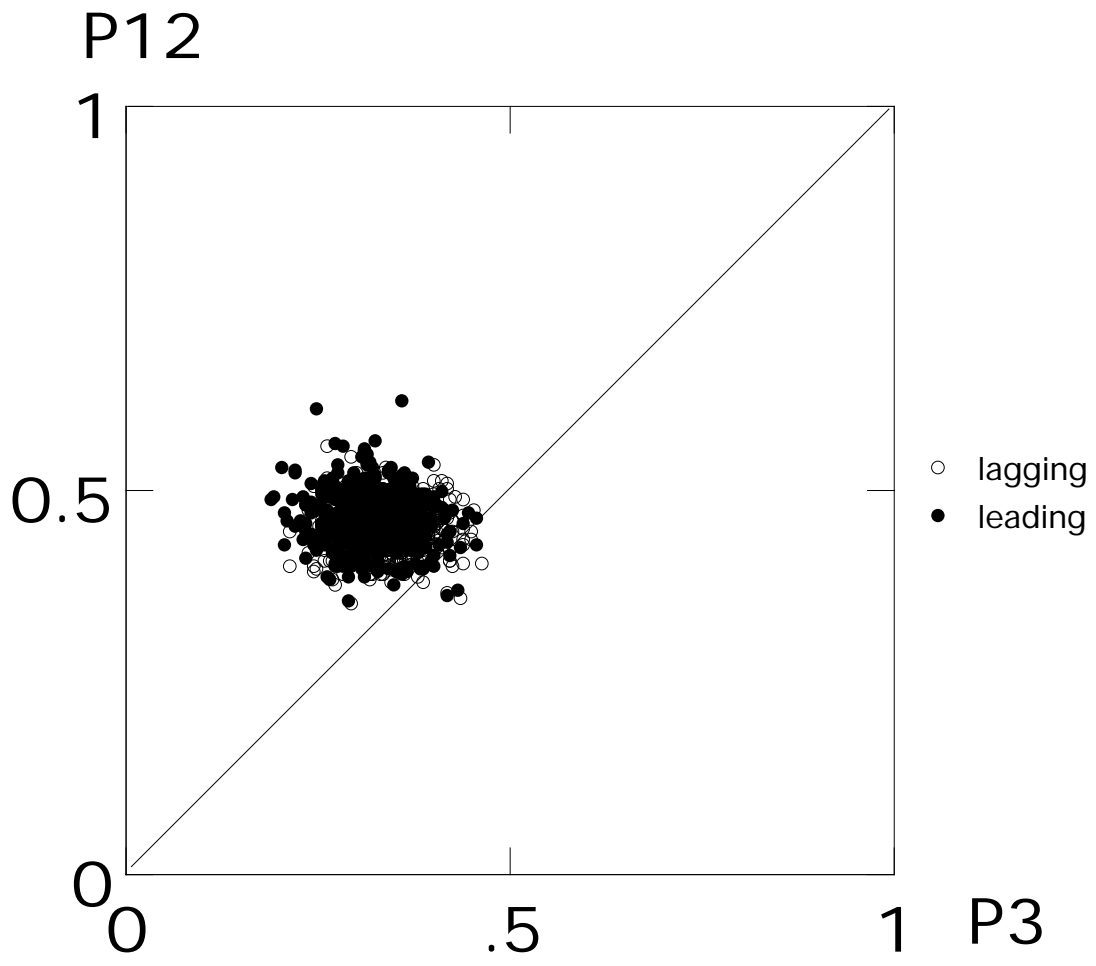




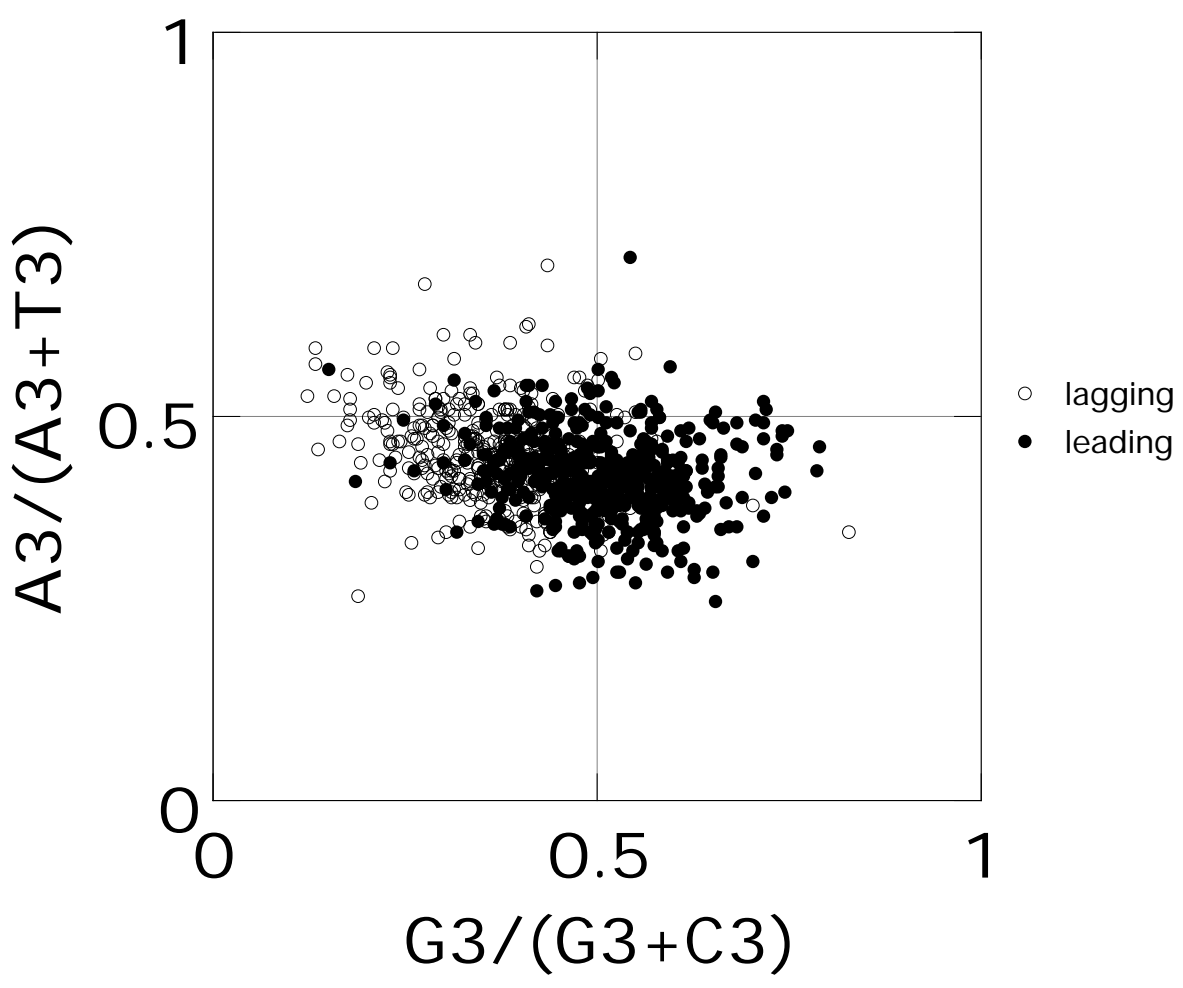
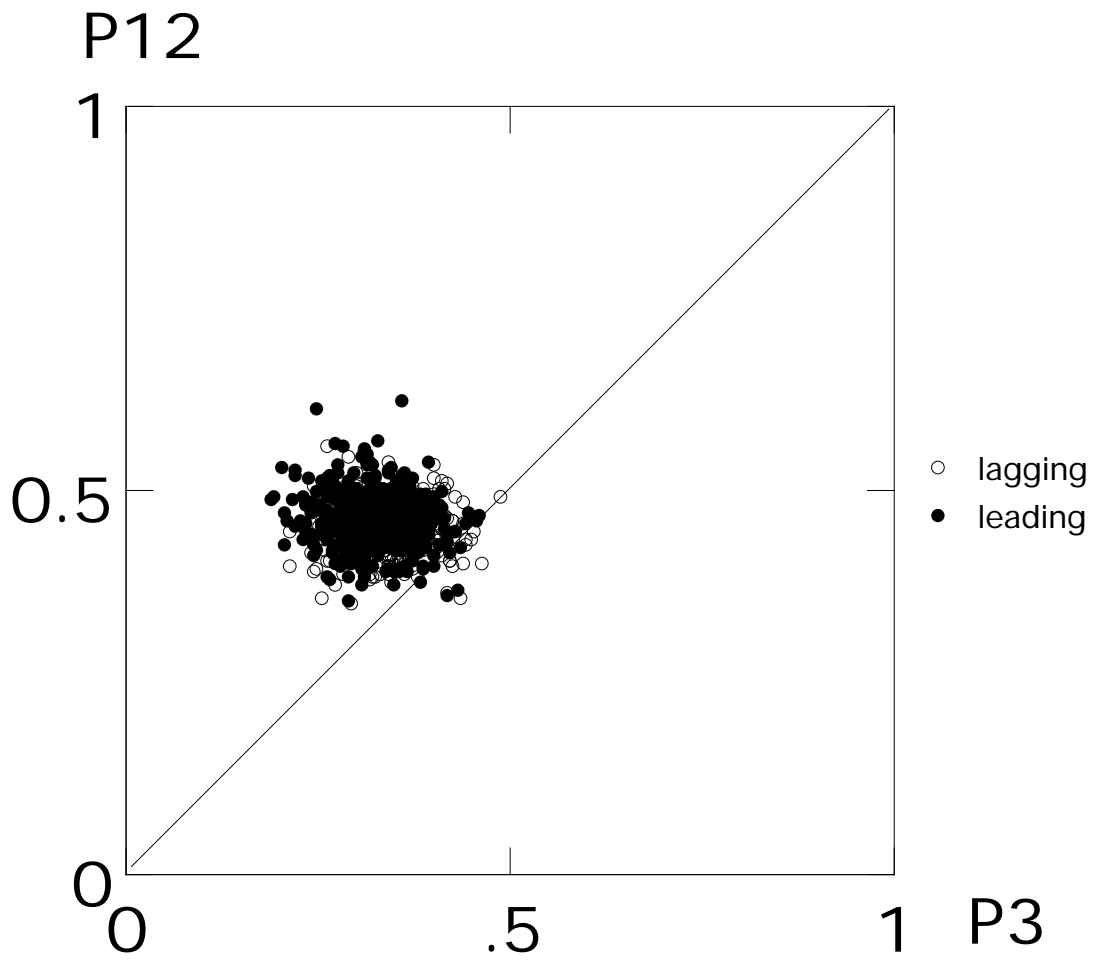
Caulobacter crescentus



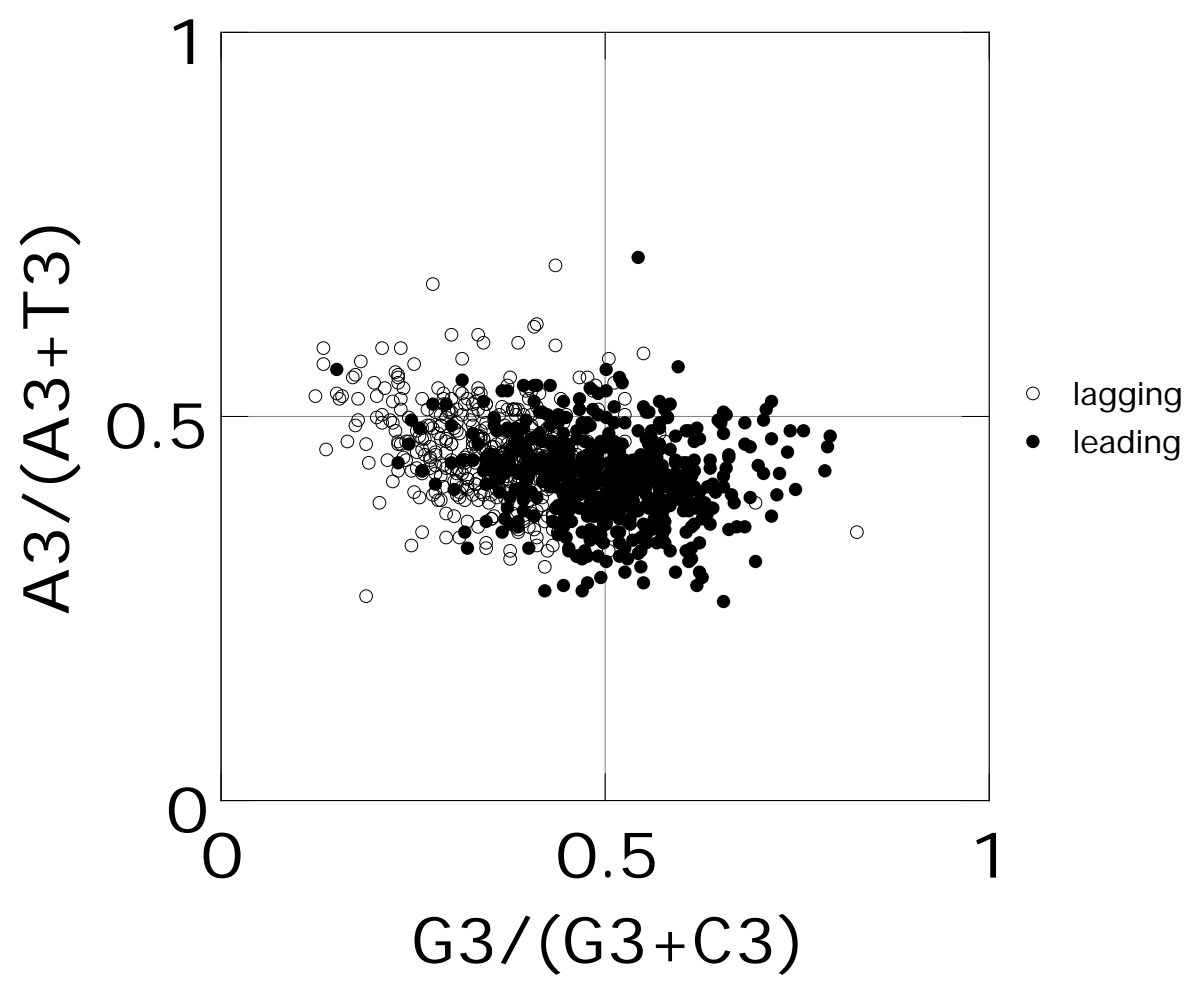
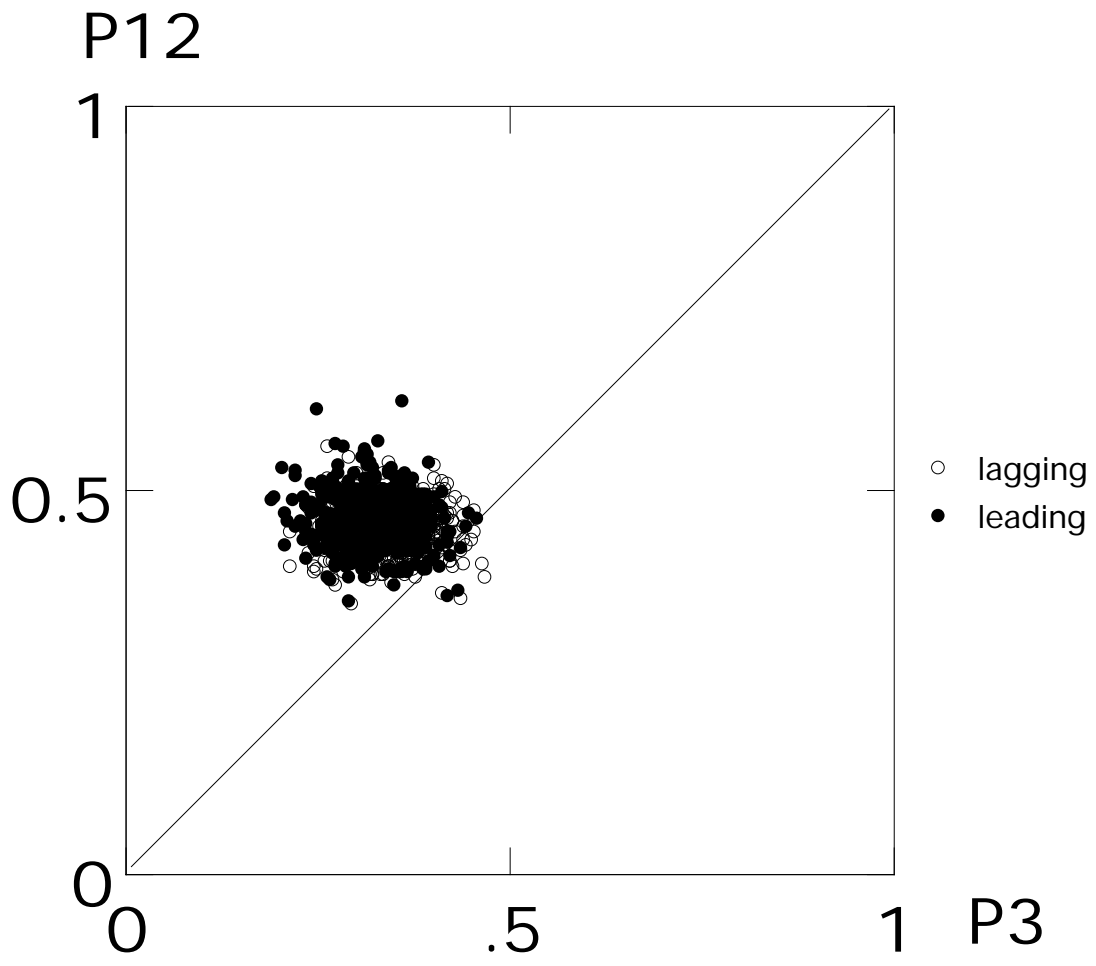




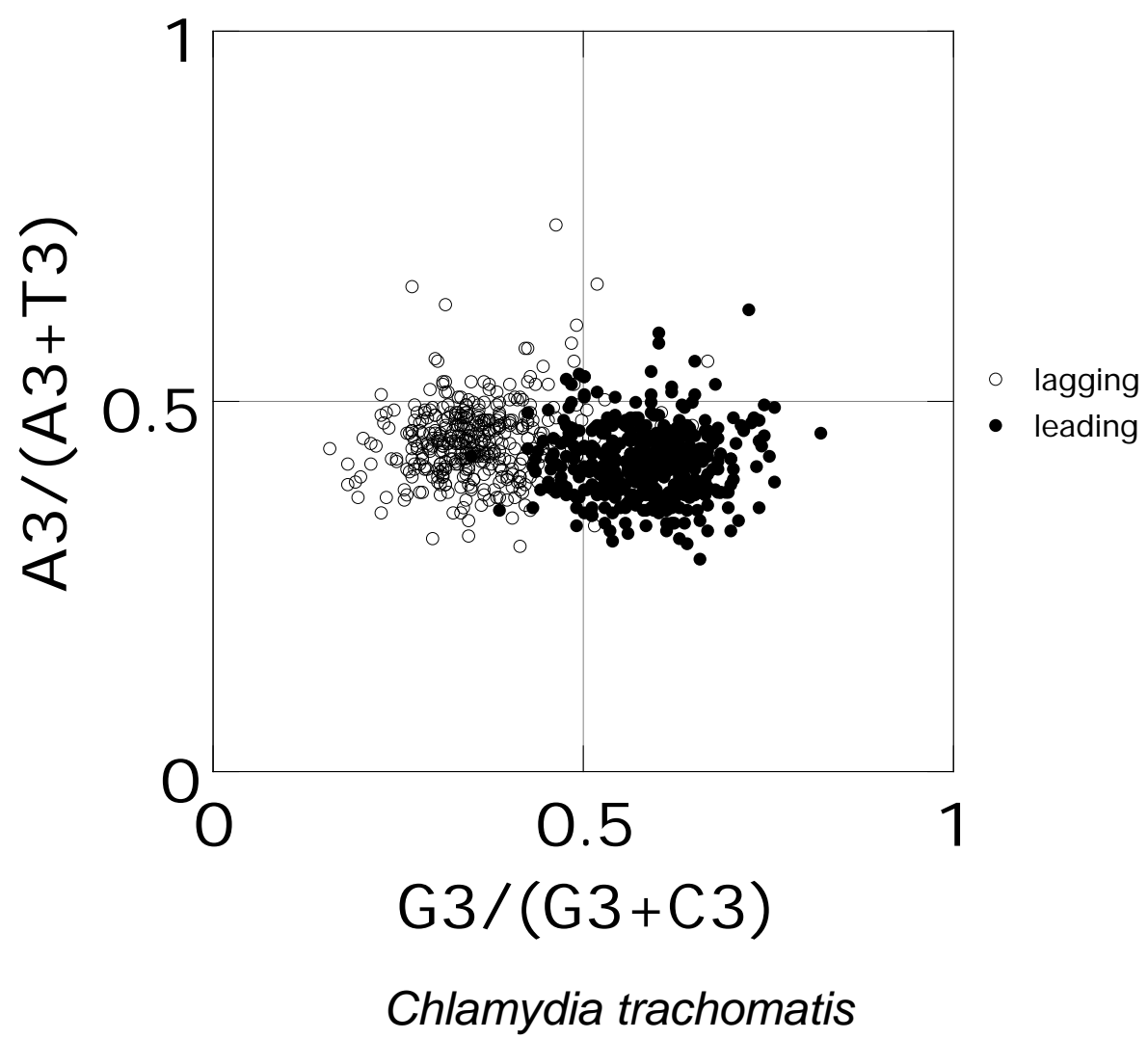
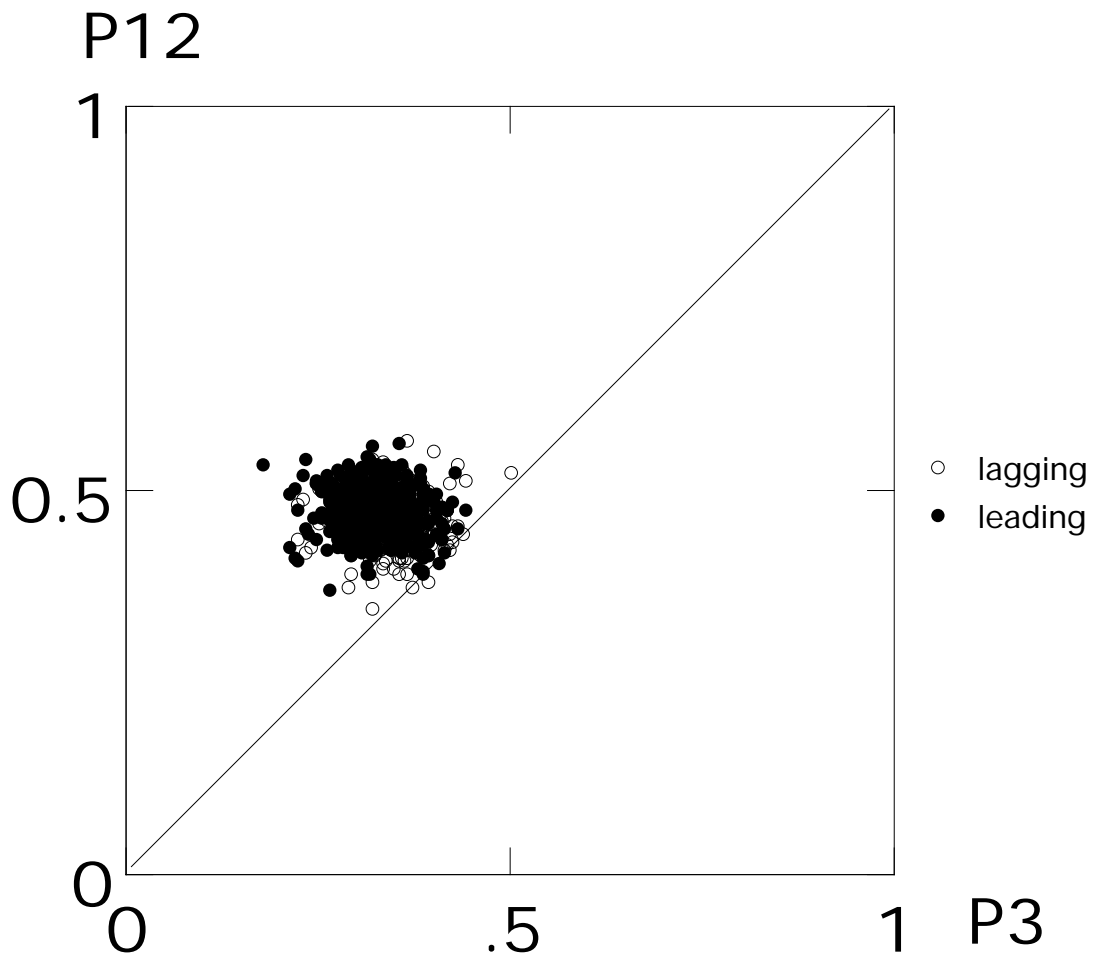
Chlamydophila pneumoniae CWL029

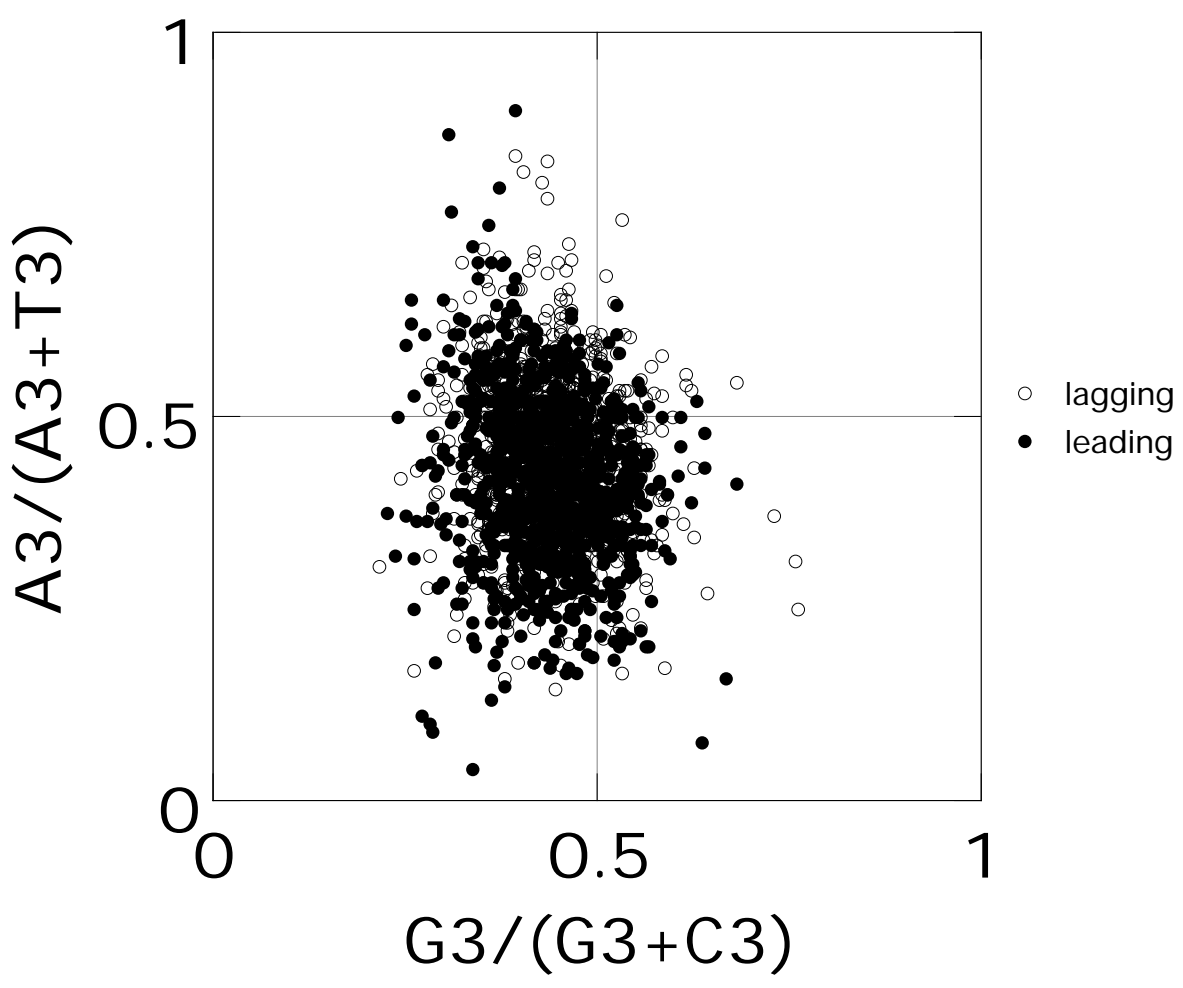
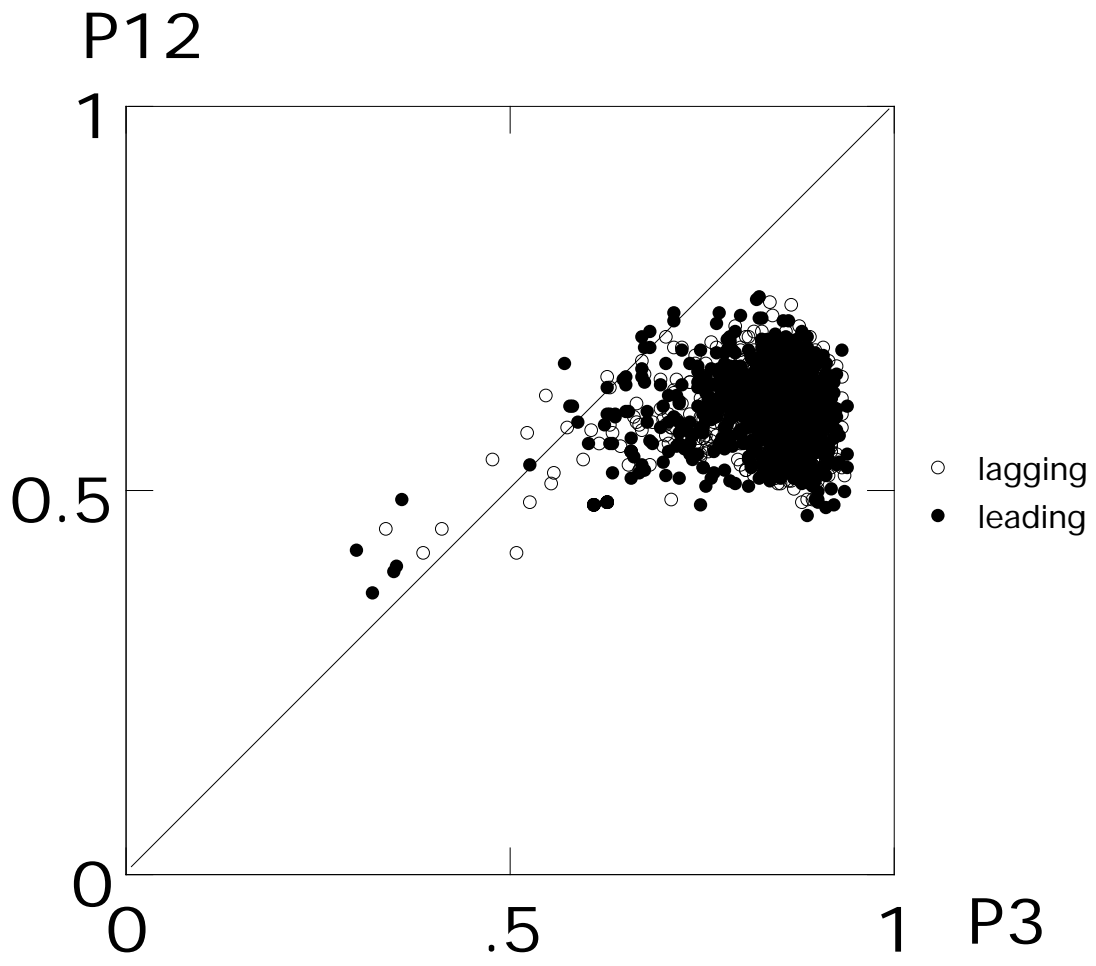


Chlamydophila pneumoniae AR39

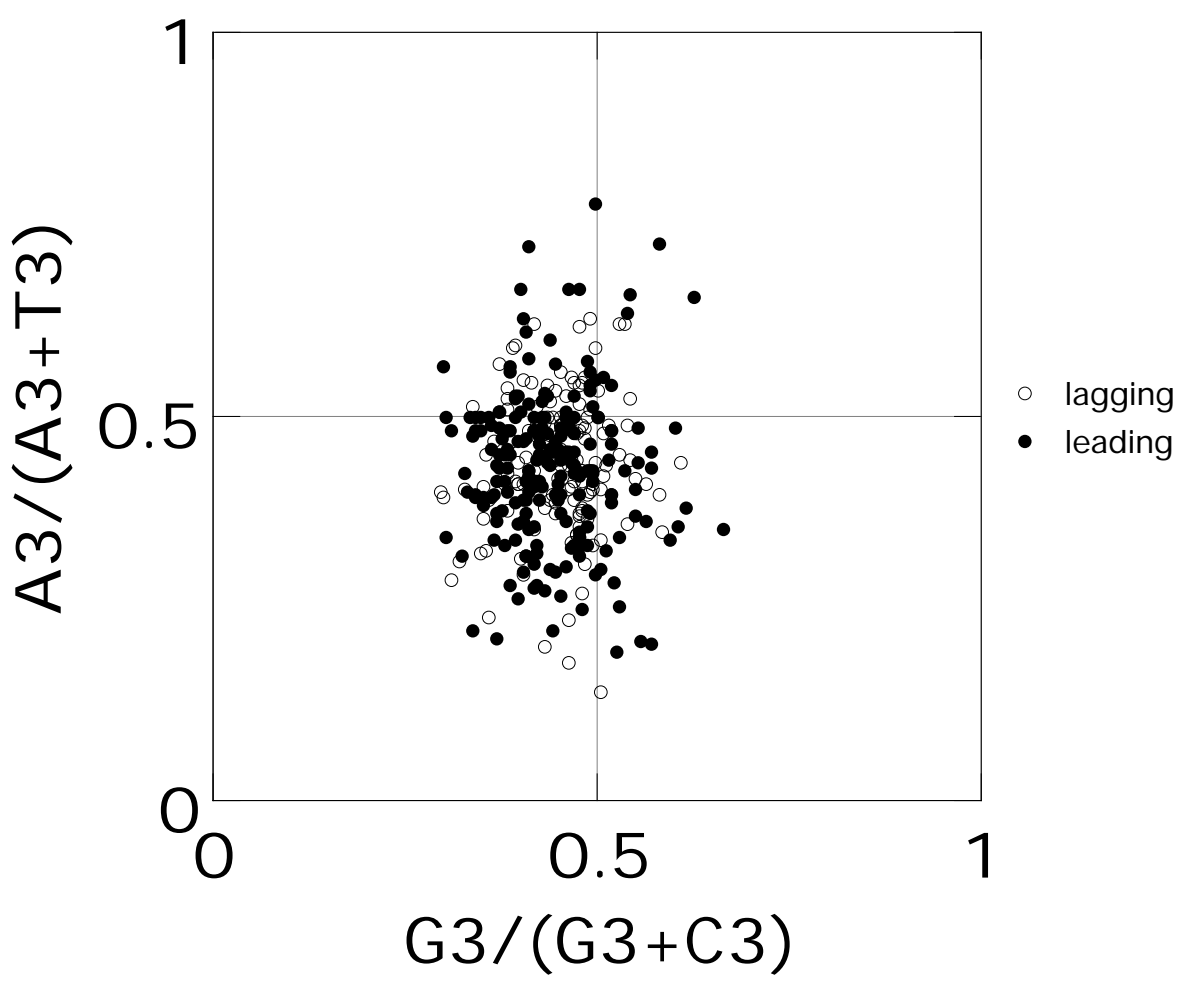
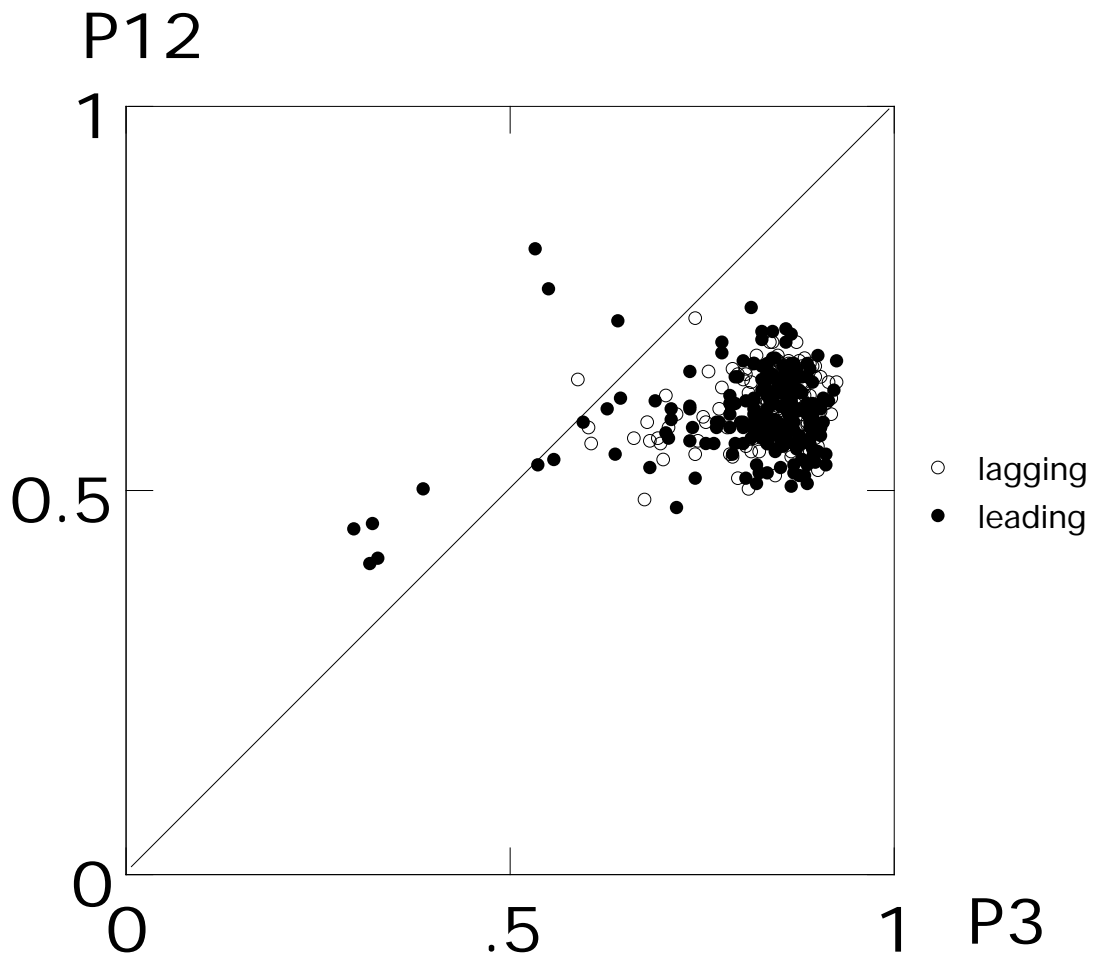


Chlamydophila pneumoniae J138

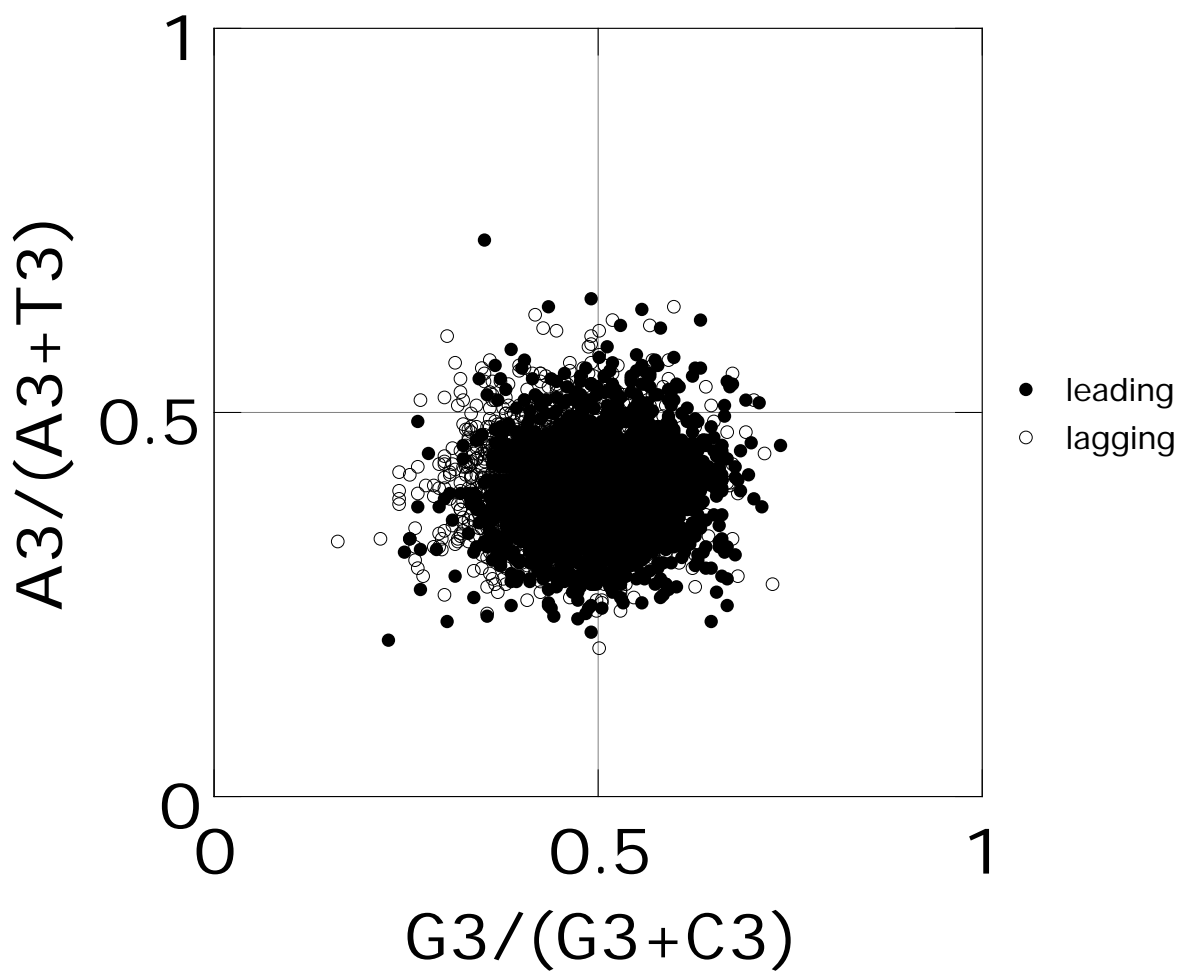
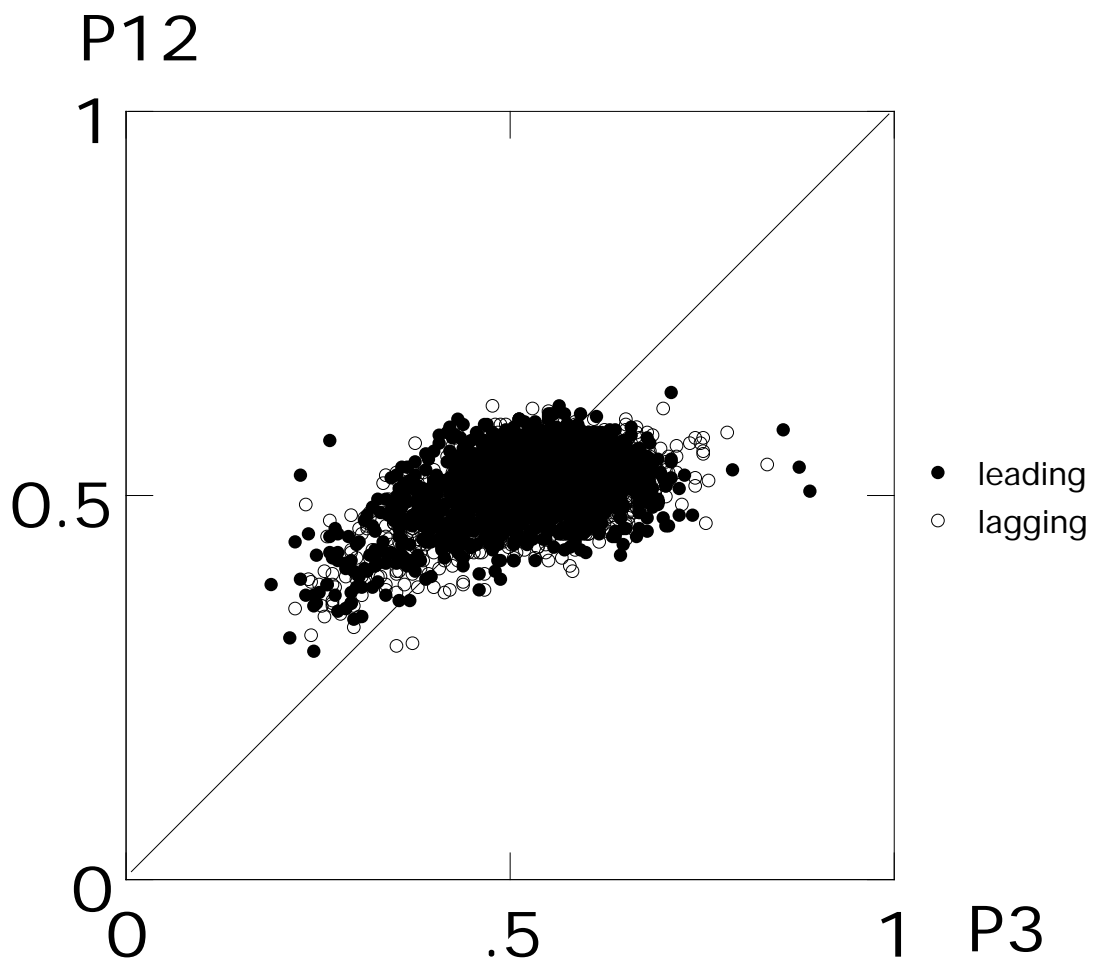




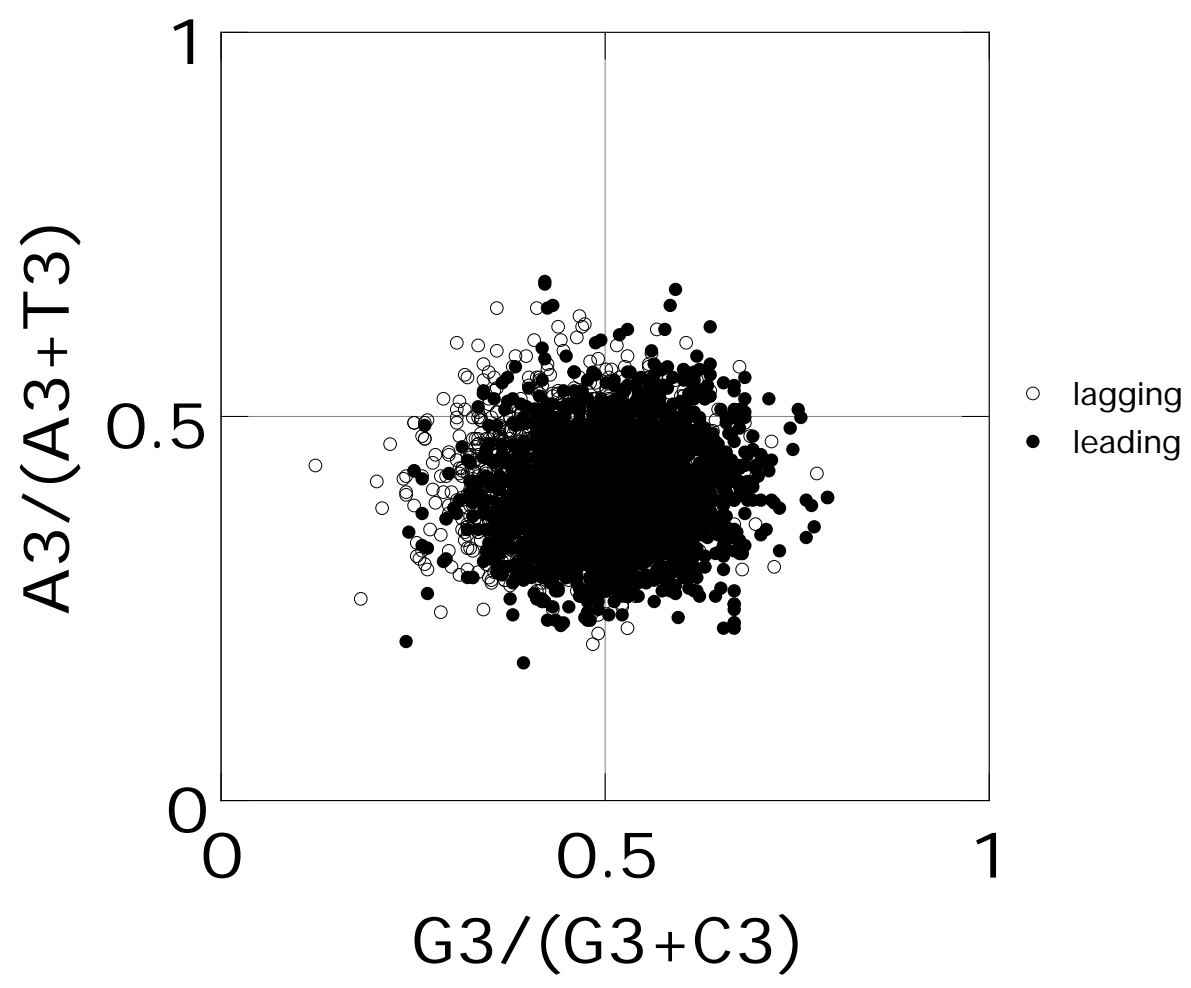
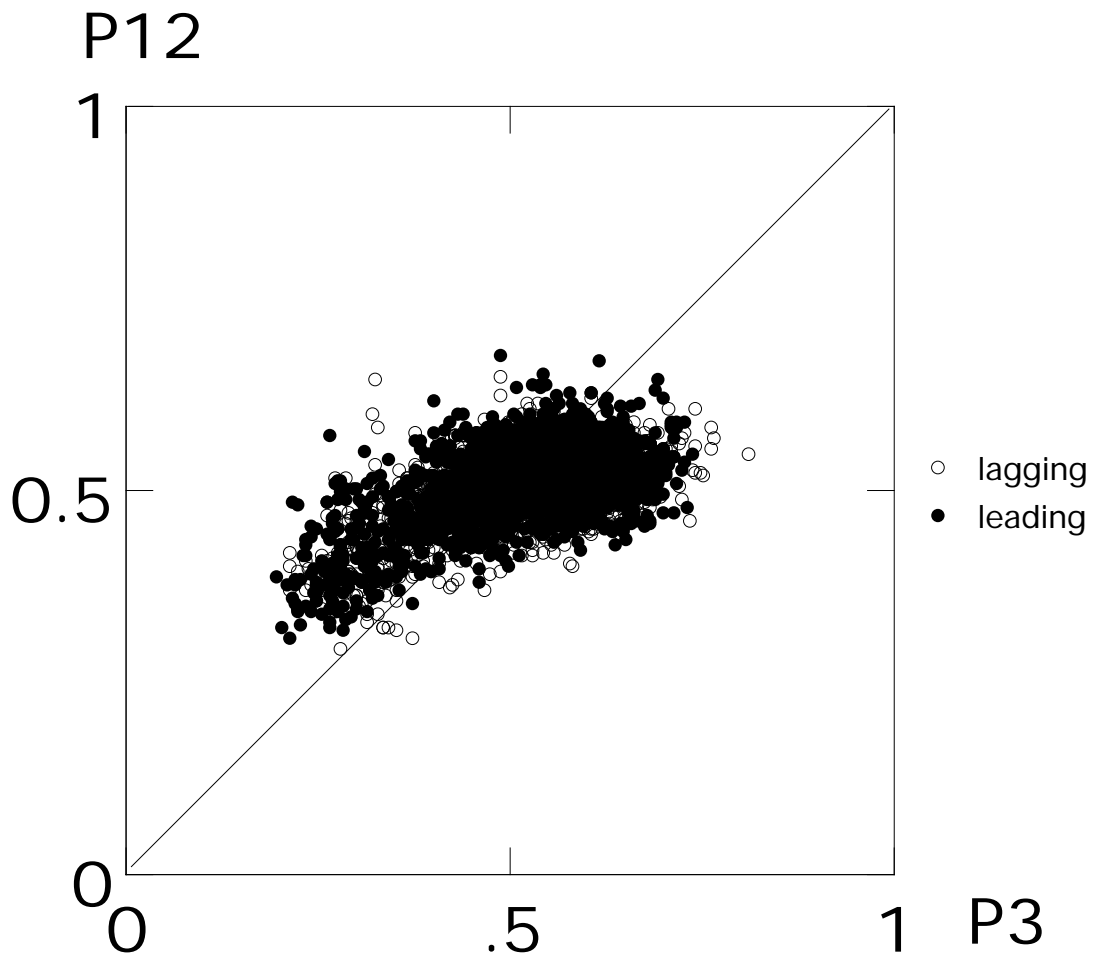
Deinococcus radiodurans chromosome 1



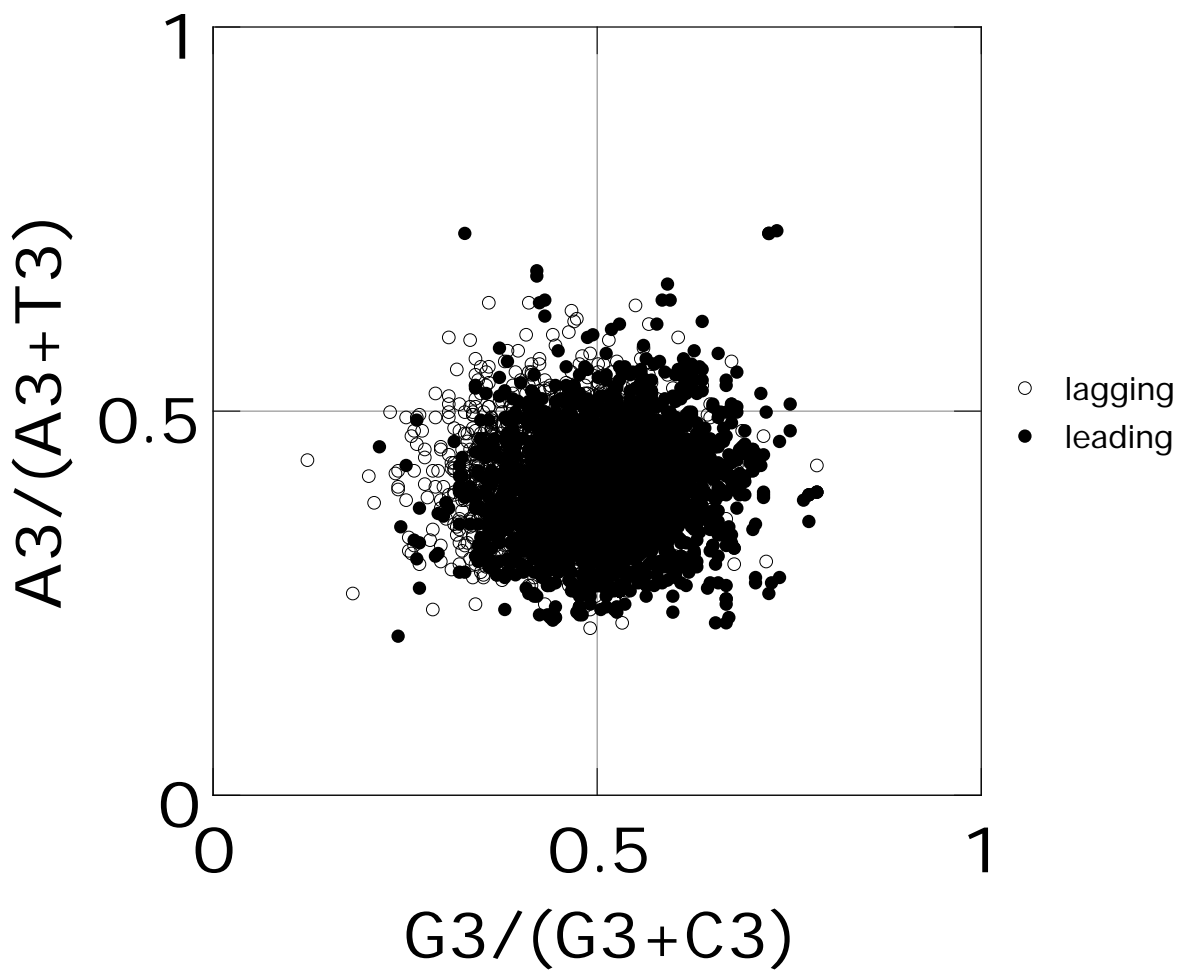
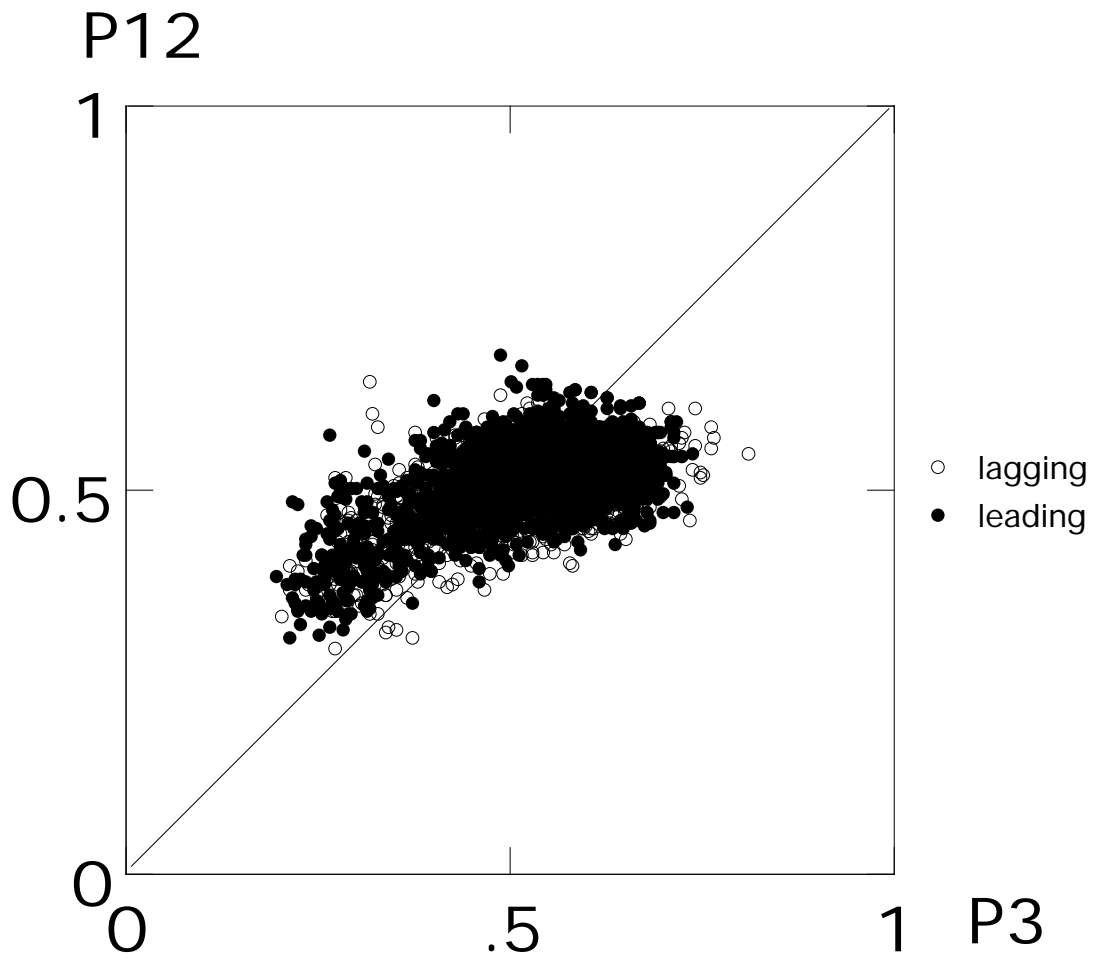
Deinococcus radiodurans chromosome 2



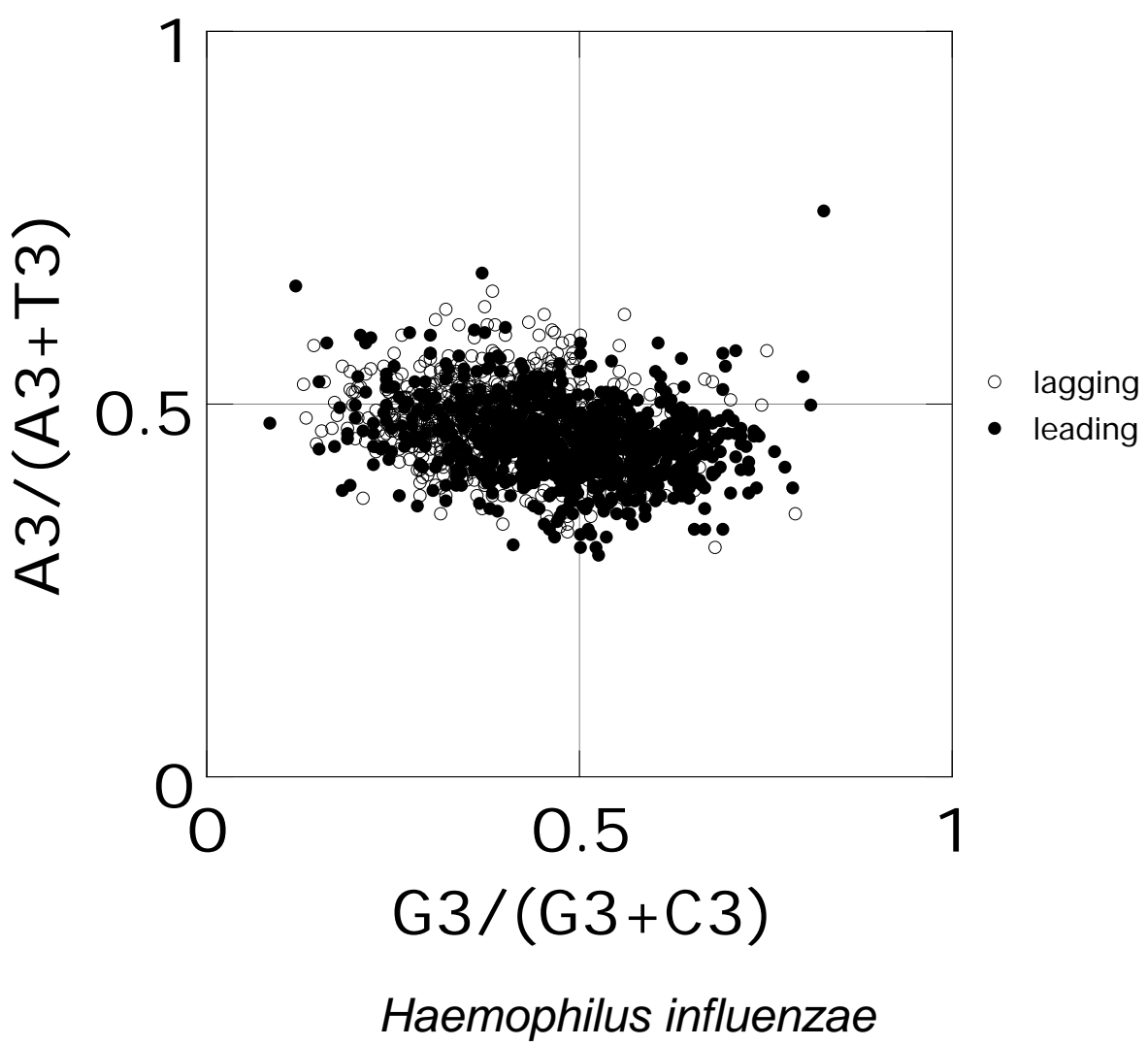
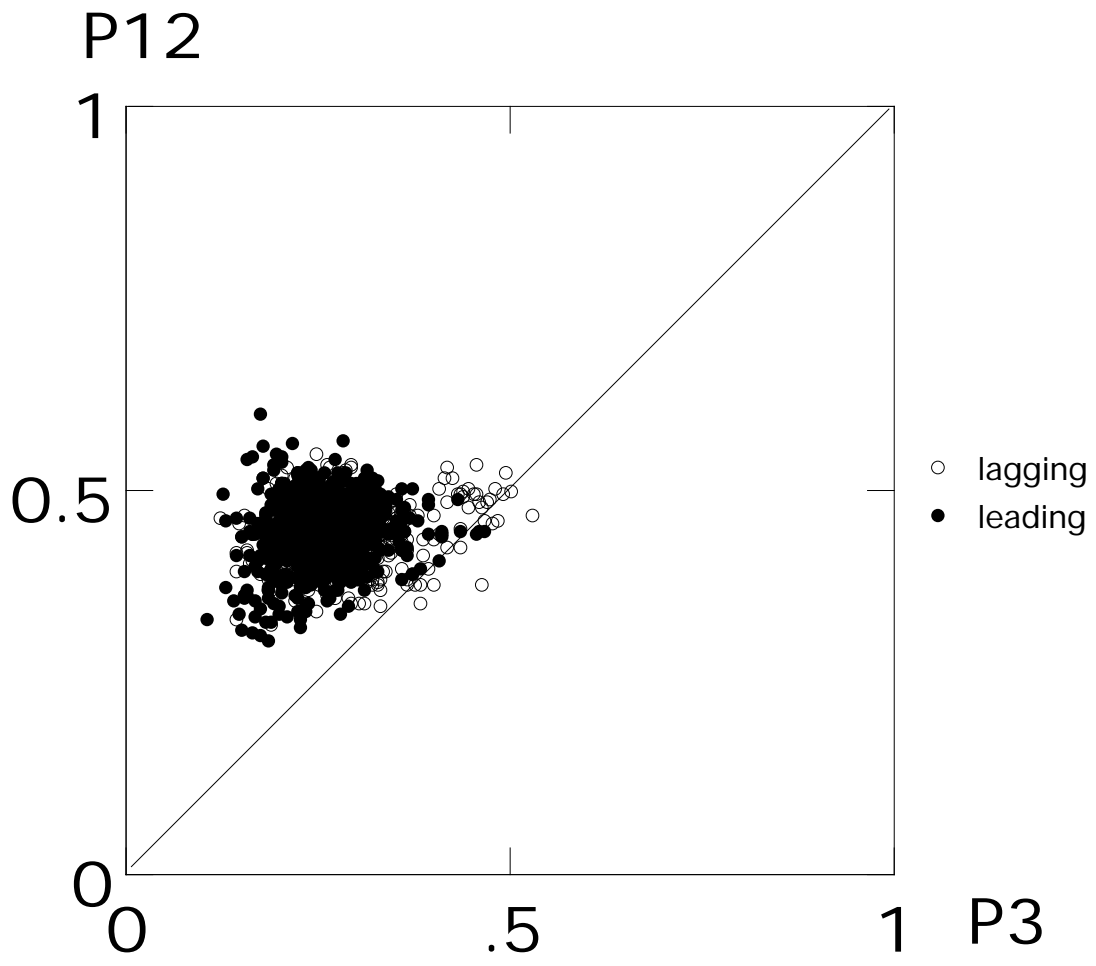
Escherichia coli K-12

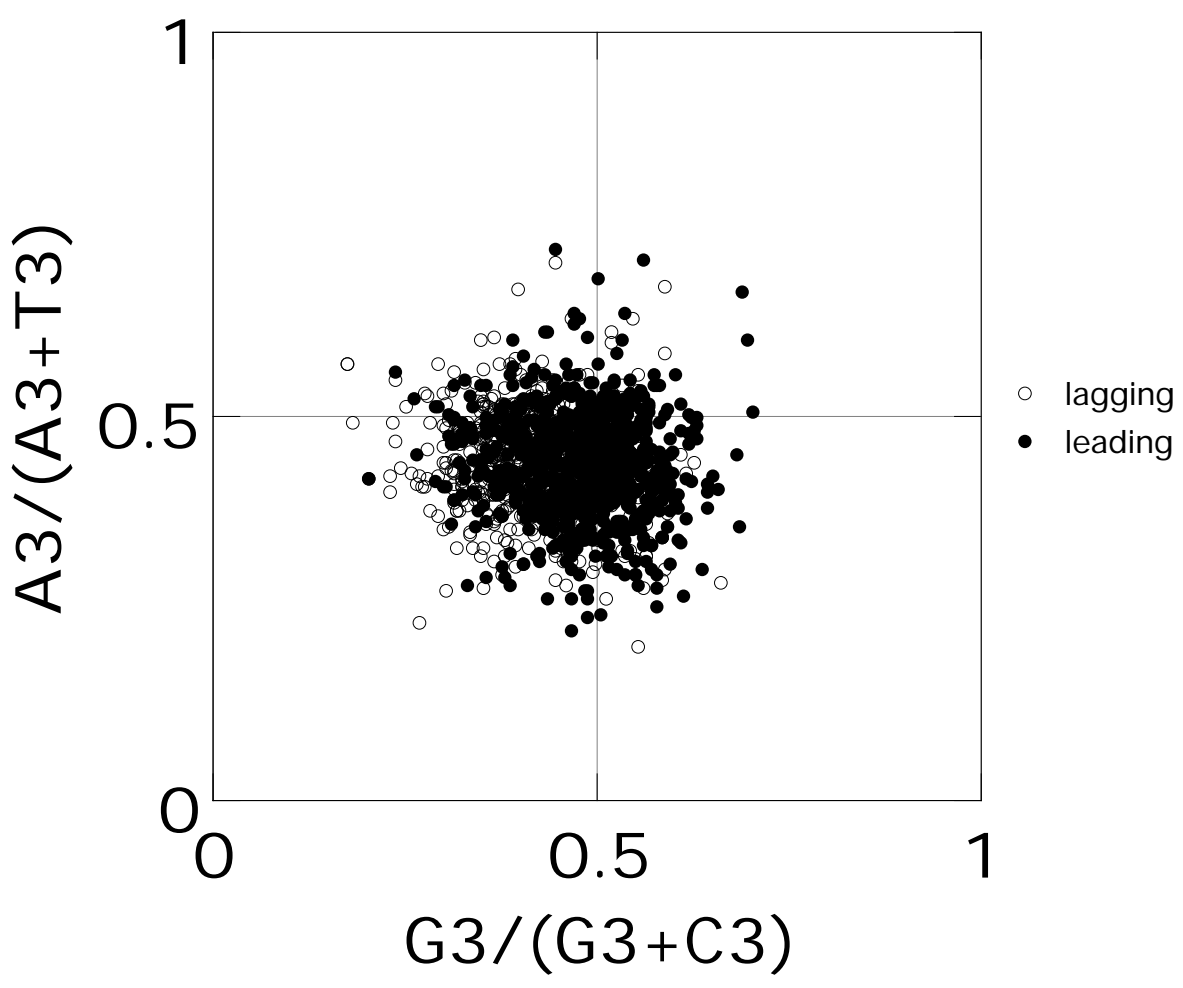
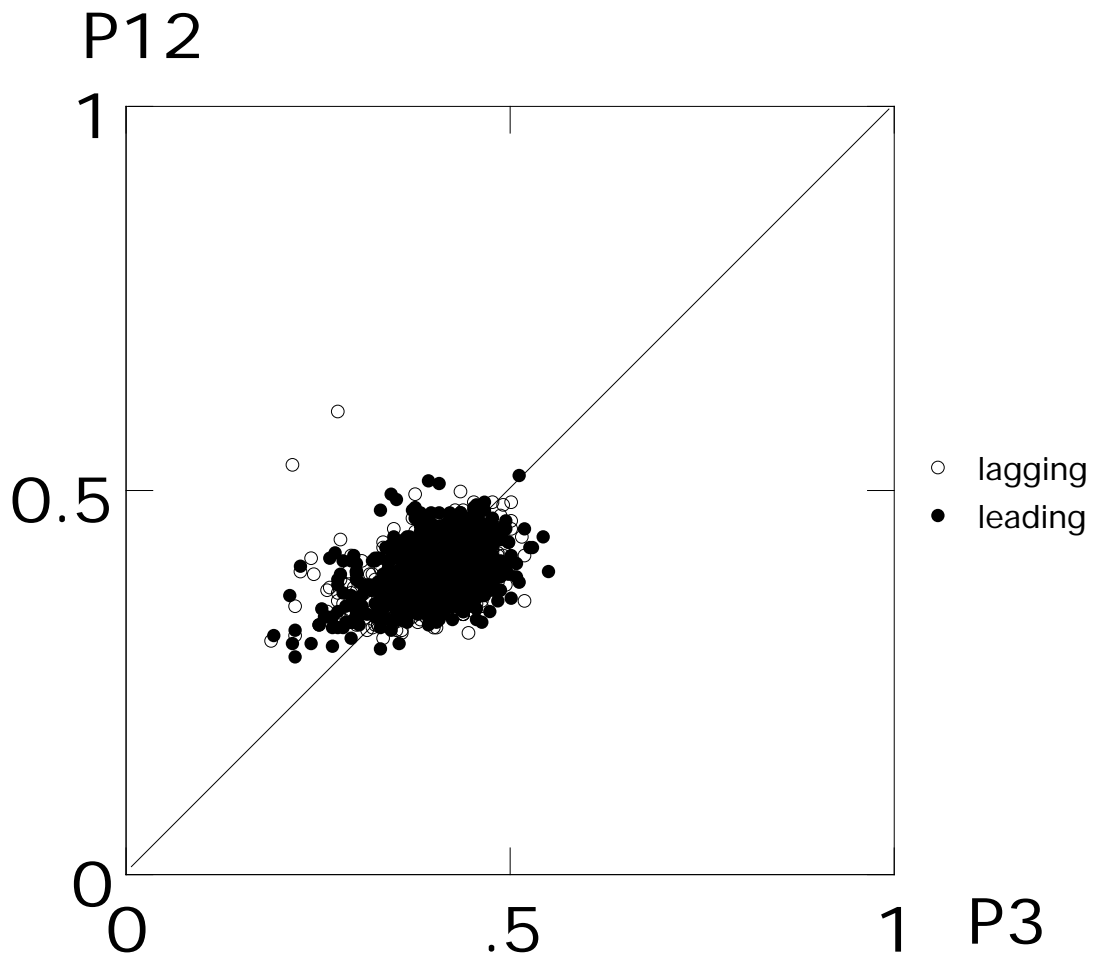


Escherichia coli EDL933

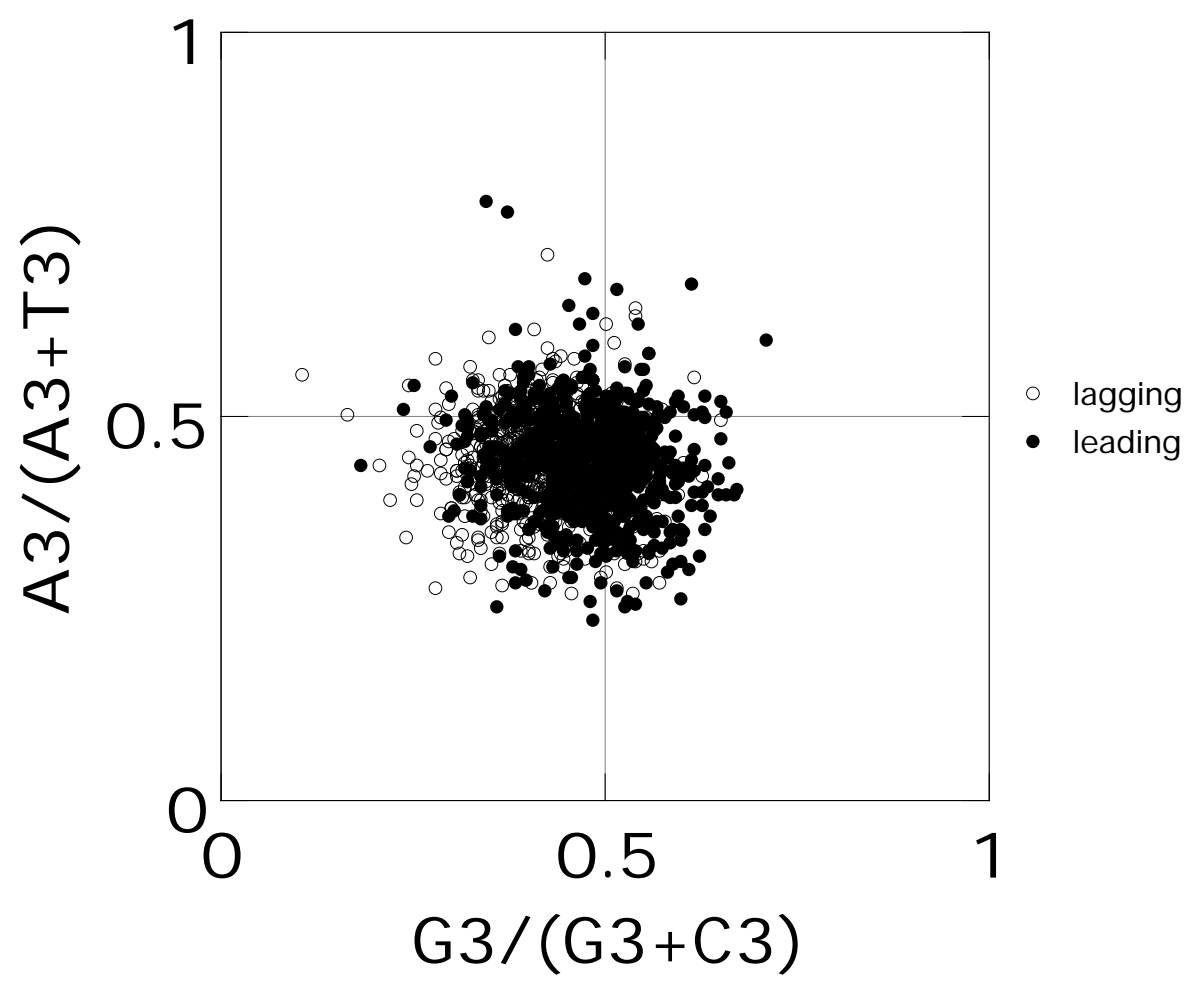
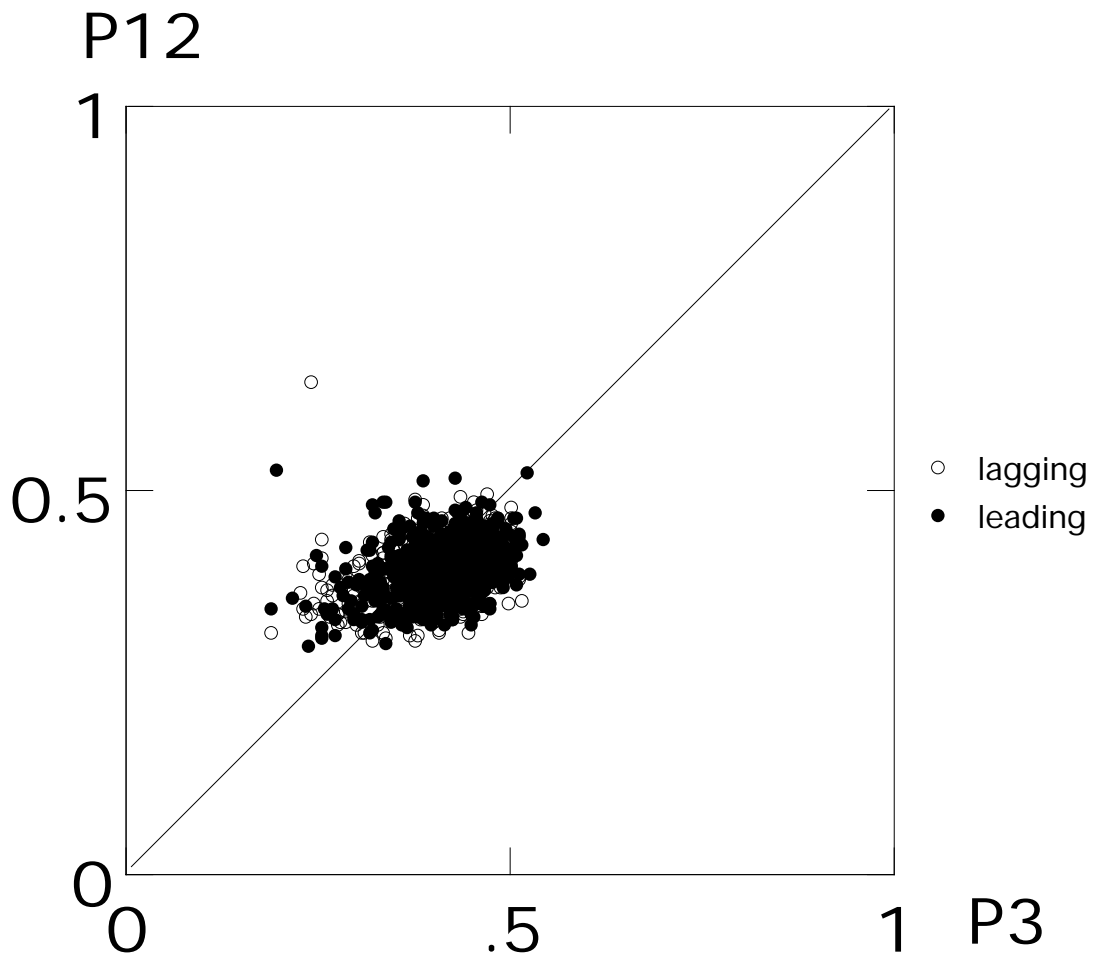


Escherichia coli RIMD 0509952

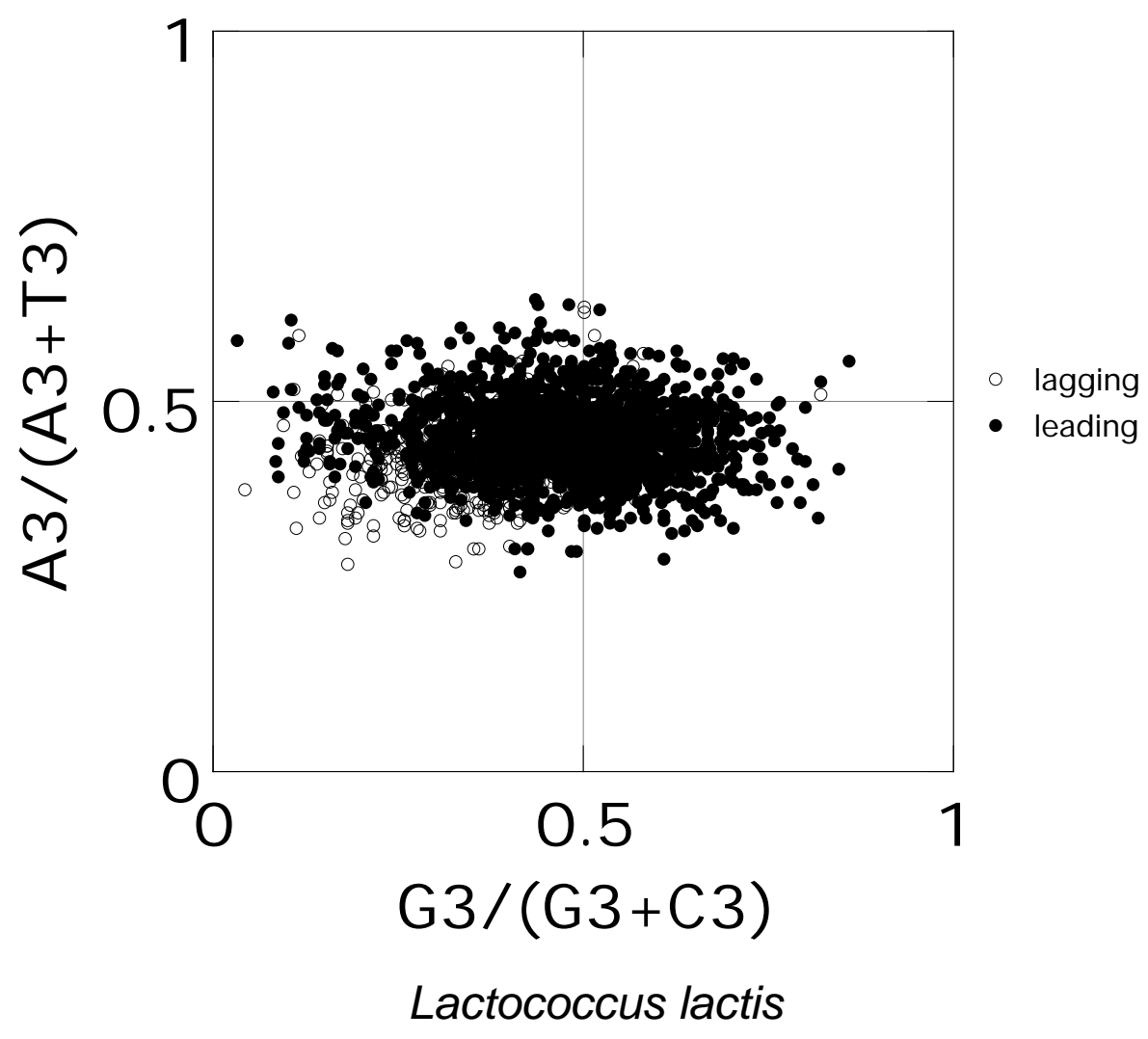
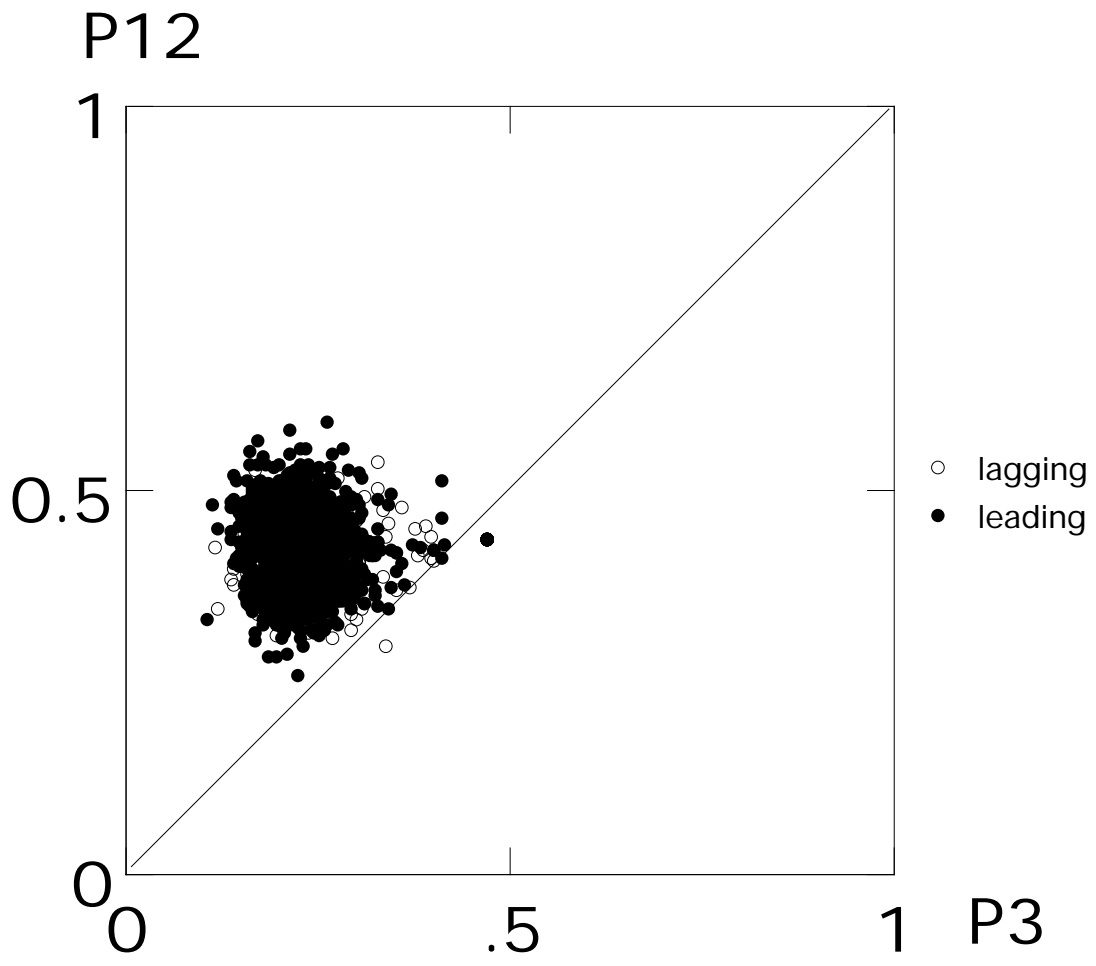


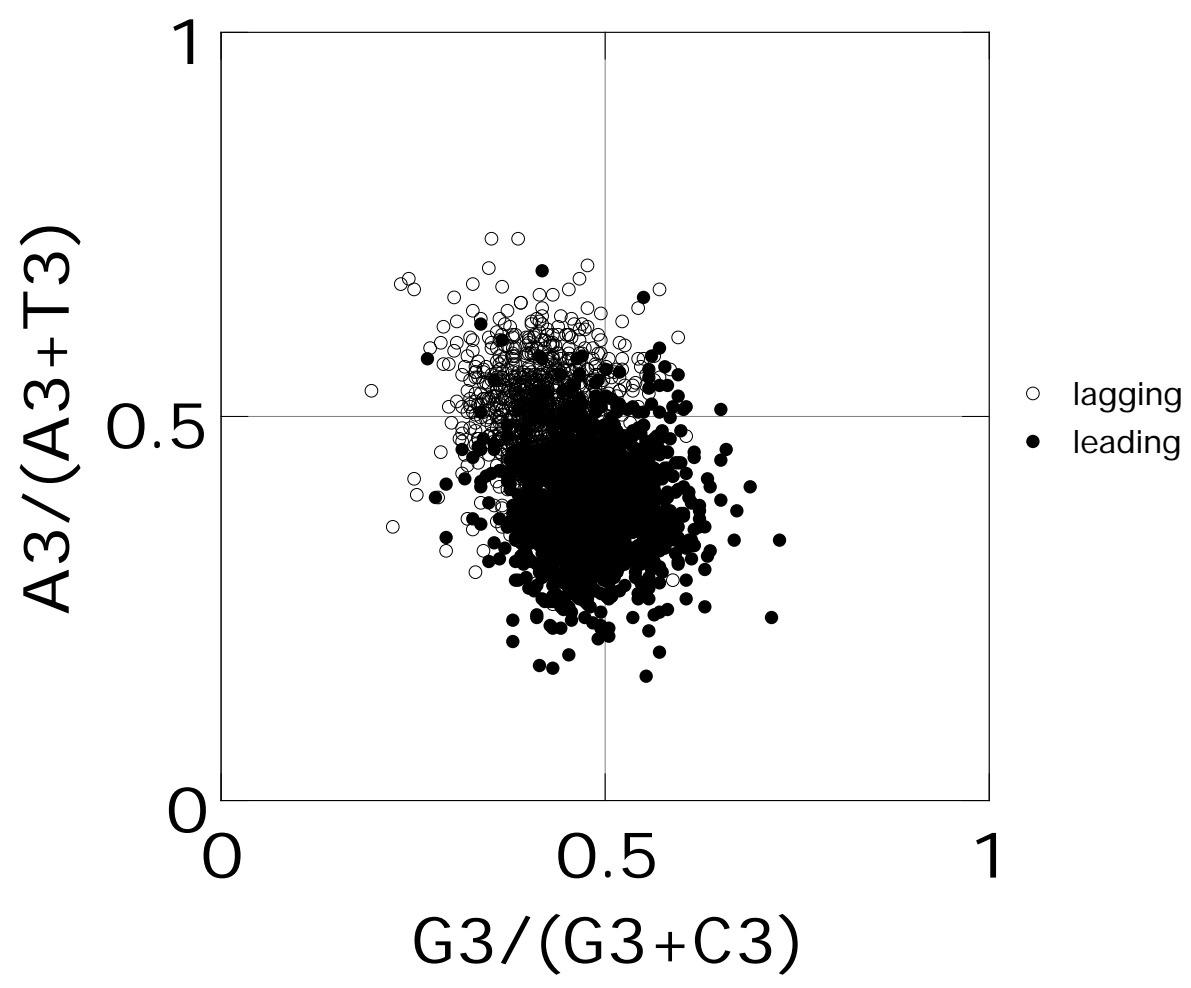
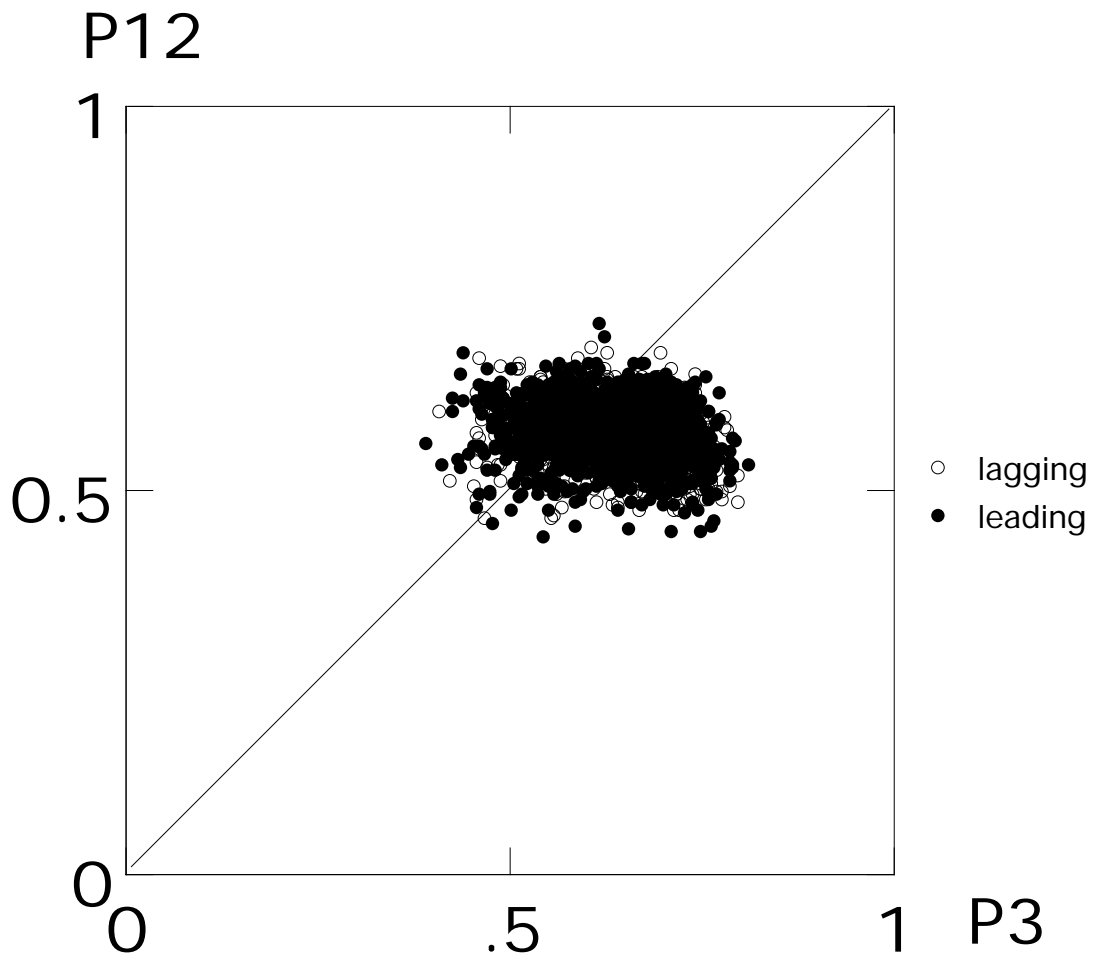


Helicobacter pylori 26695

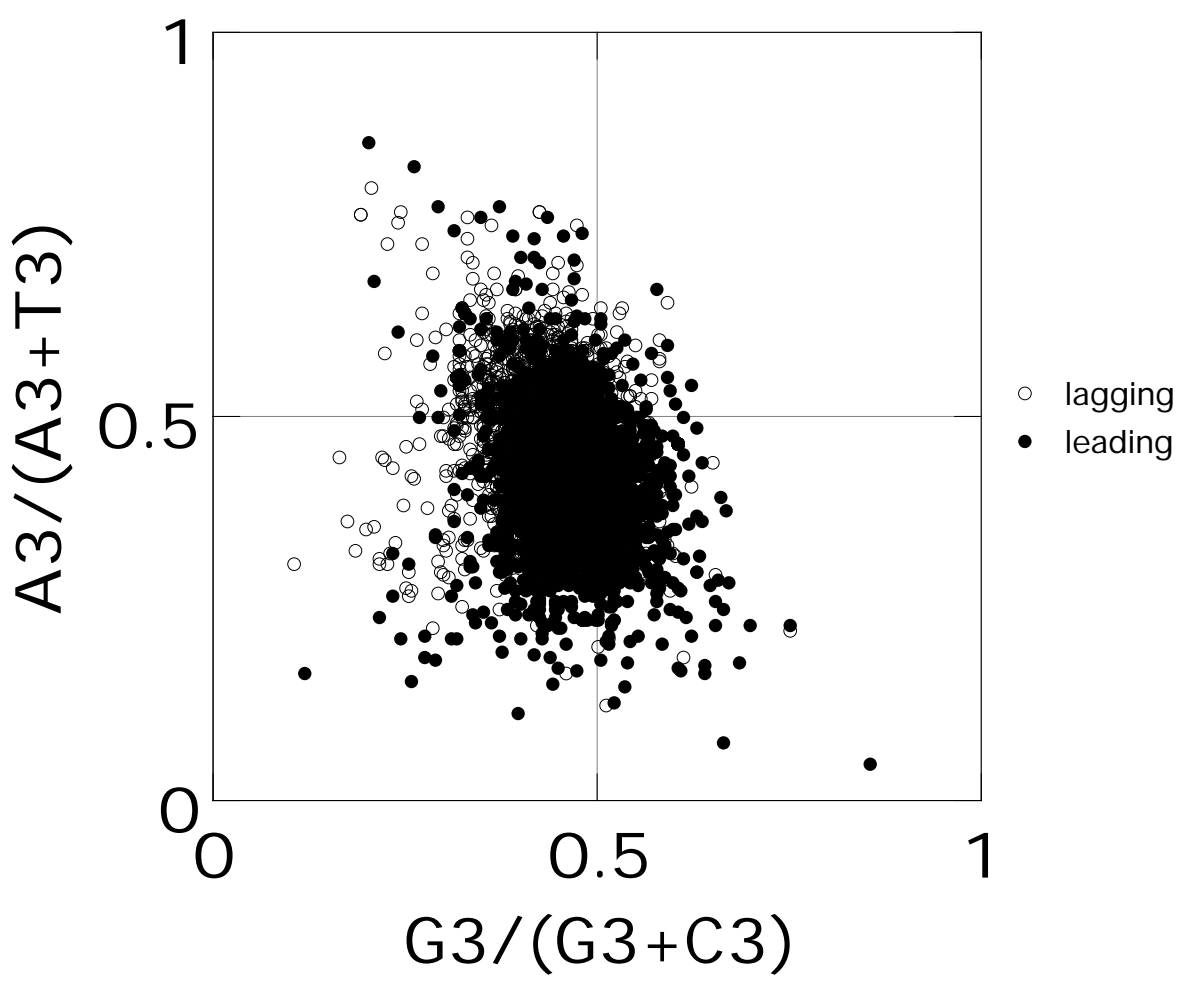
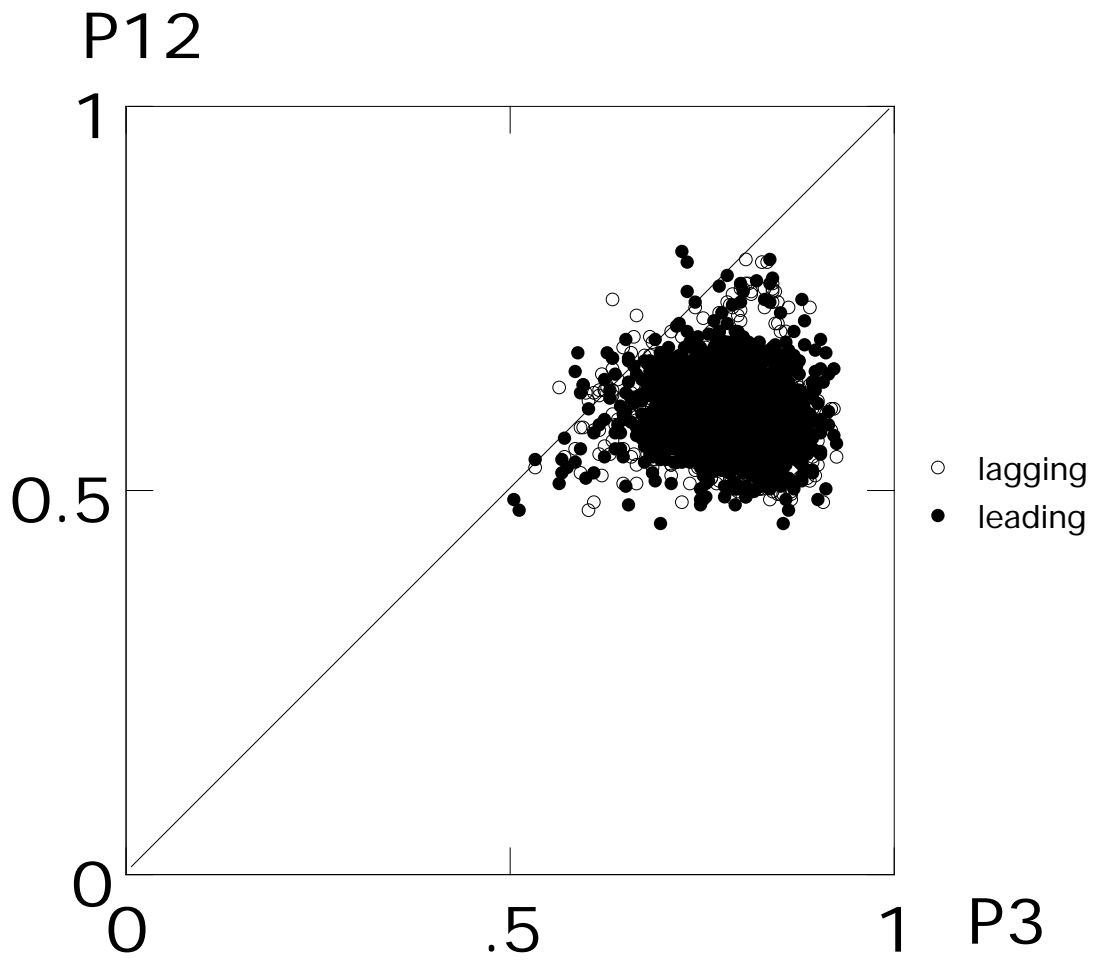


Helicobacter pylori J99

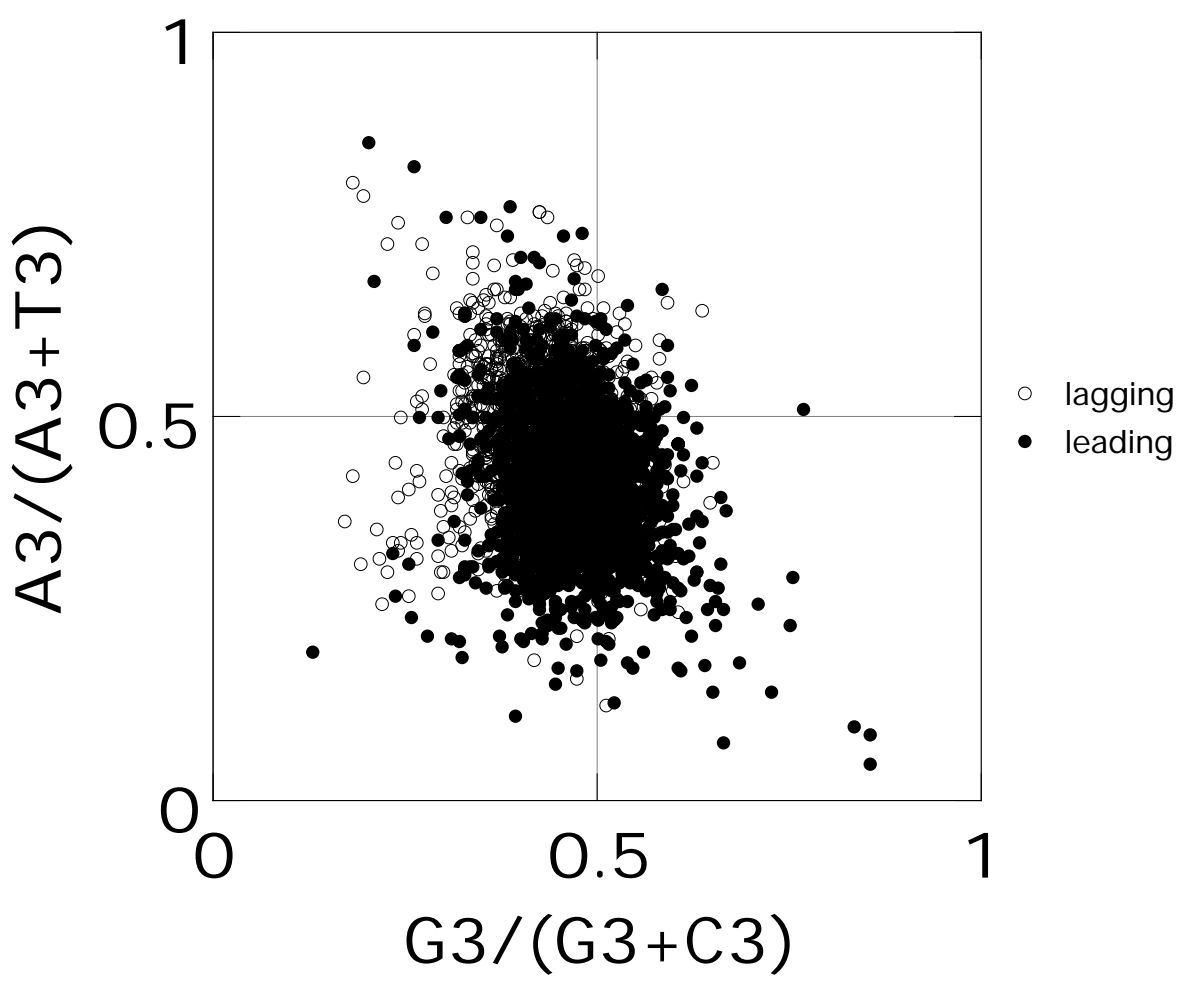
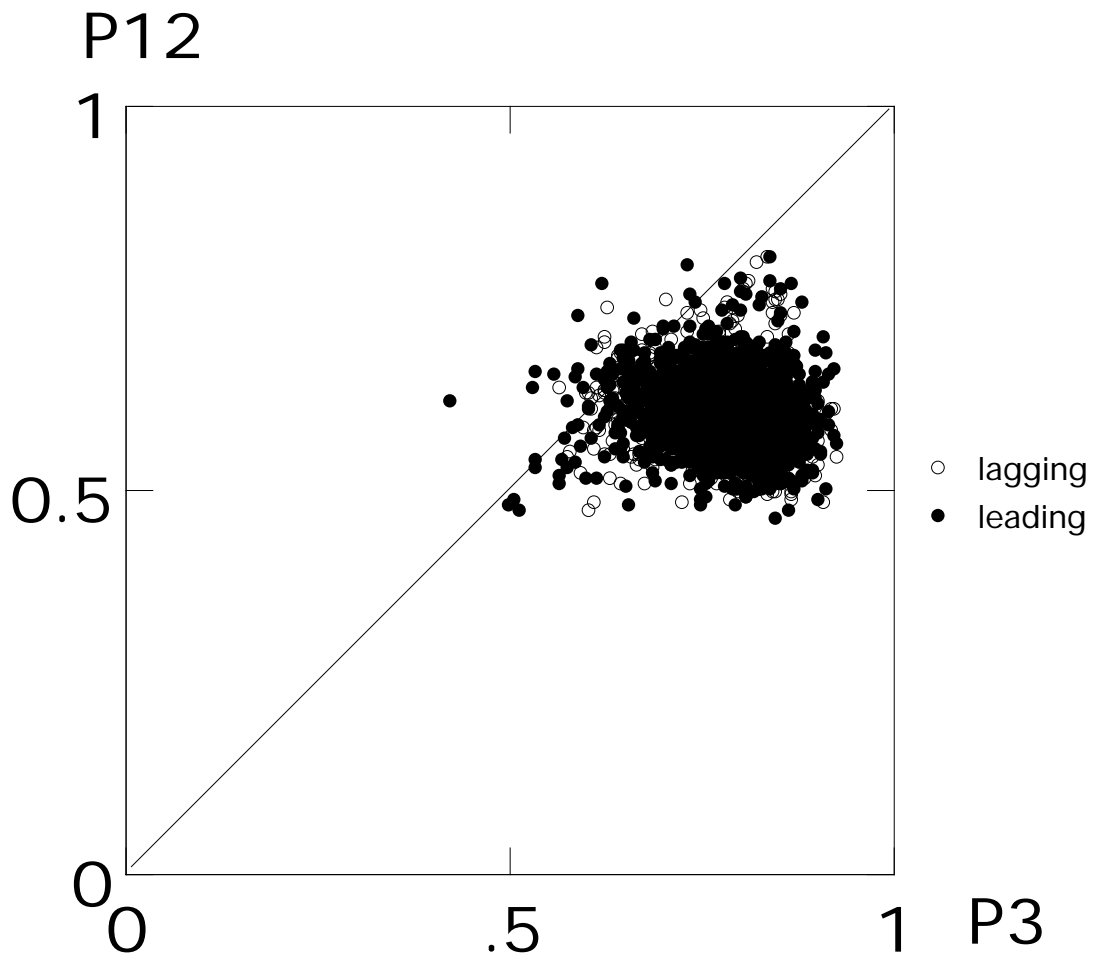




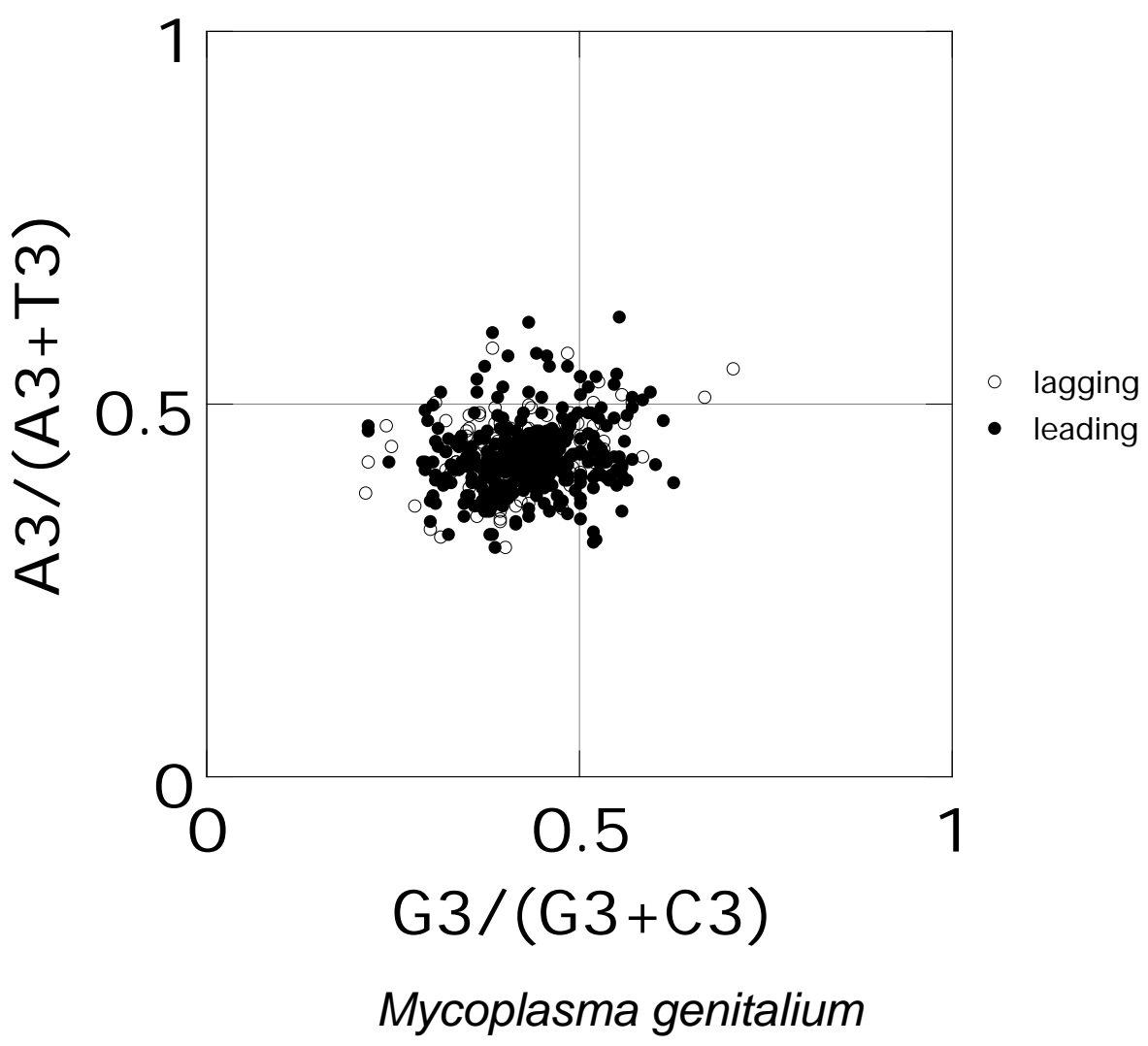
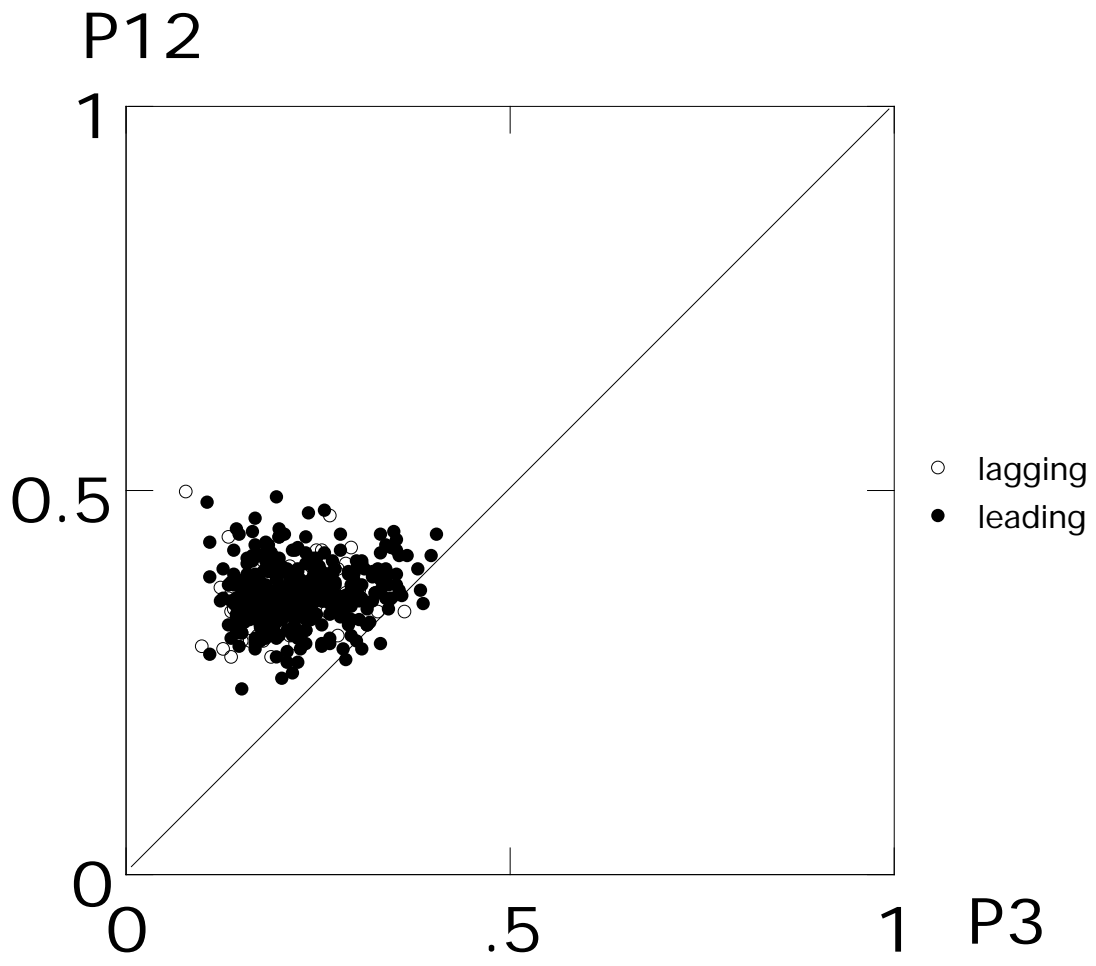
Mycobacterium leprae

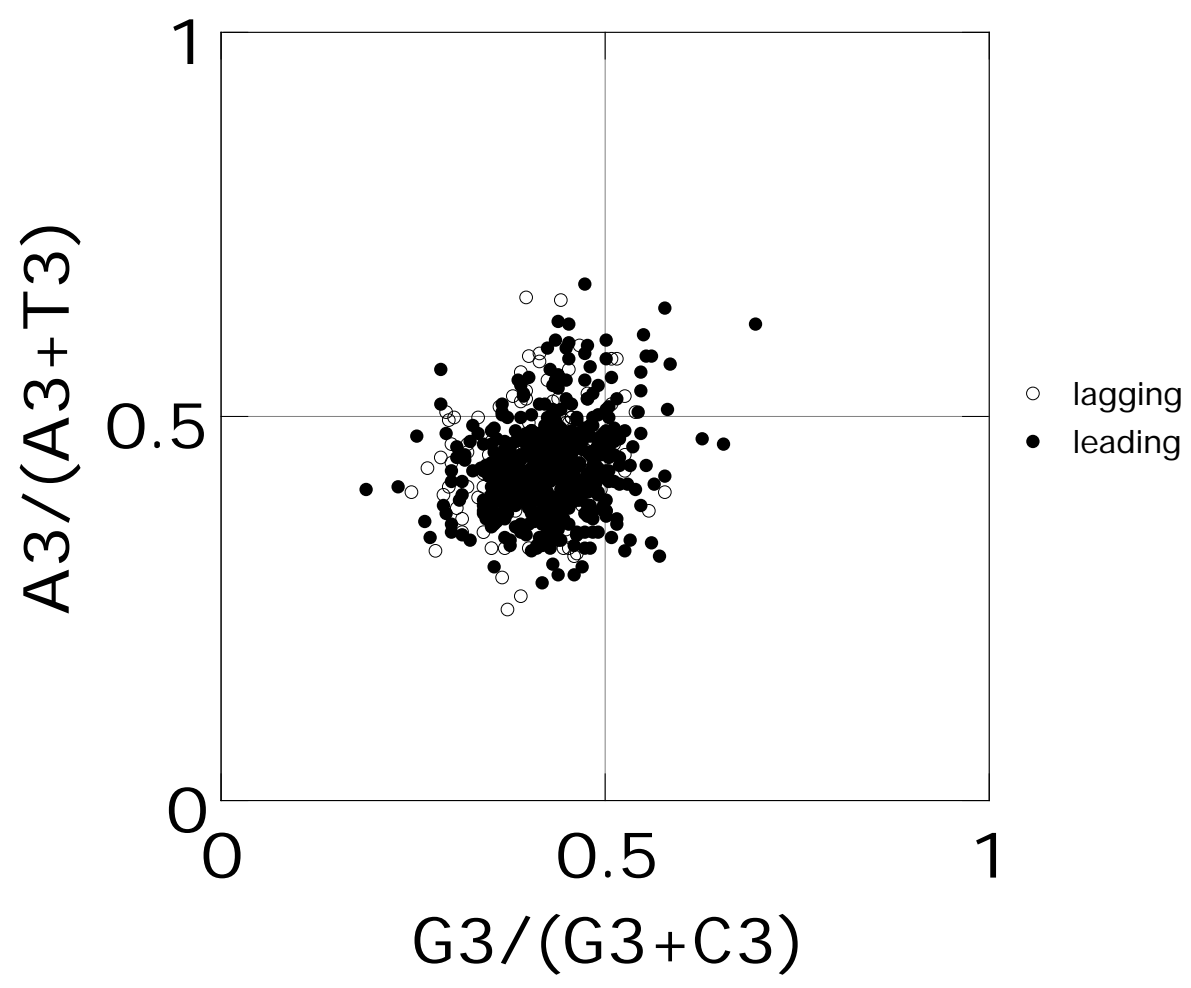
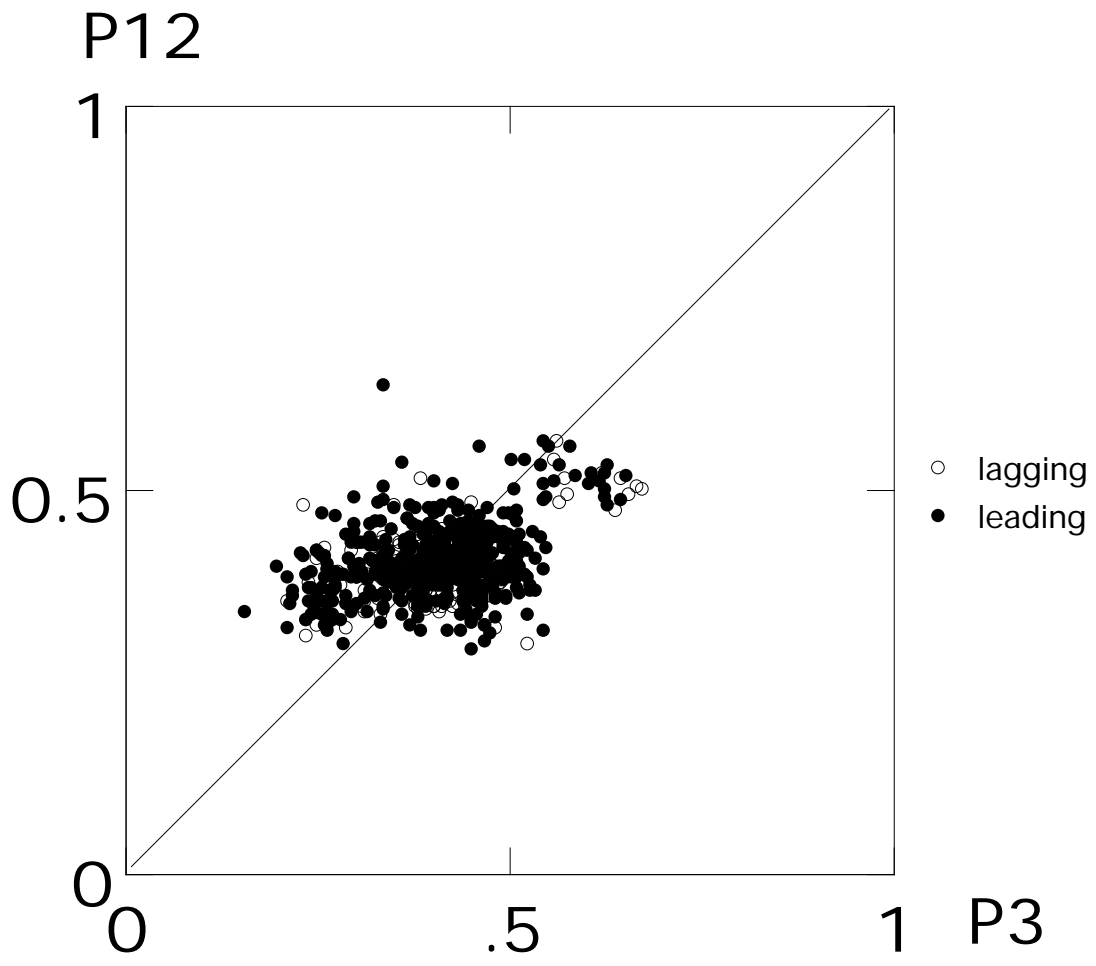


Mycobacterium tuberculosis H37Rv

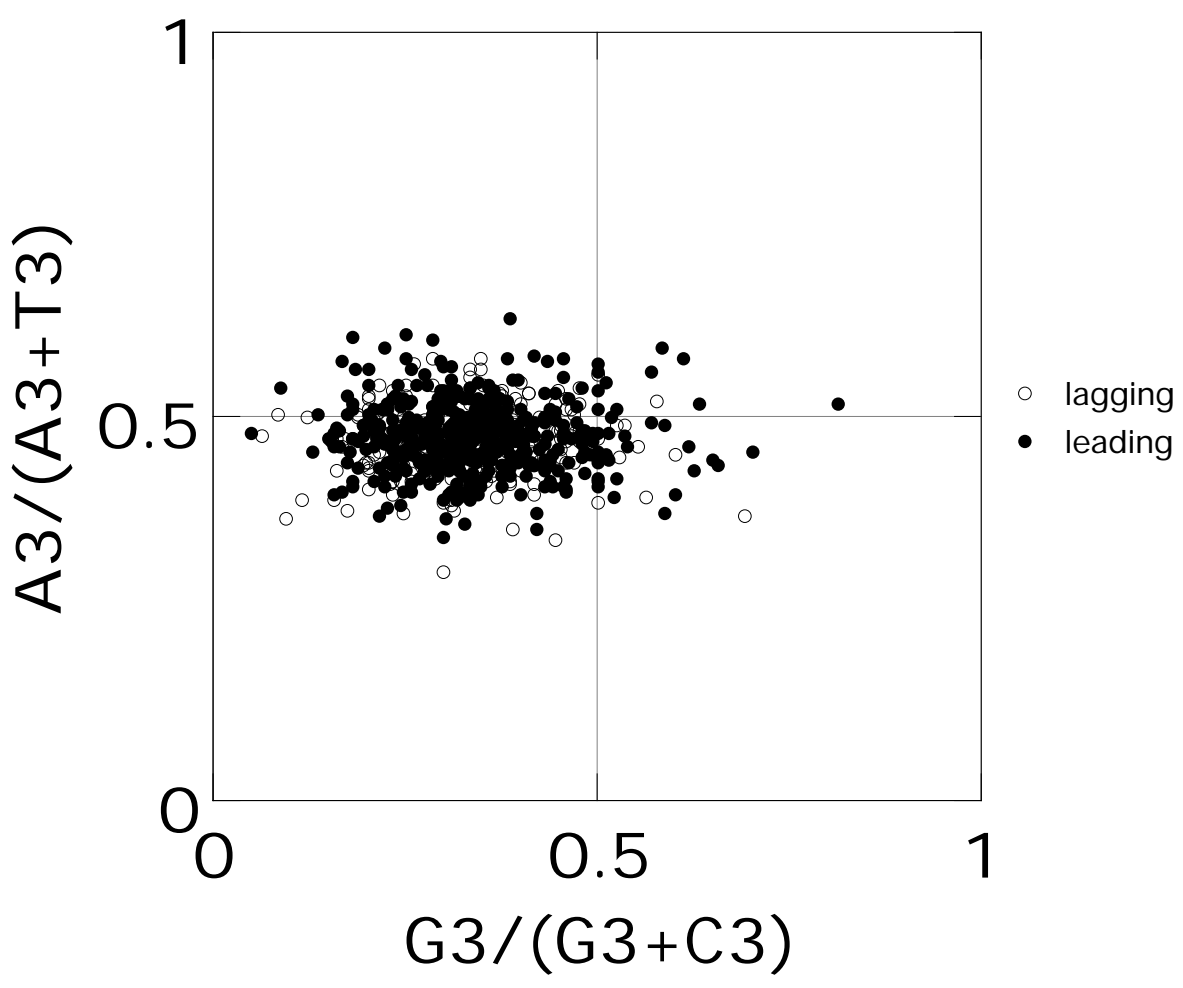
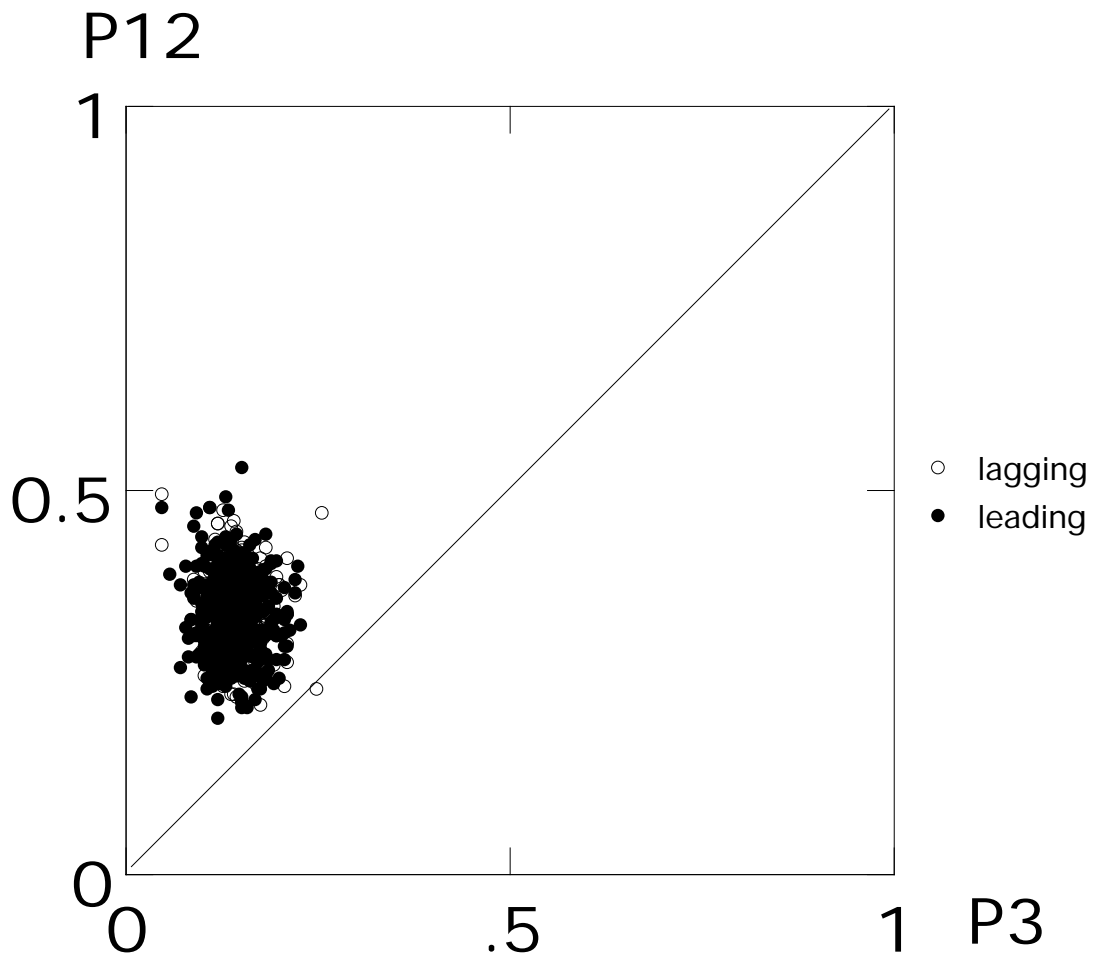


Mycobacterium tuberculosis CDC1551

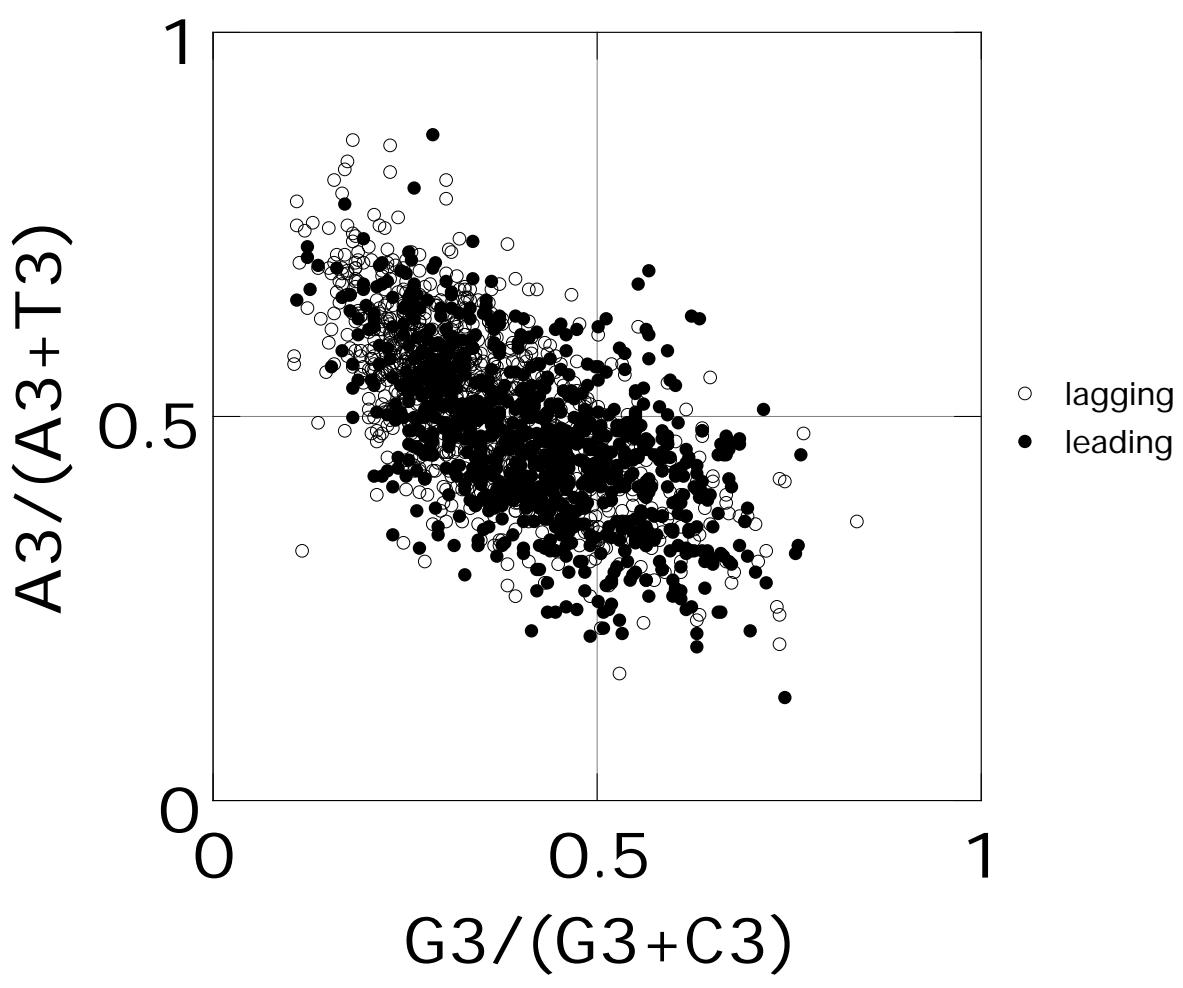
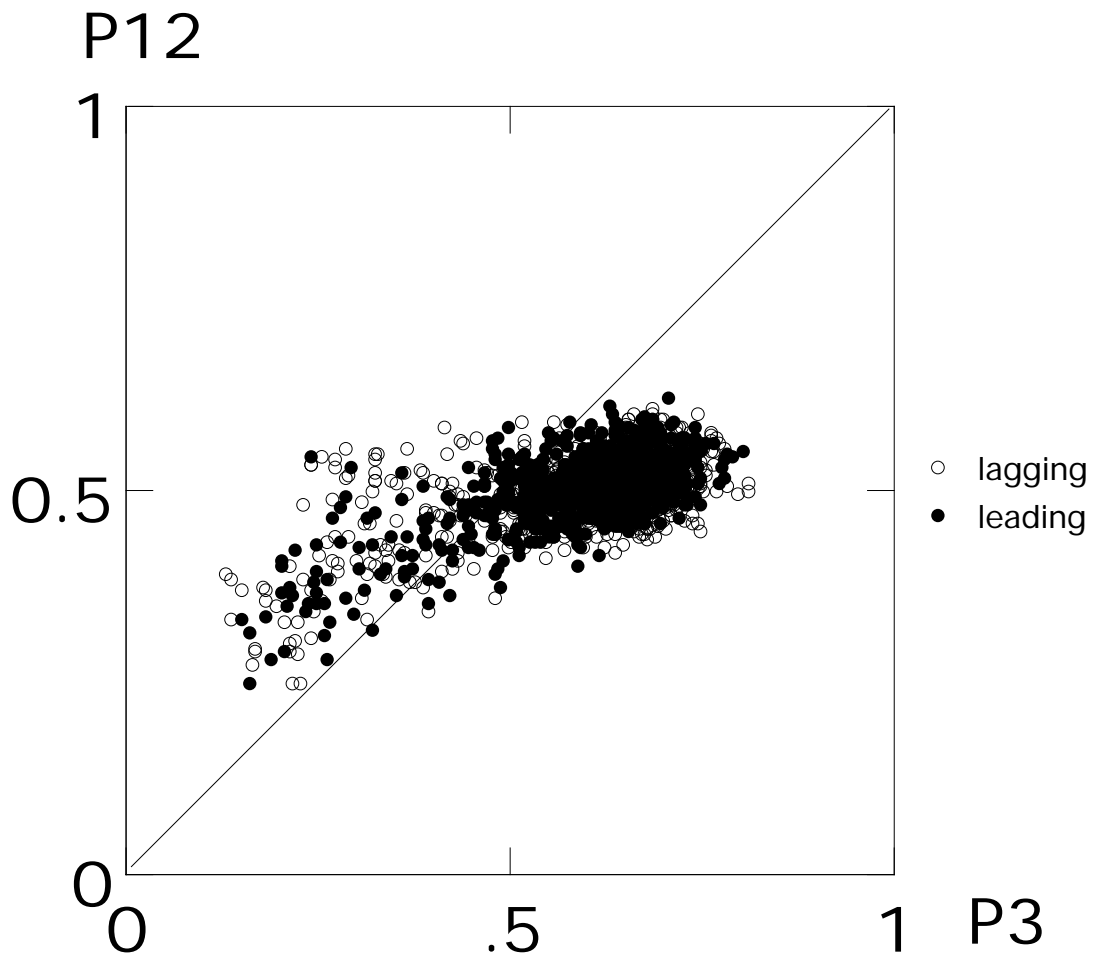




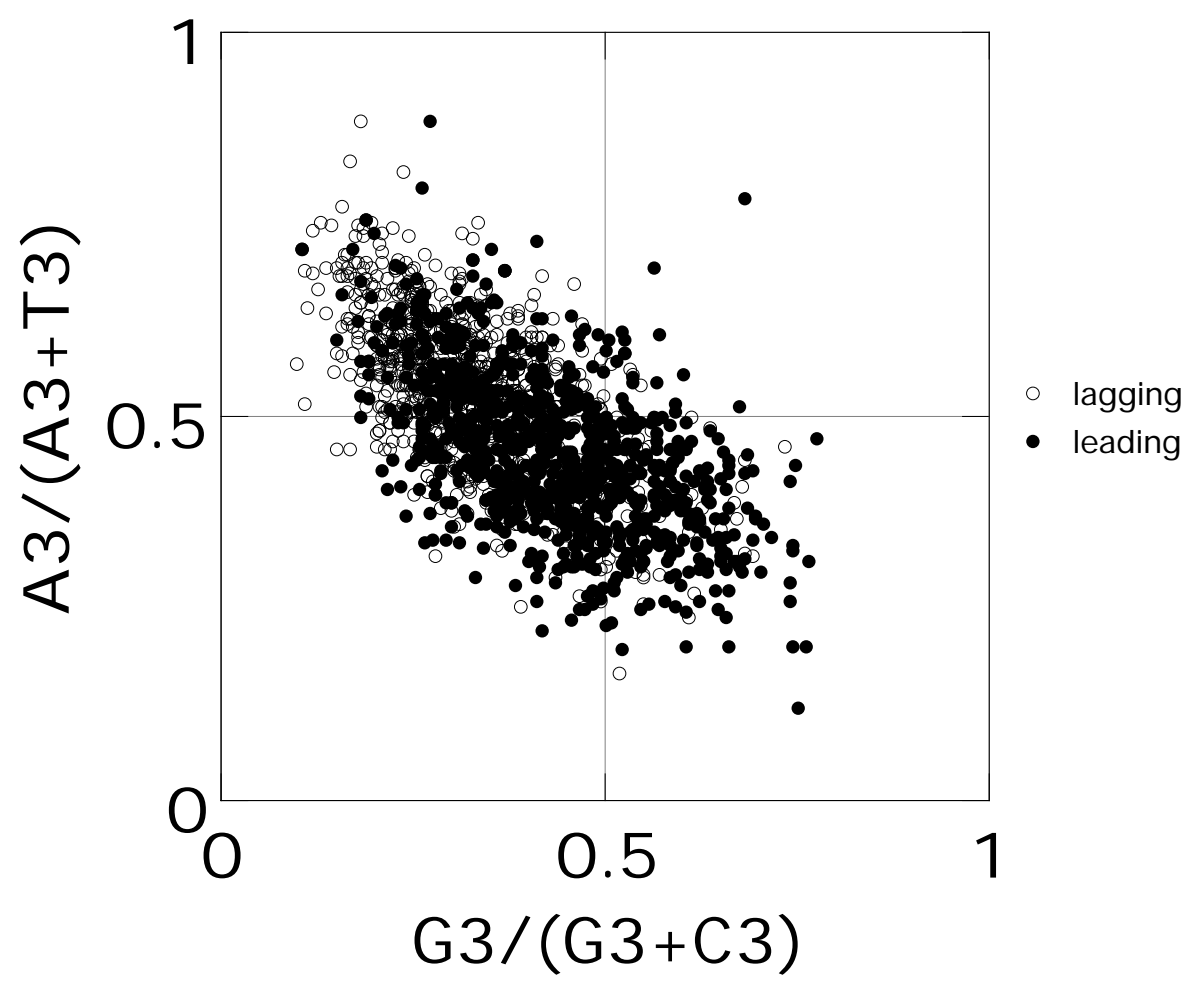
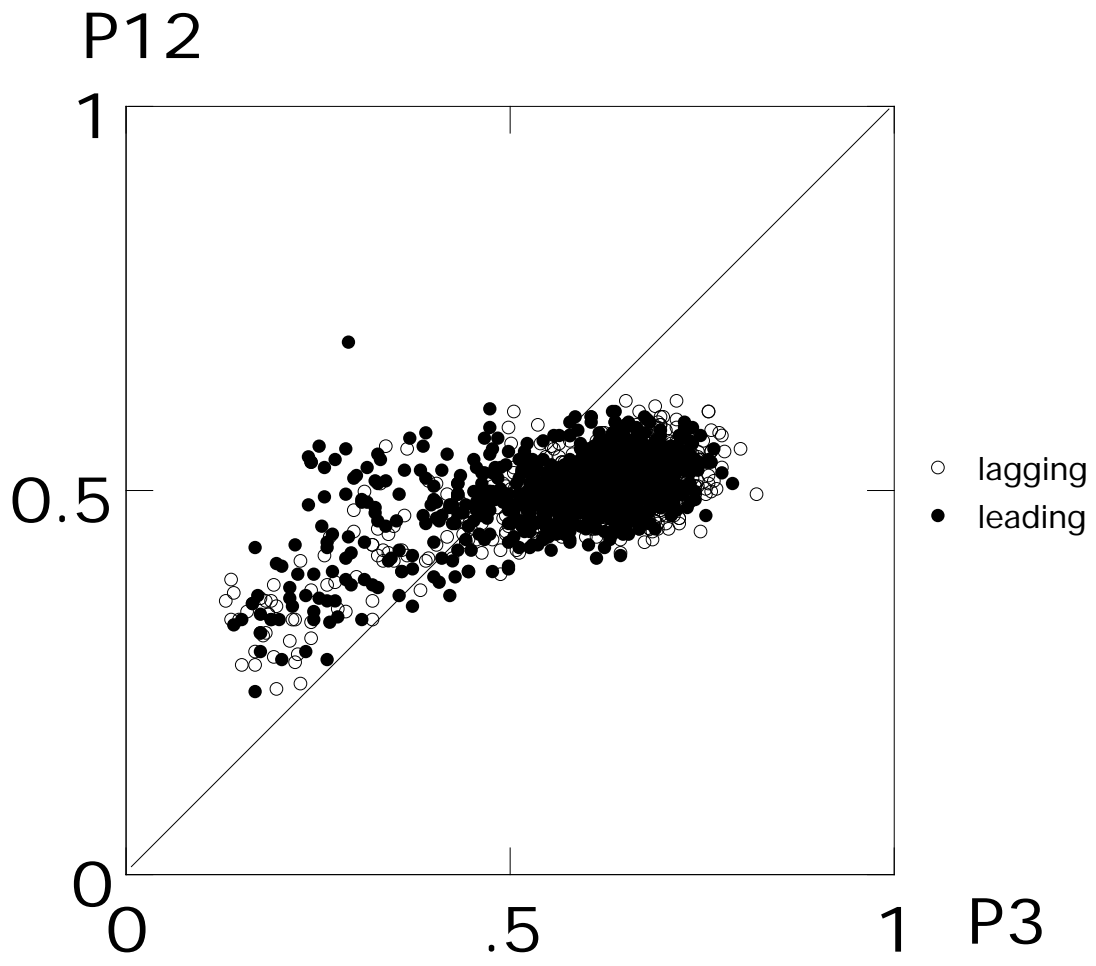
Mycoplasma pneumoniae



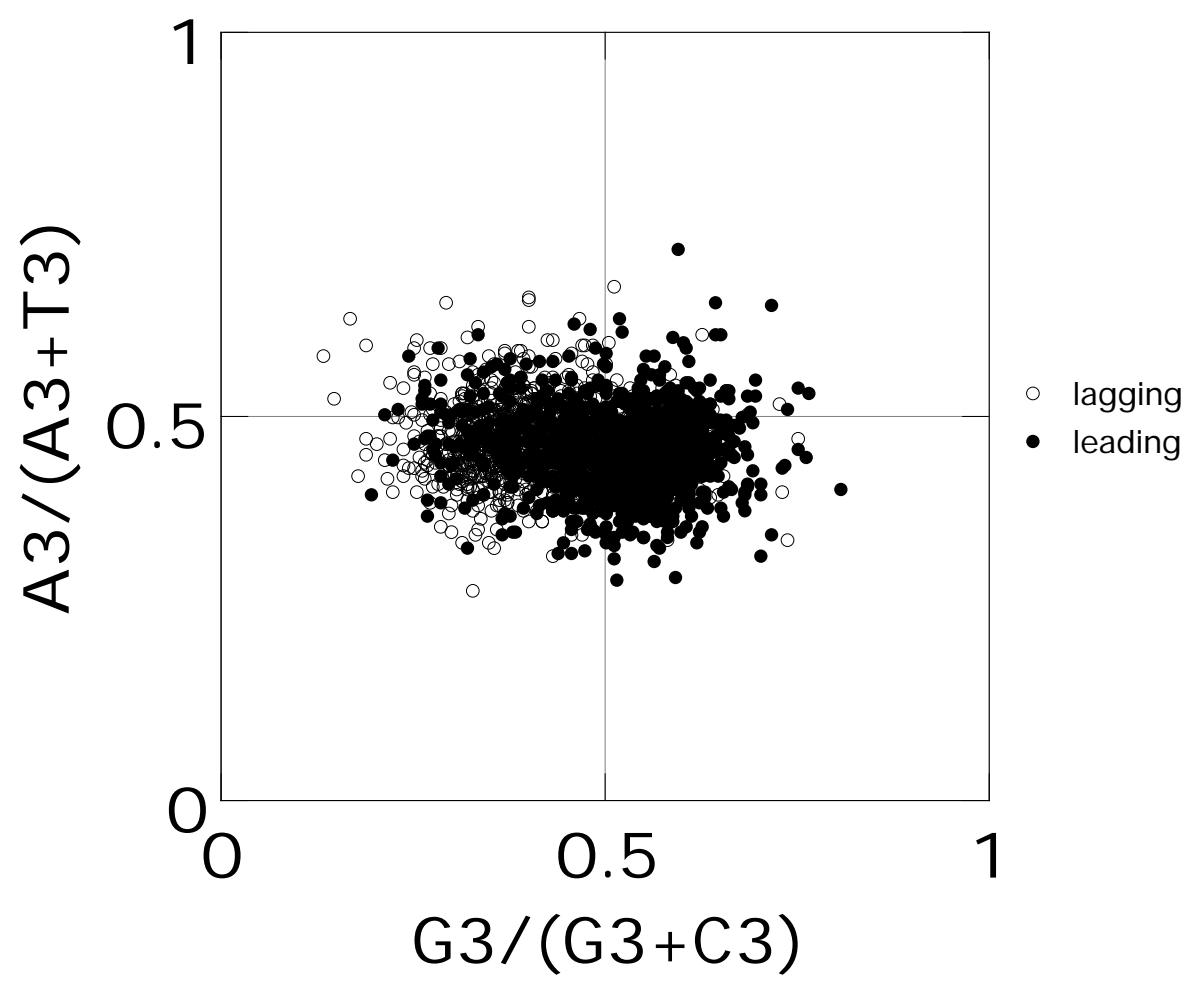
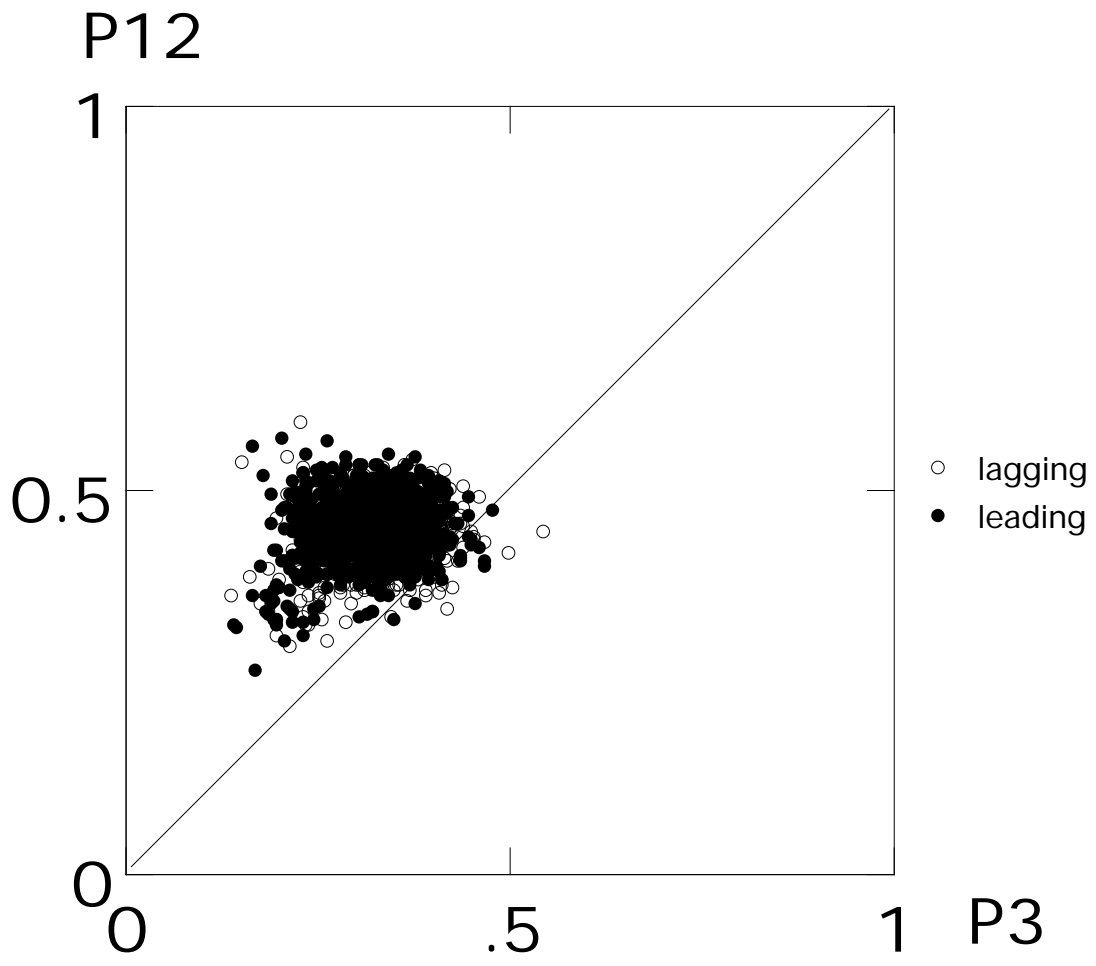
Mycoplasma pulmonis



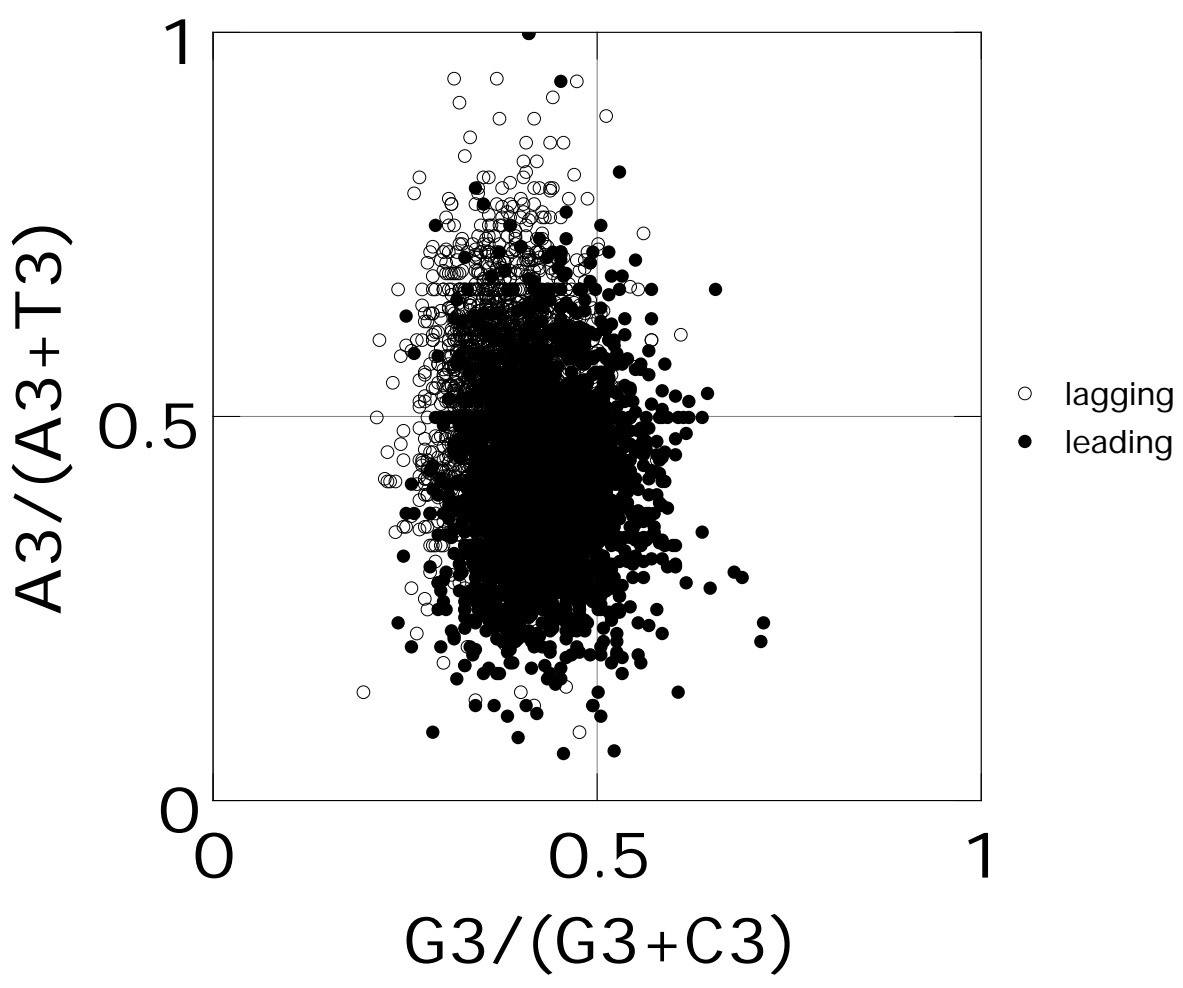
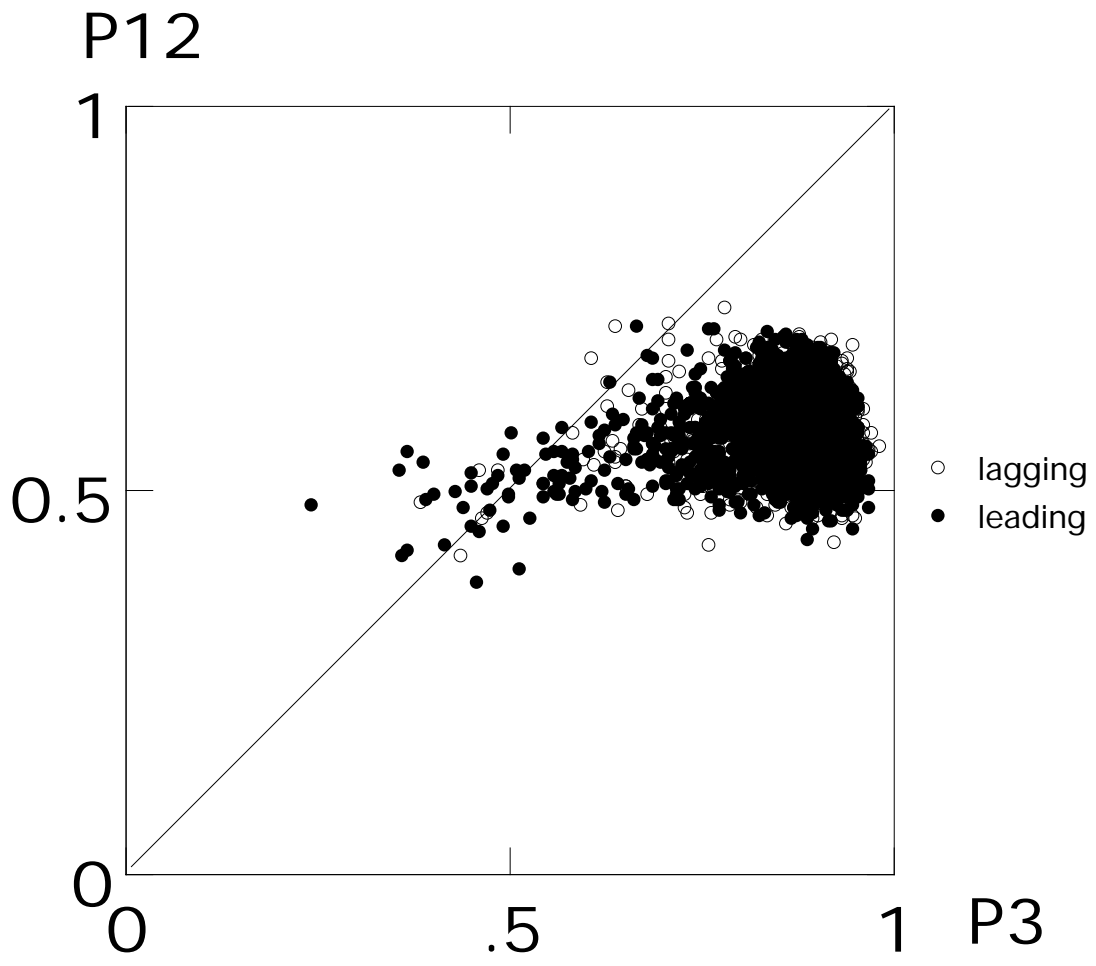
Neisseria meningitidis Z2491 (A)



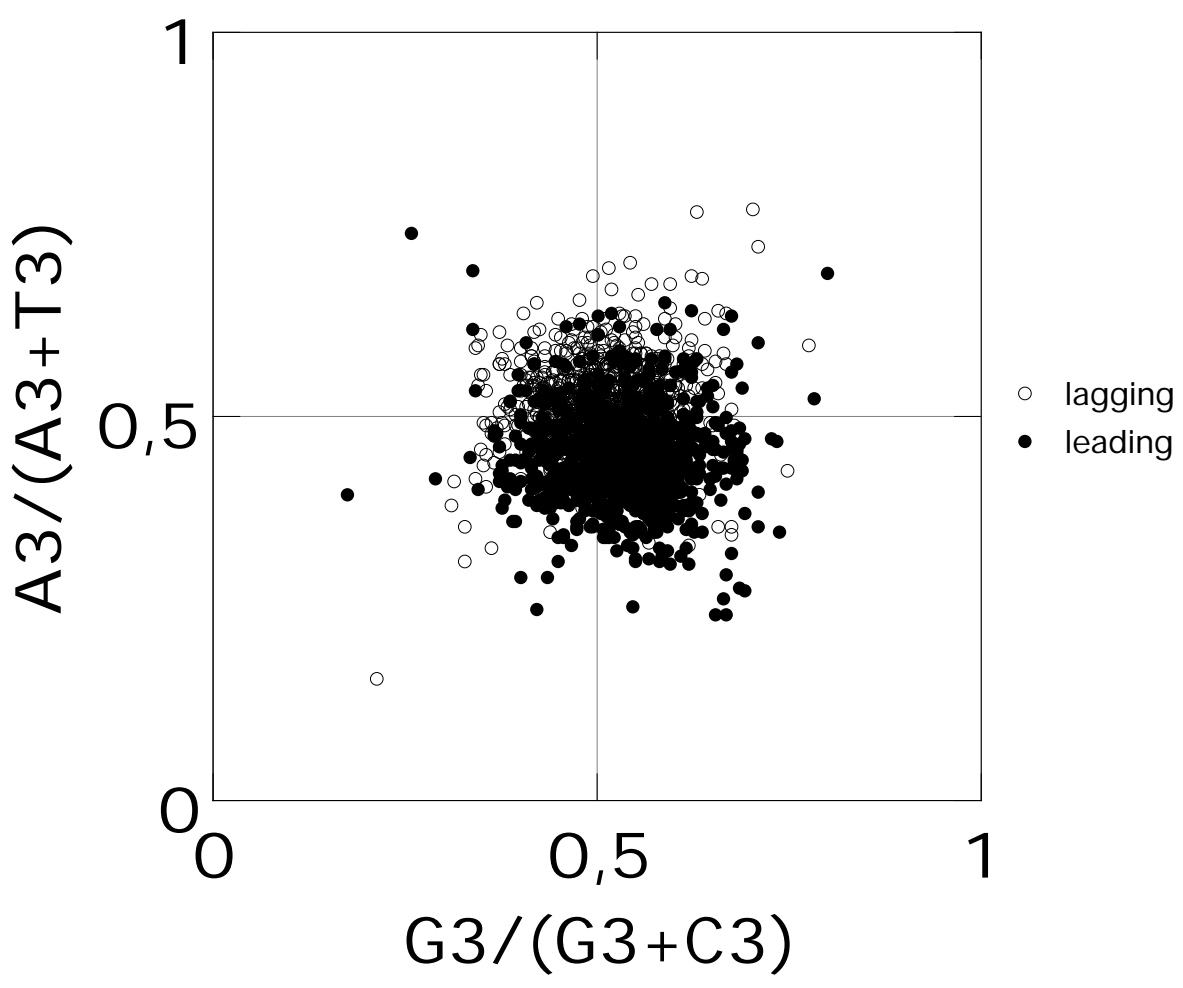
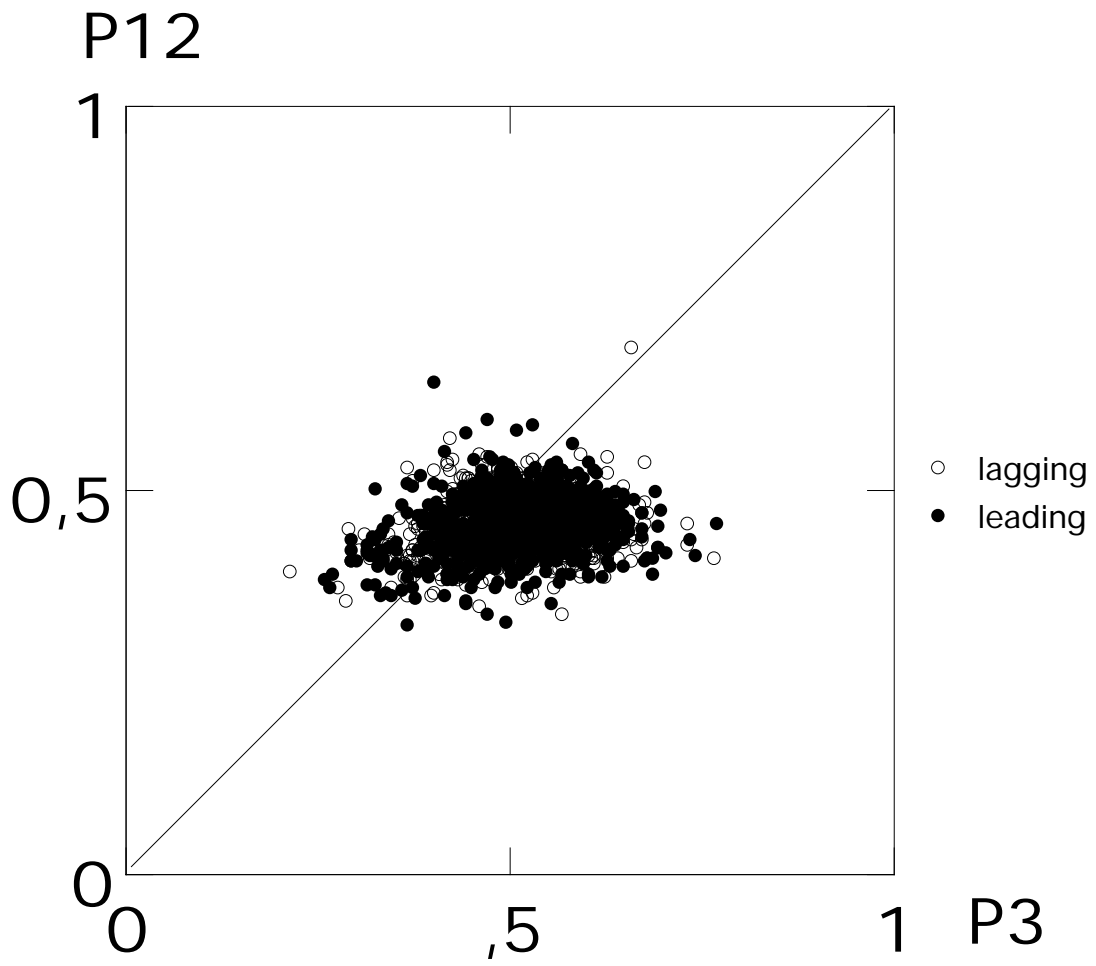
Neisseria meningitidis MC58 (B)



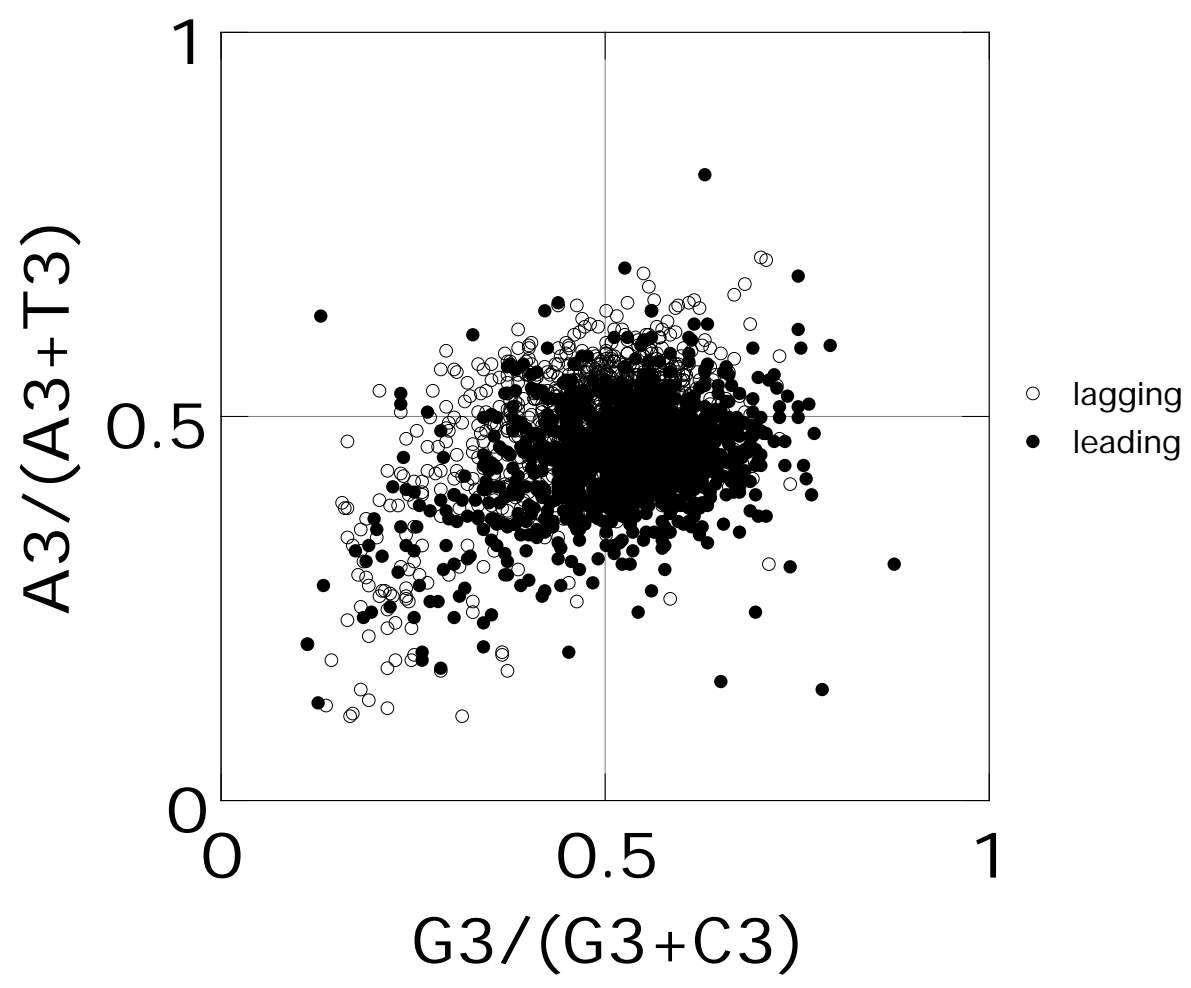
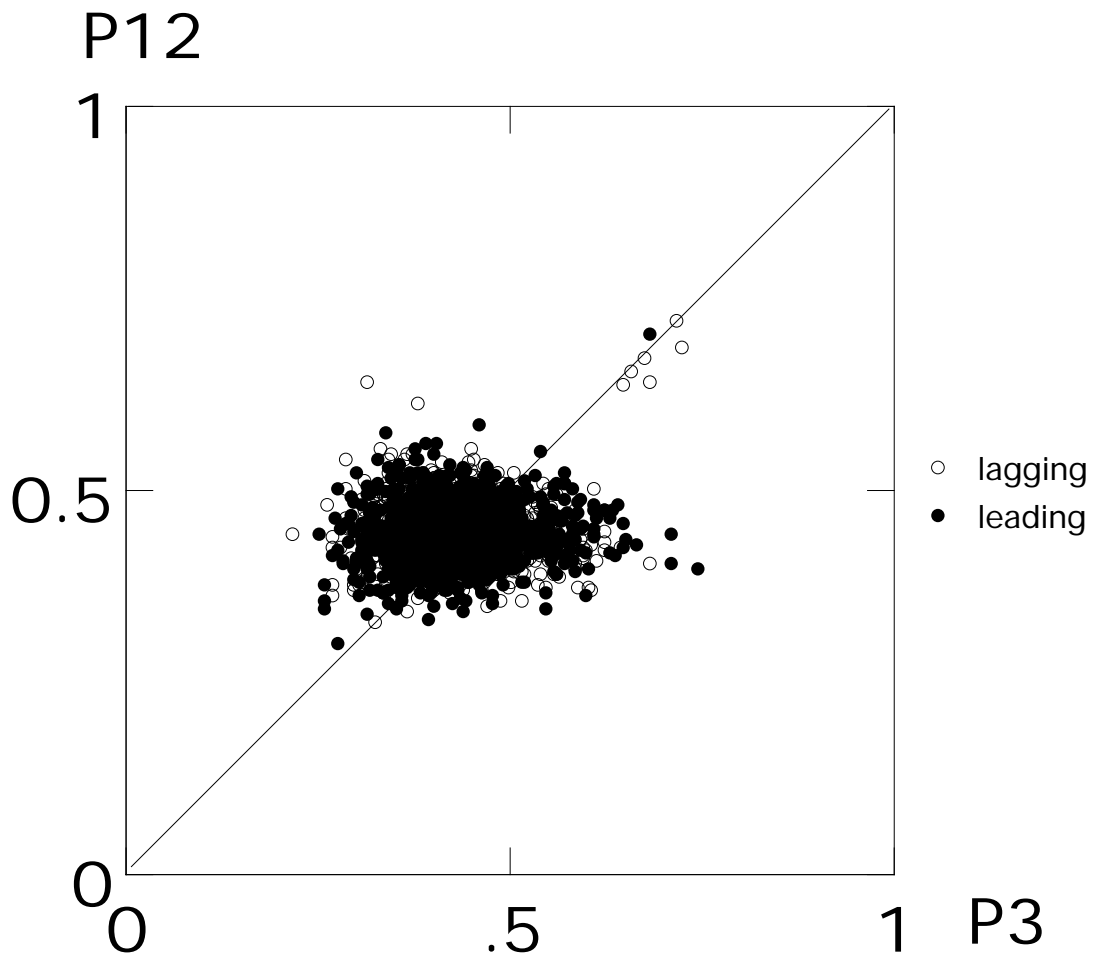
Pasteurella multocida



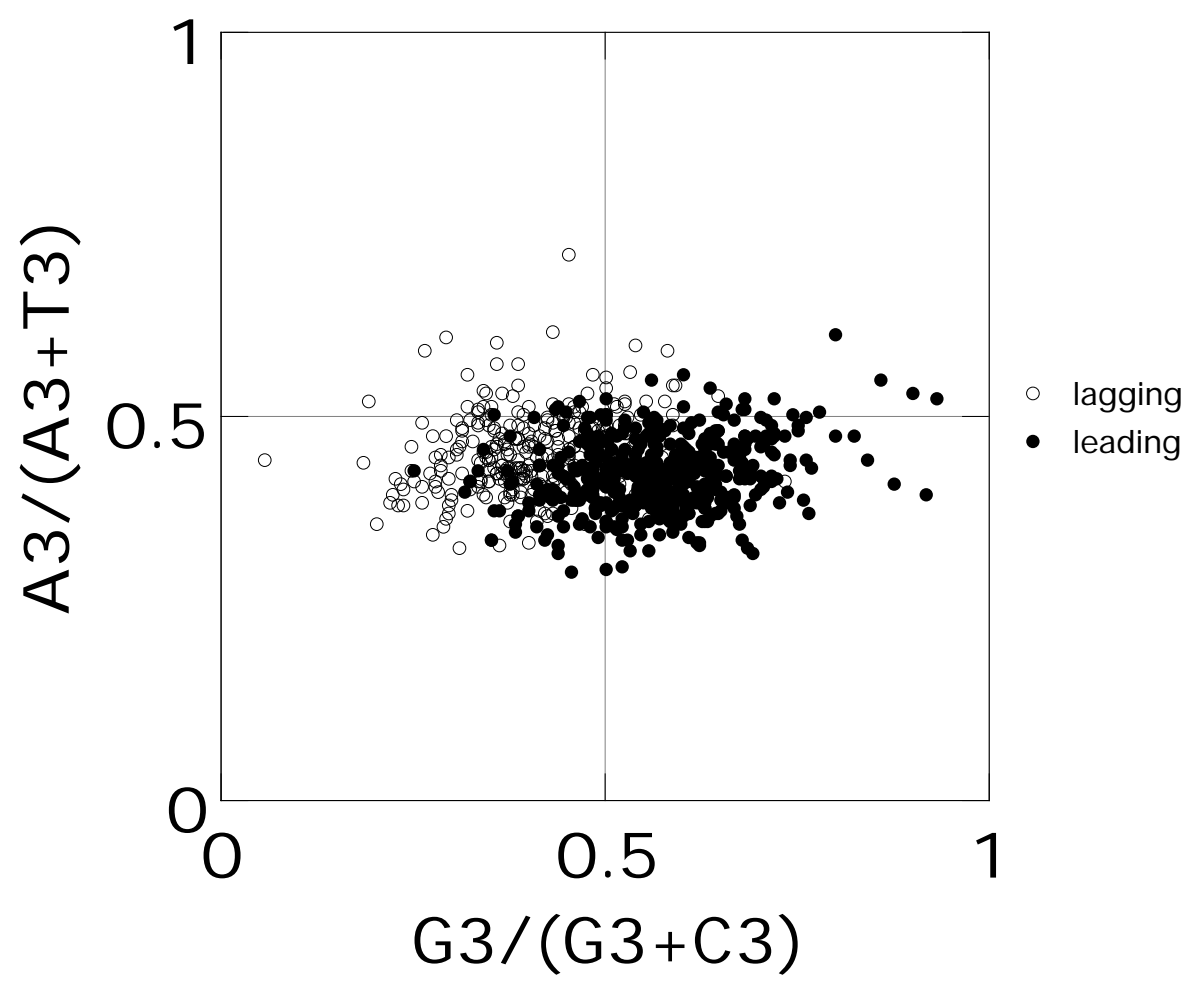
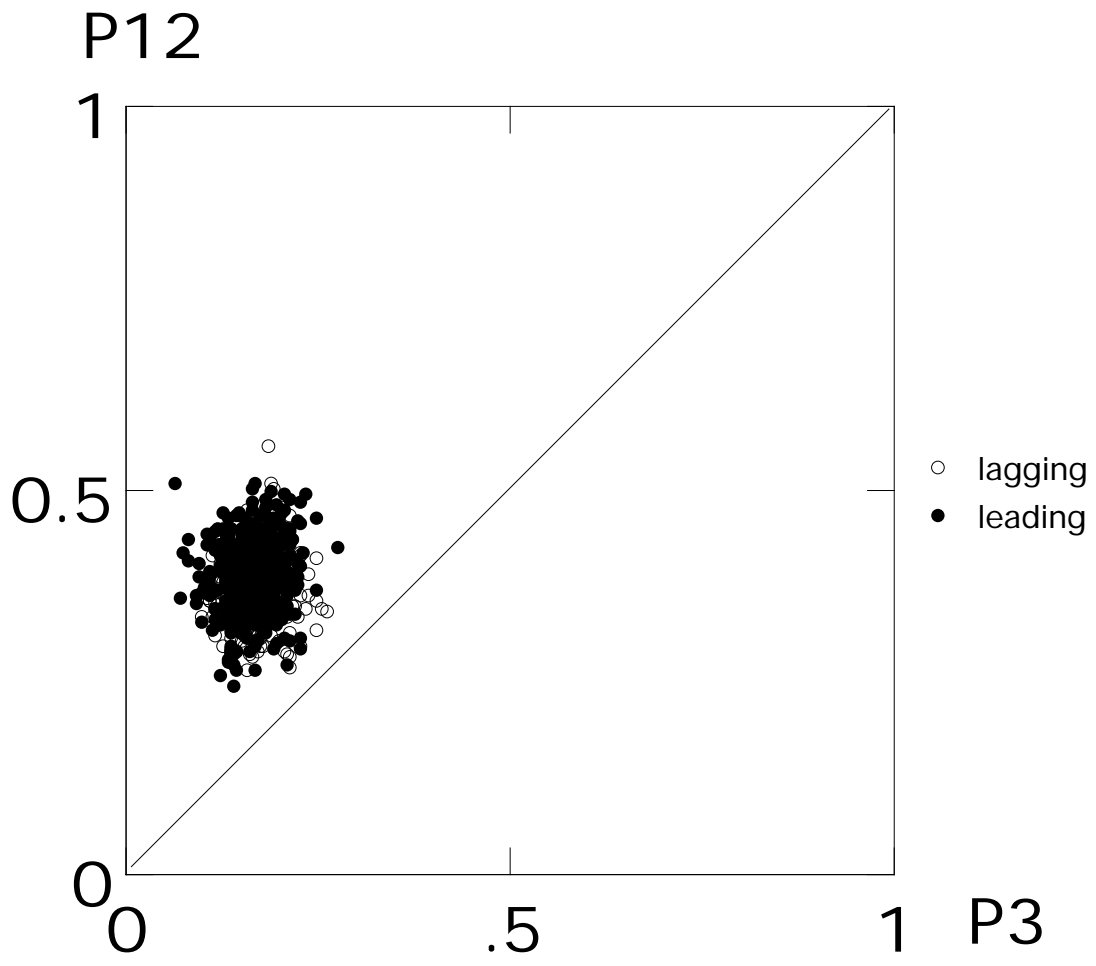
Pseudomonas aeruginosa



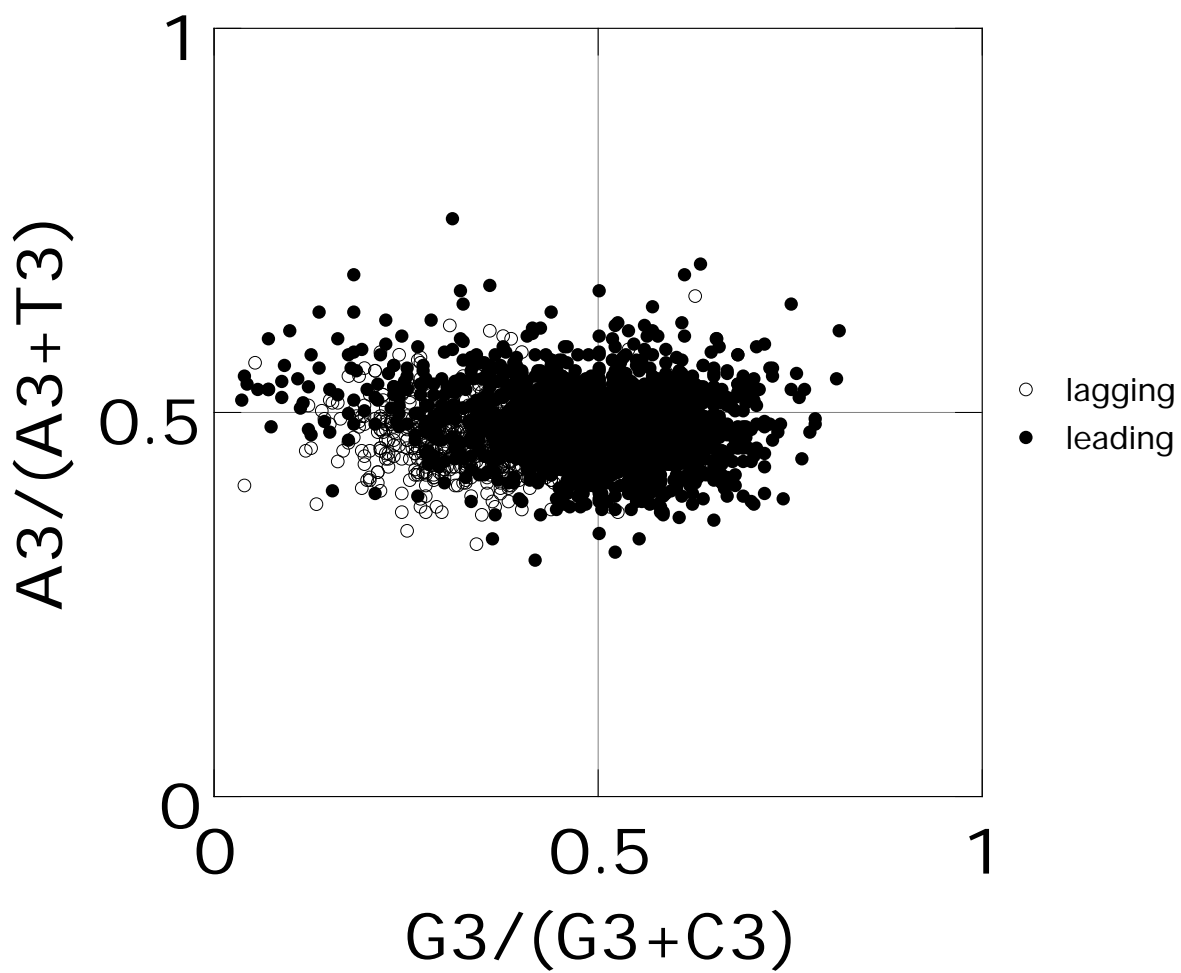
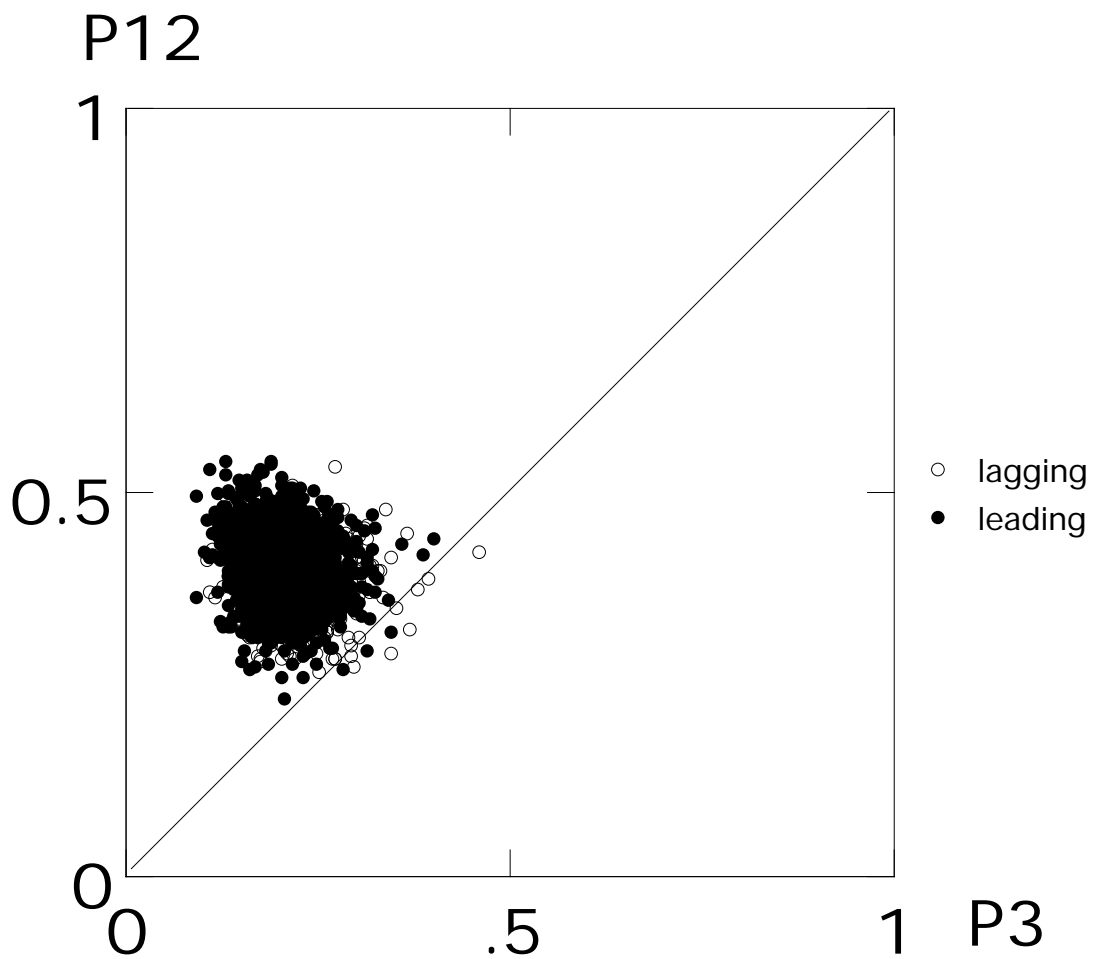
Pyrococcus abyssi



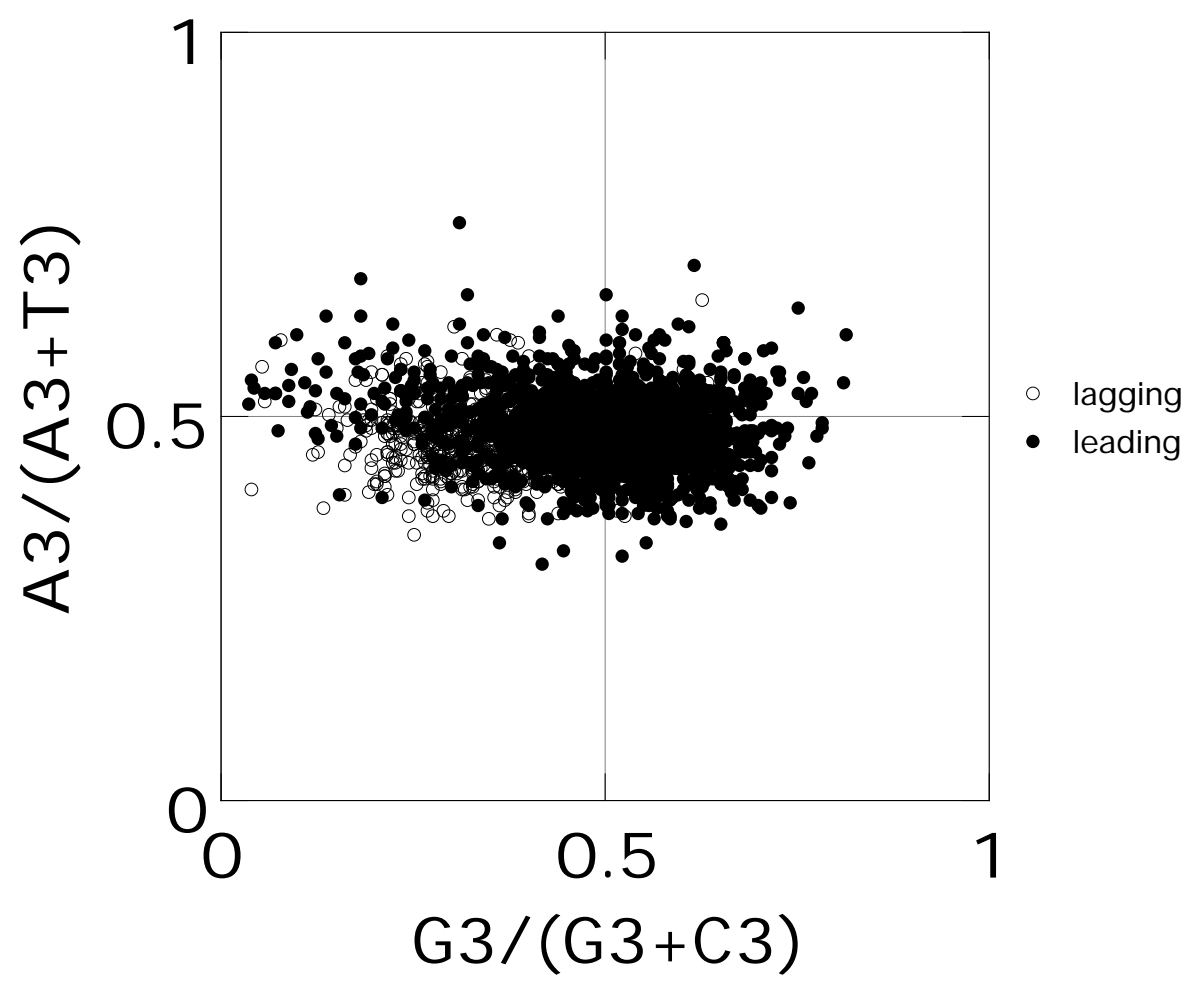
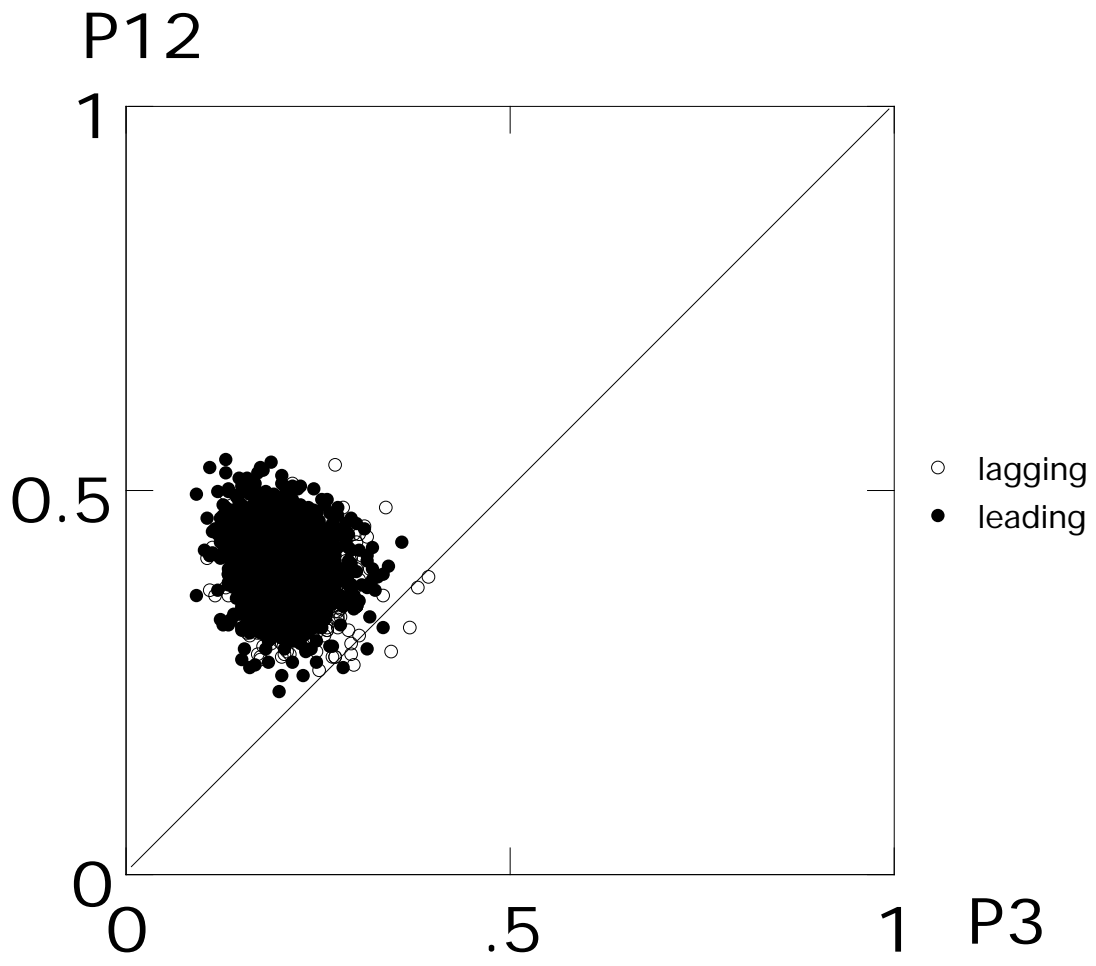
Pyrococcus horikoshii



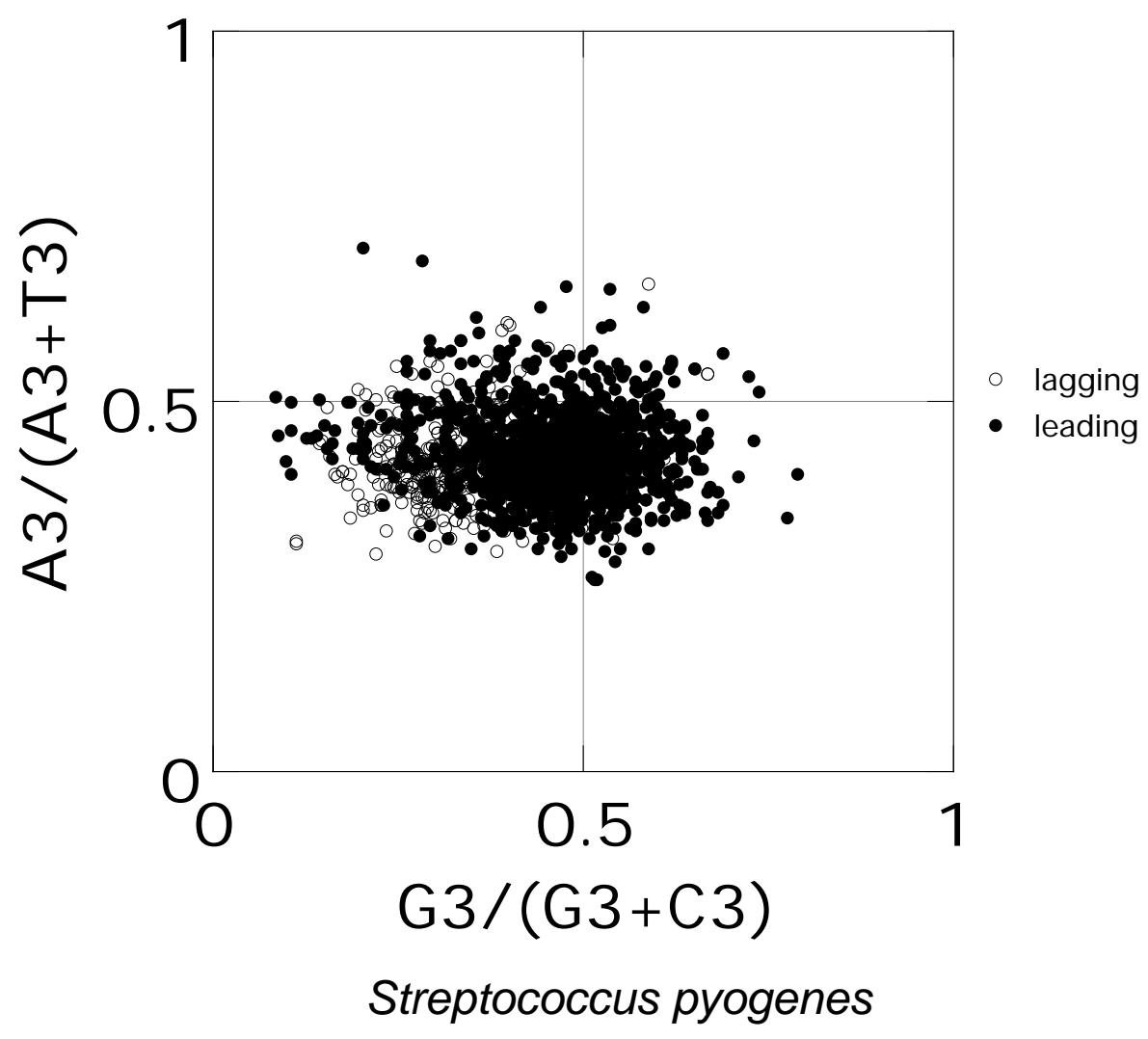
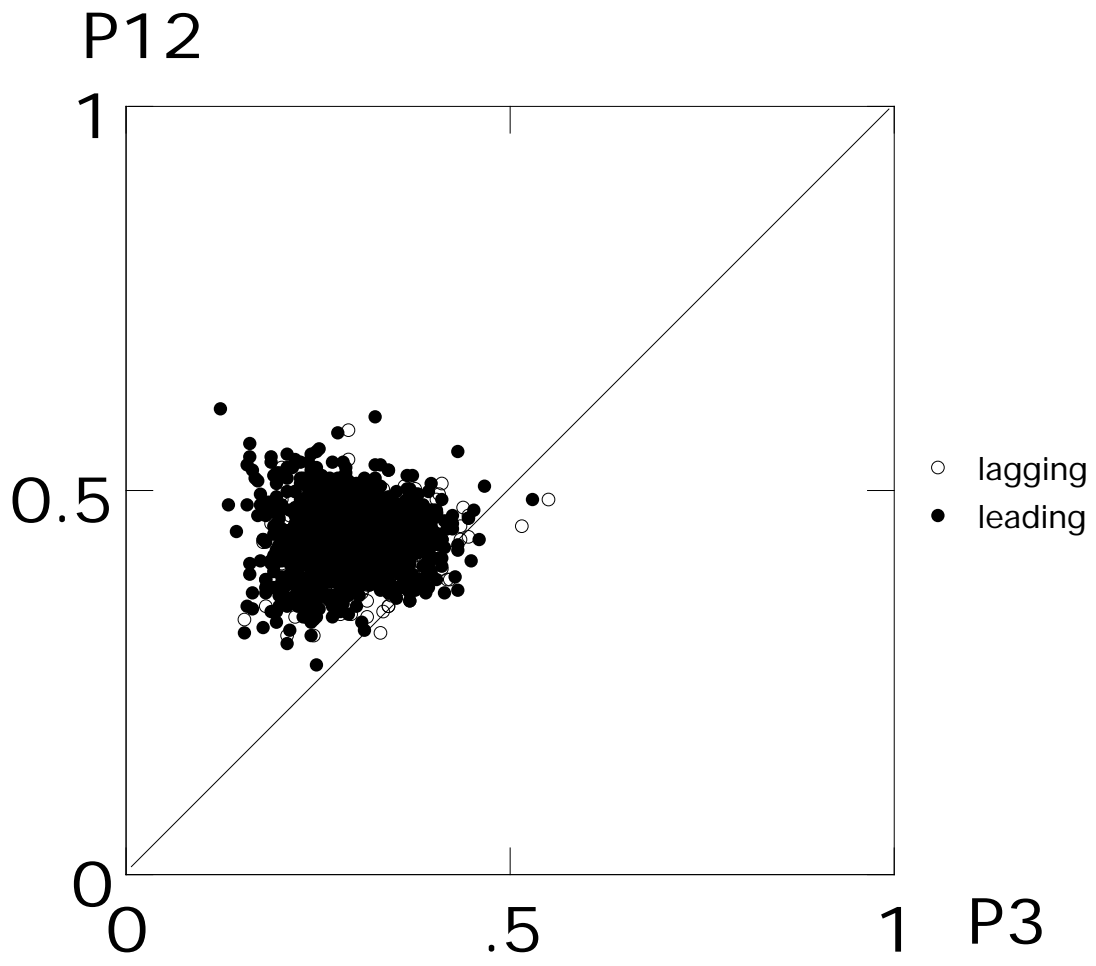
Rickettsia prowazekii

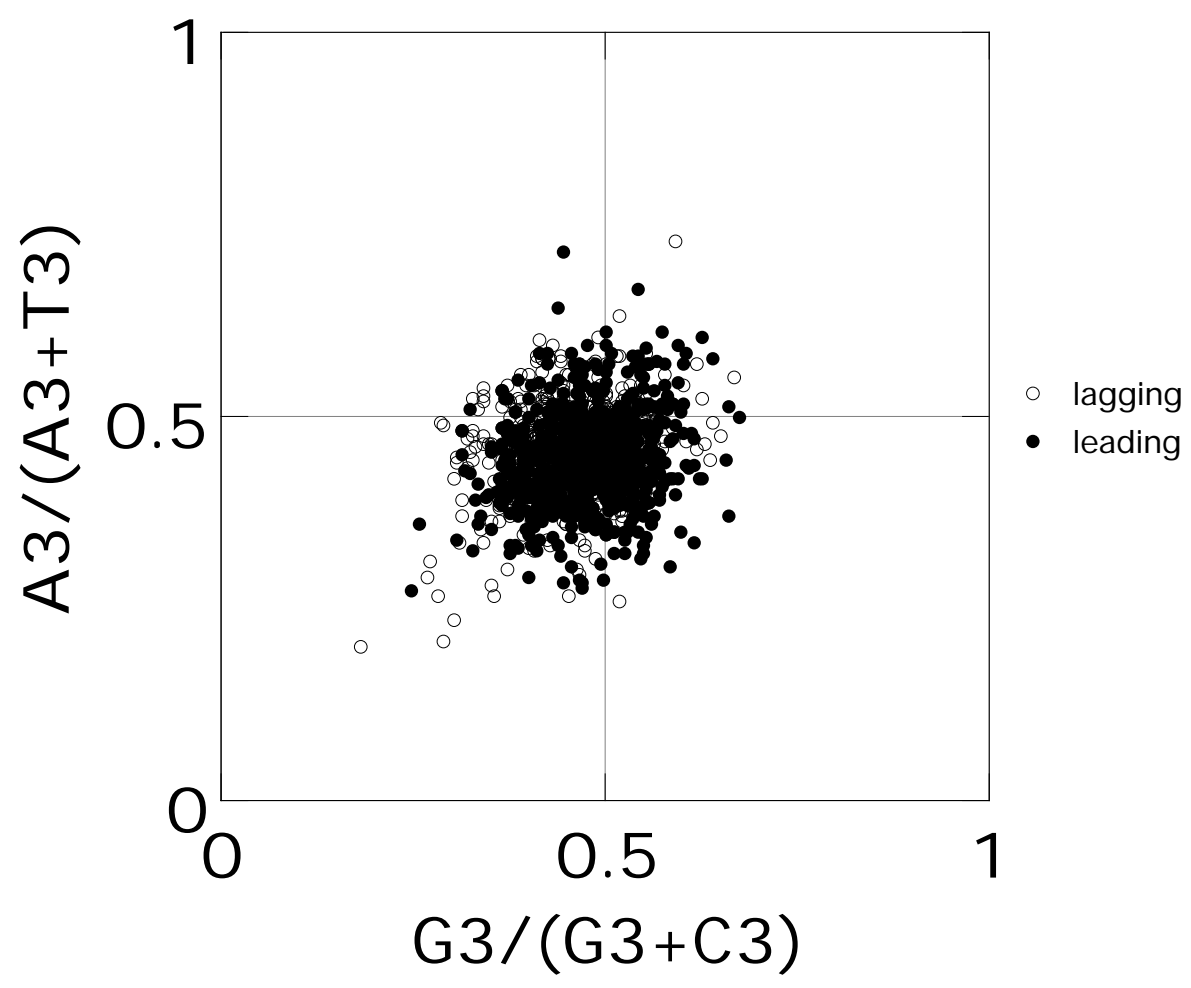
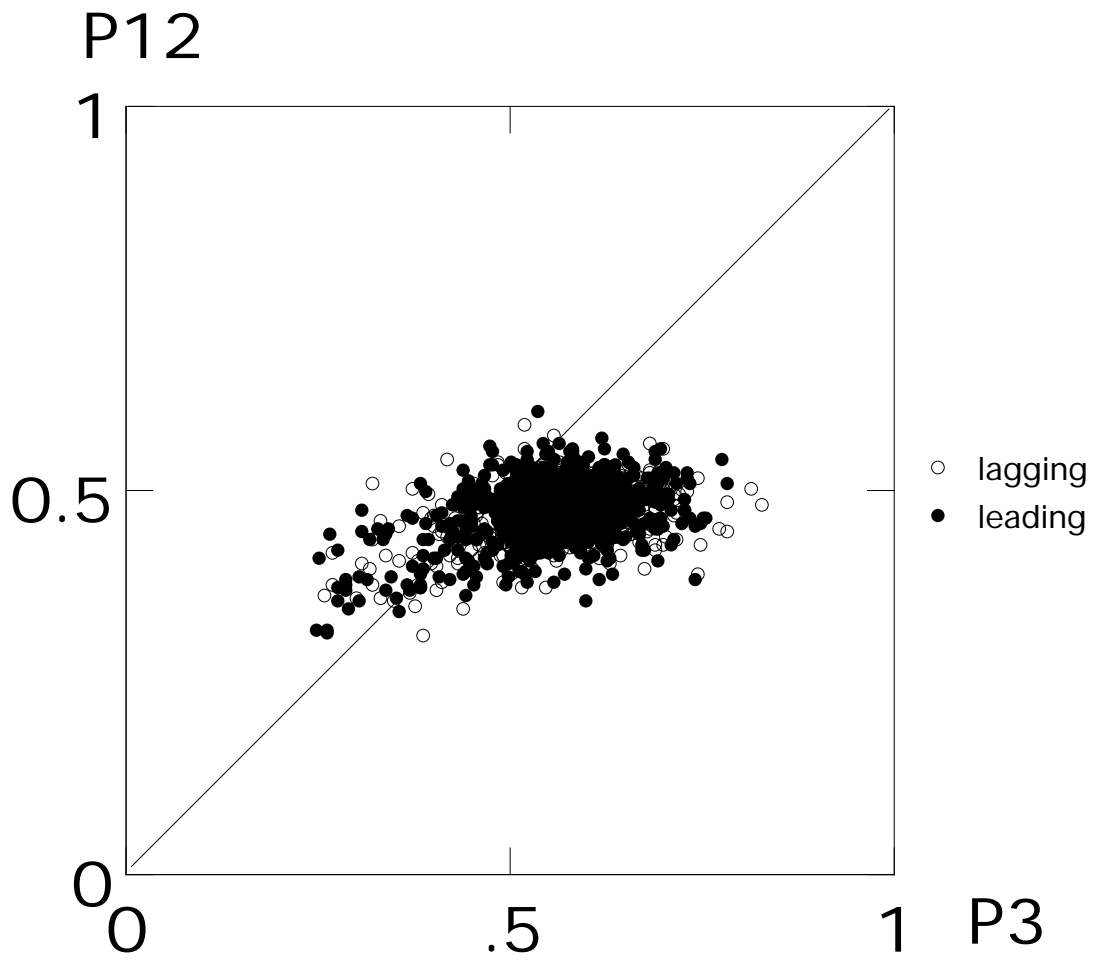


Staphylococcus aureus Mu50

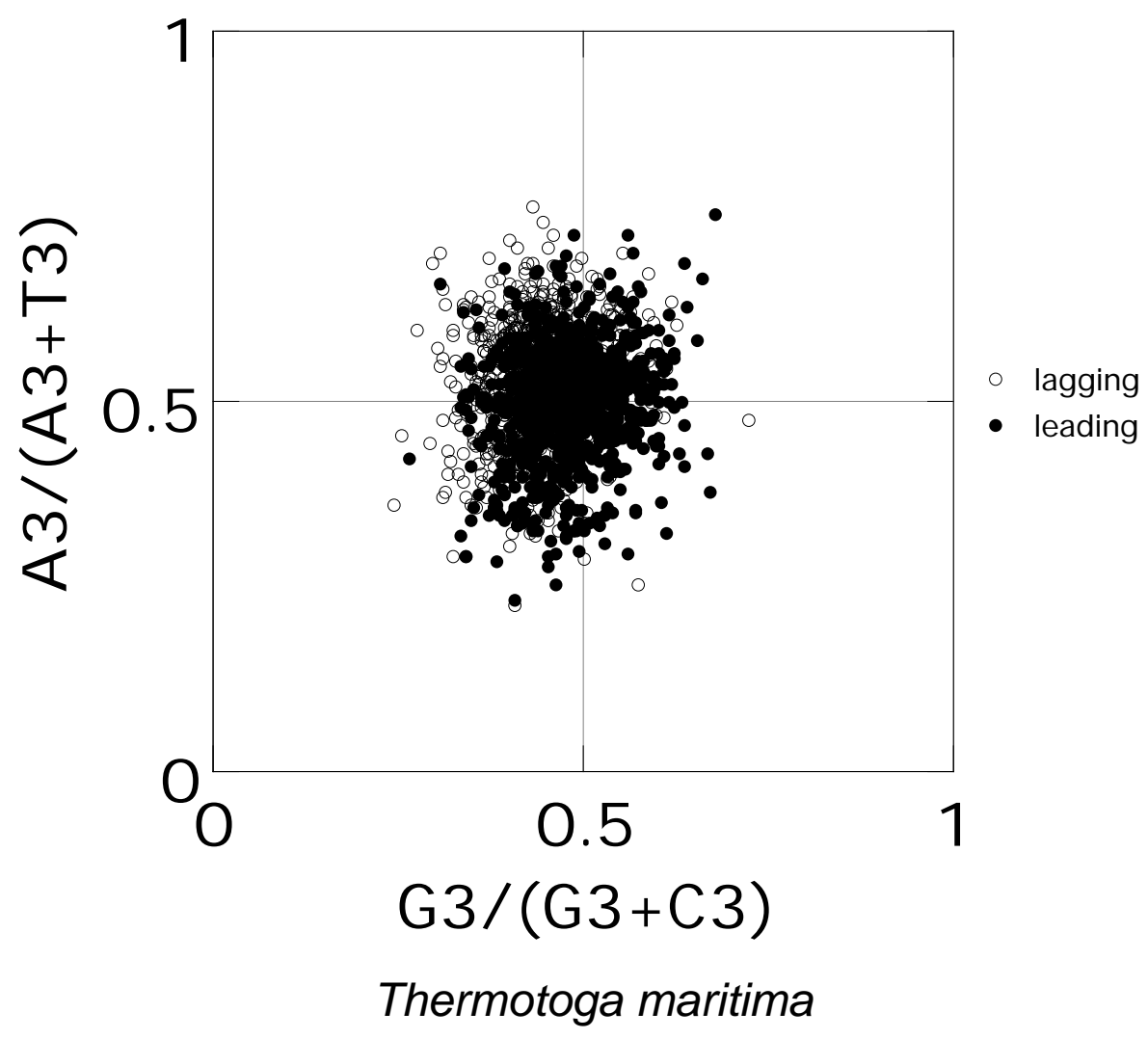
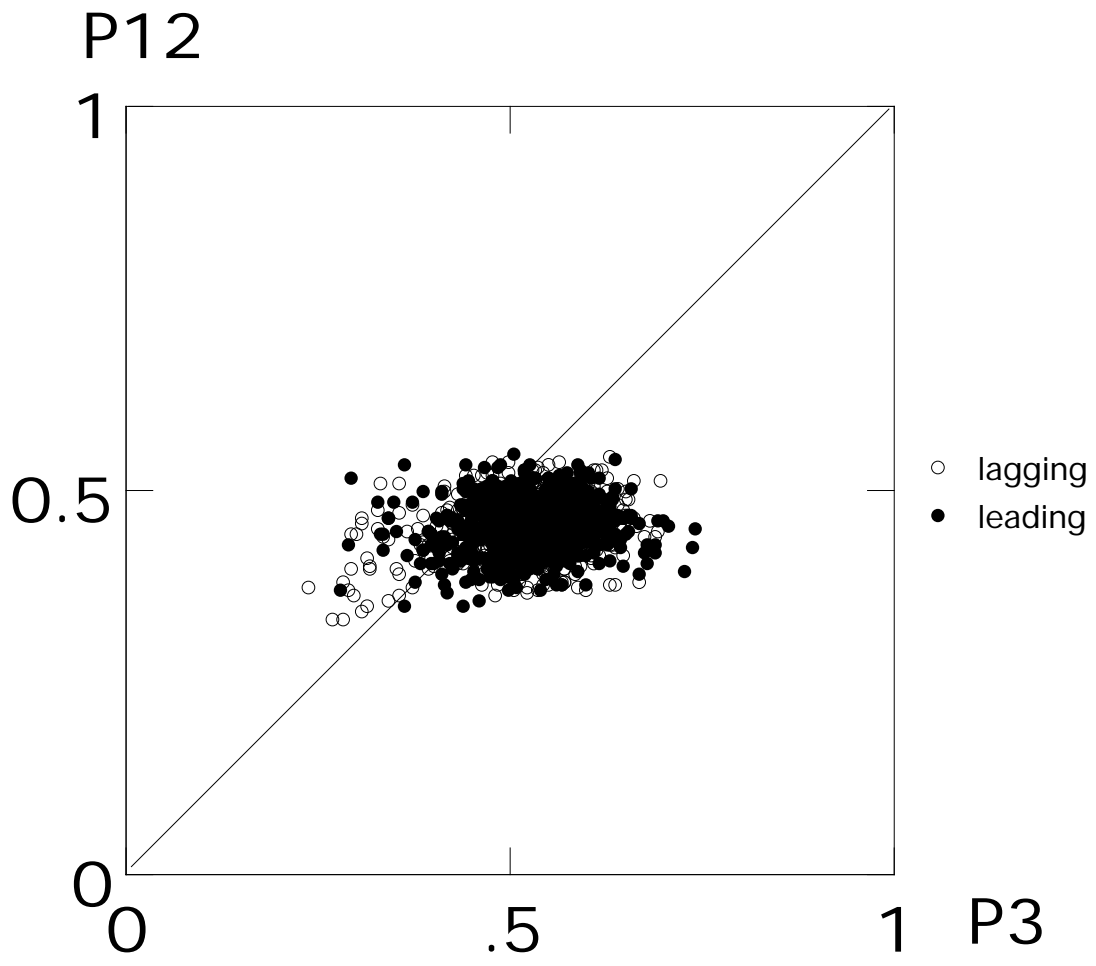


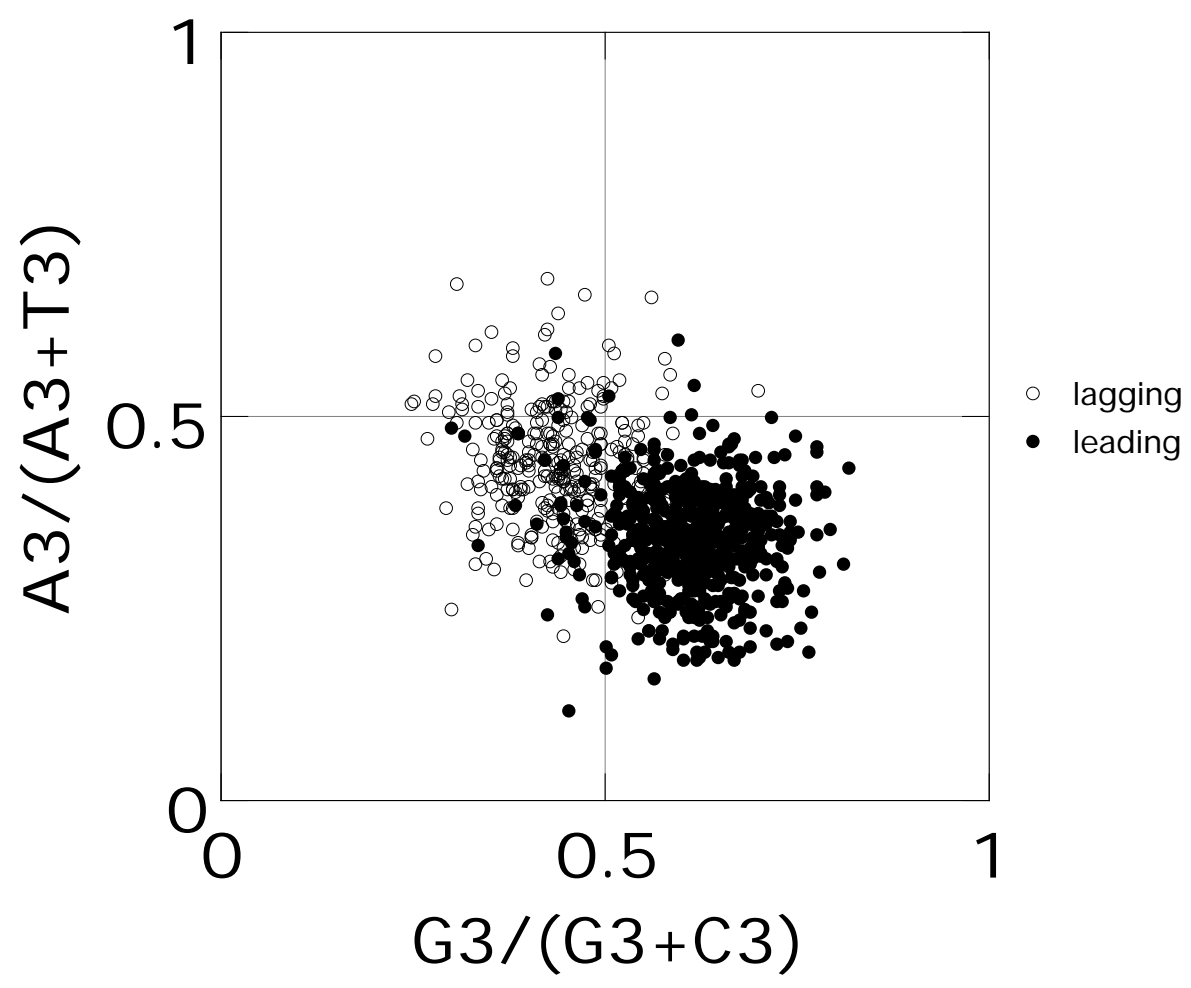
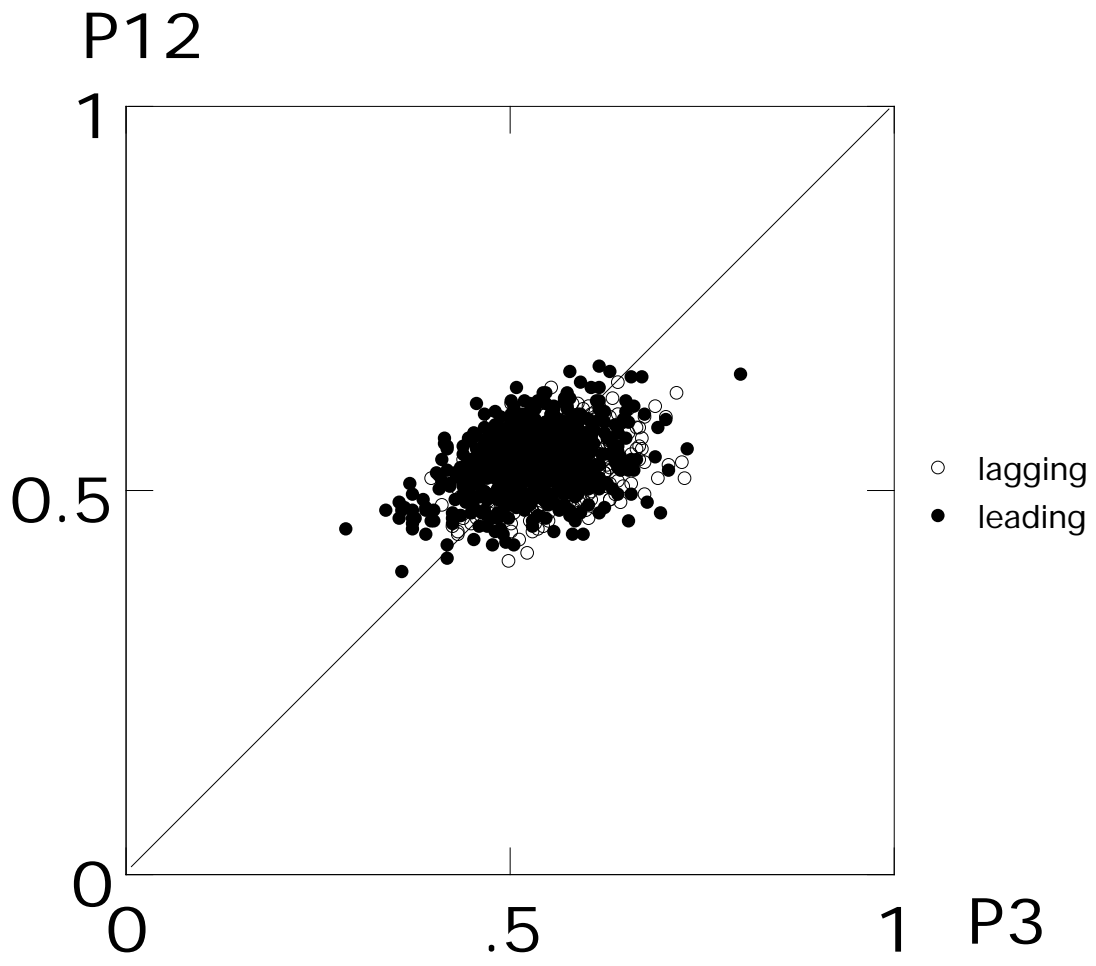
Staphylococcus aureus N315



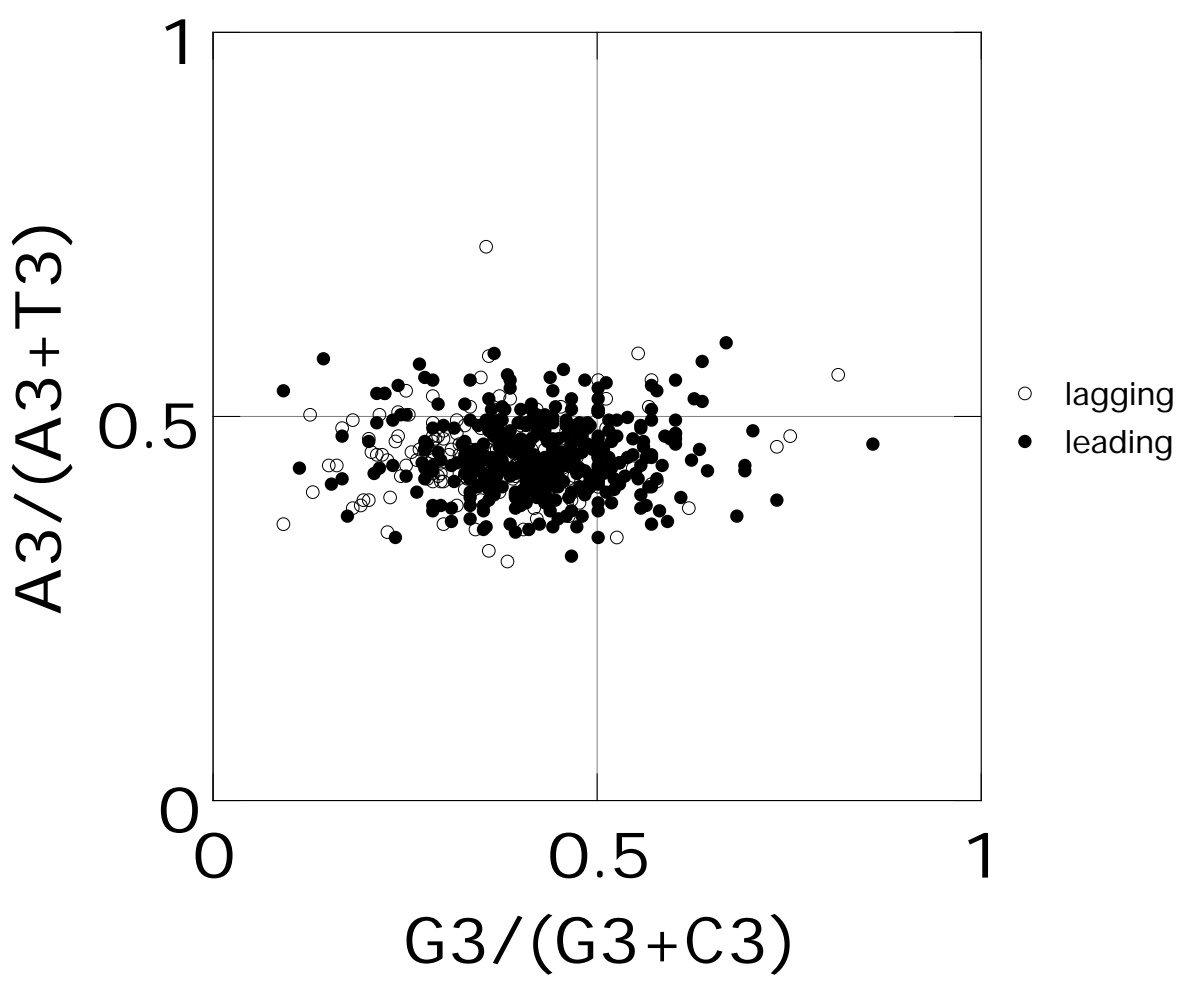
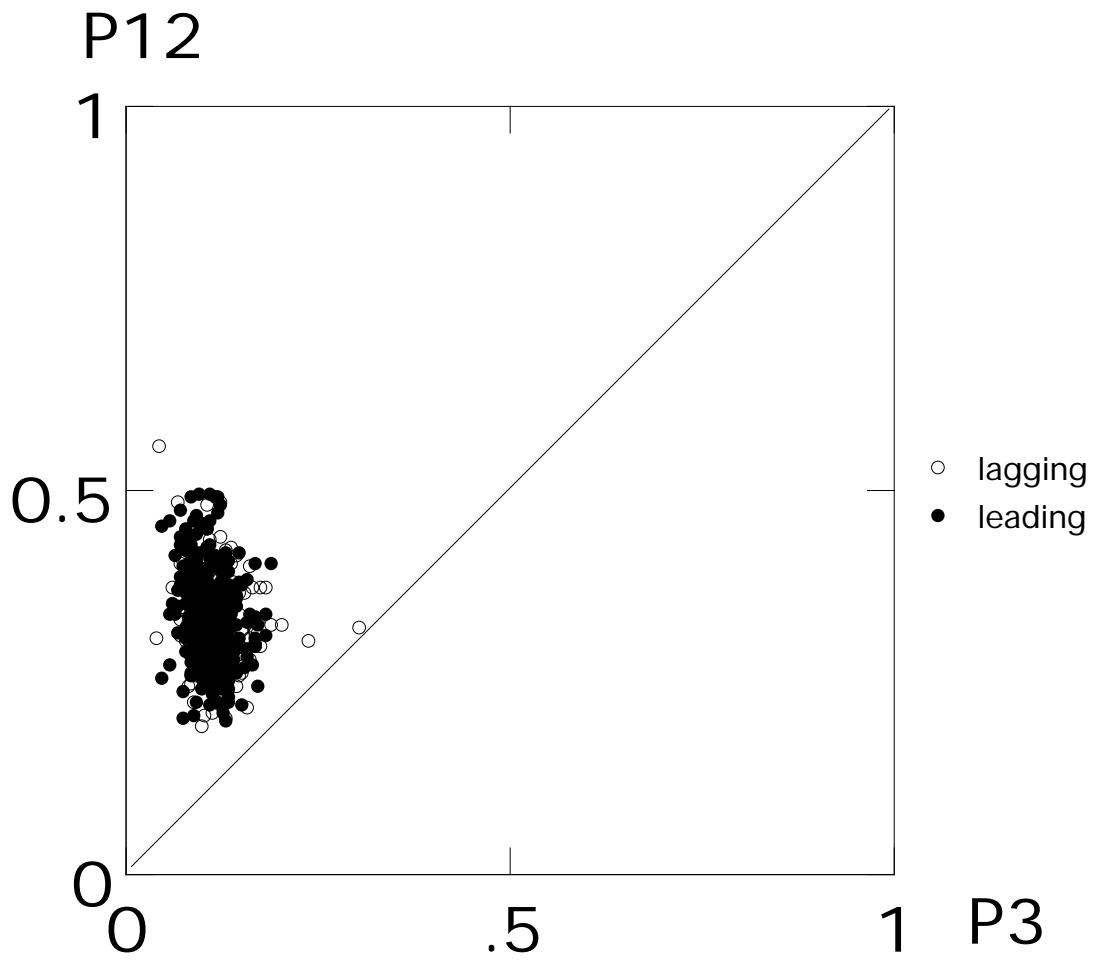


Thermoplasma acidophilum

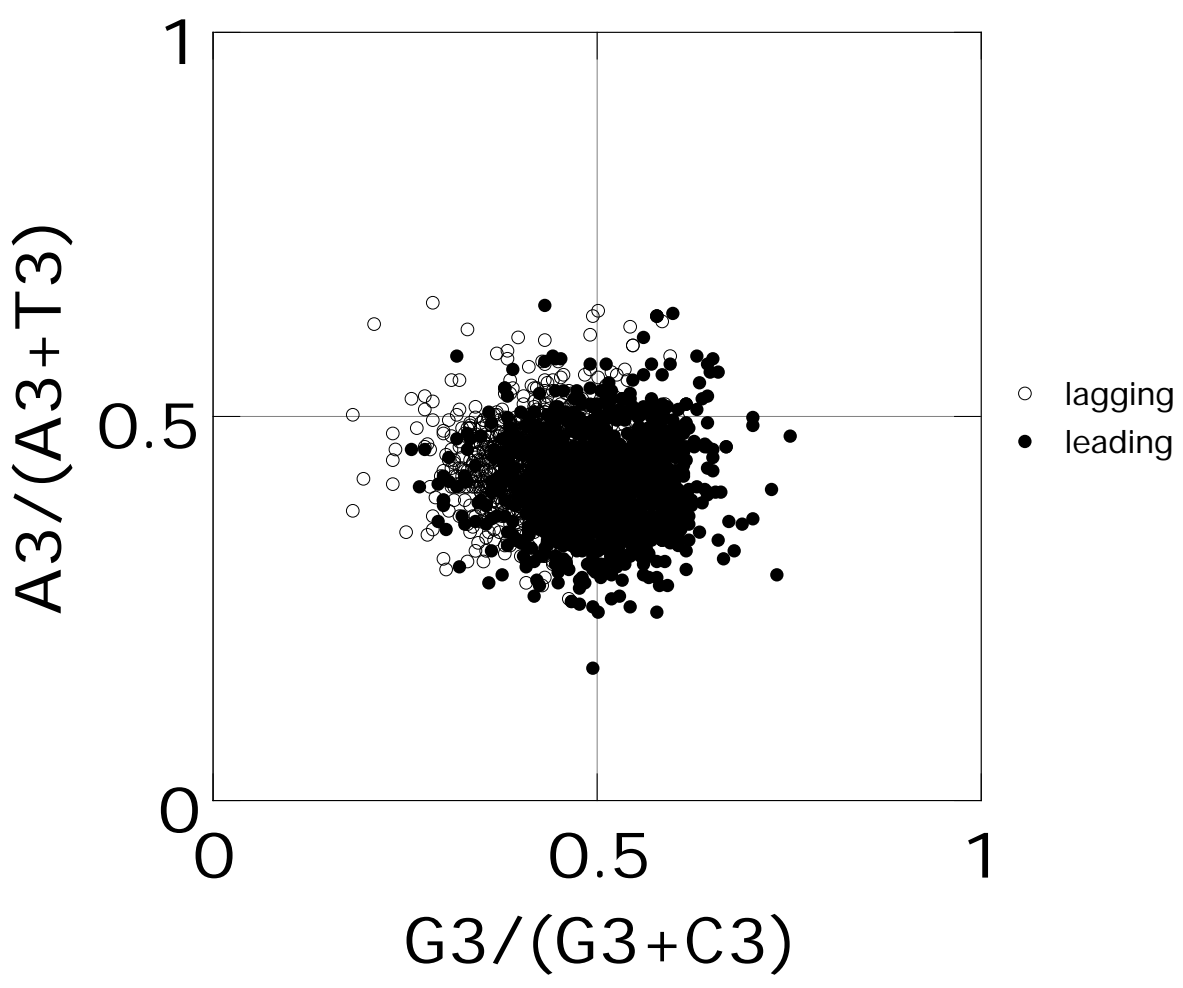
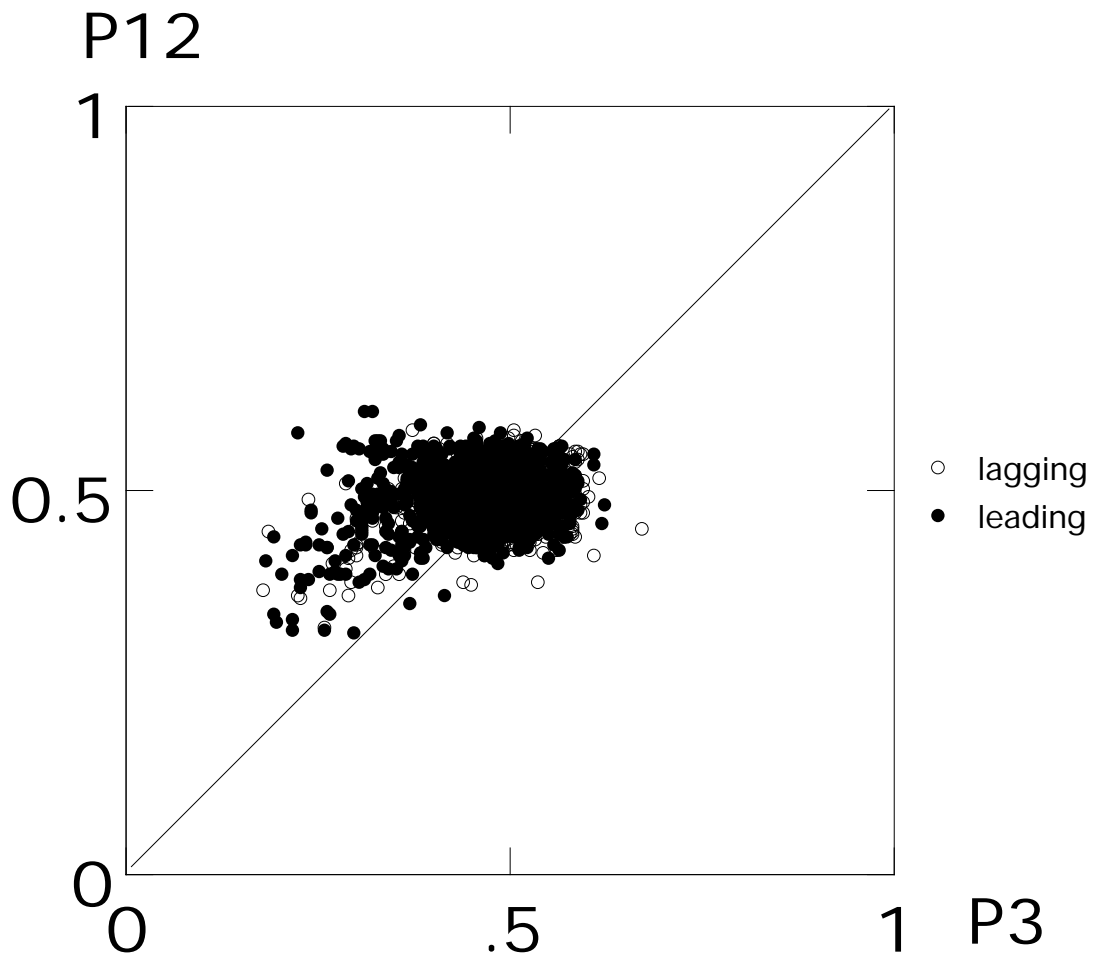




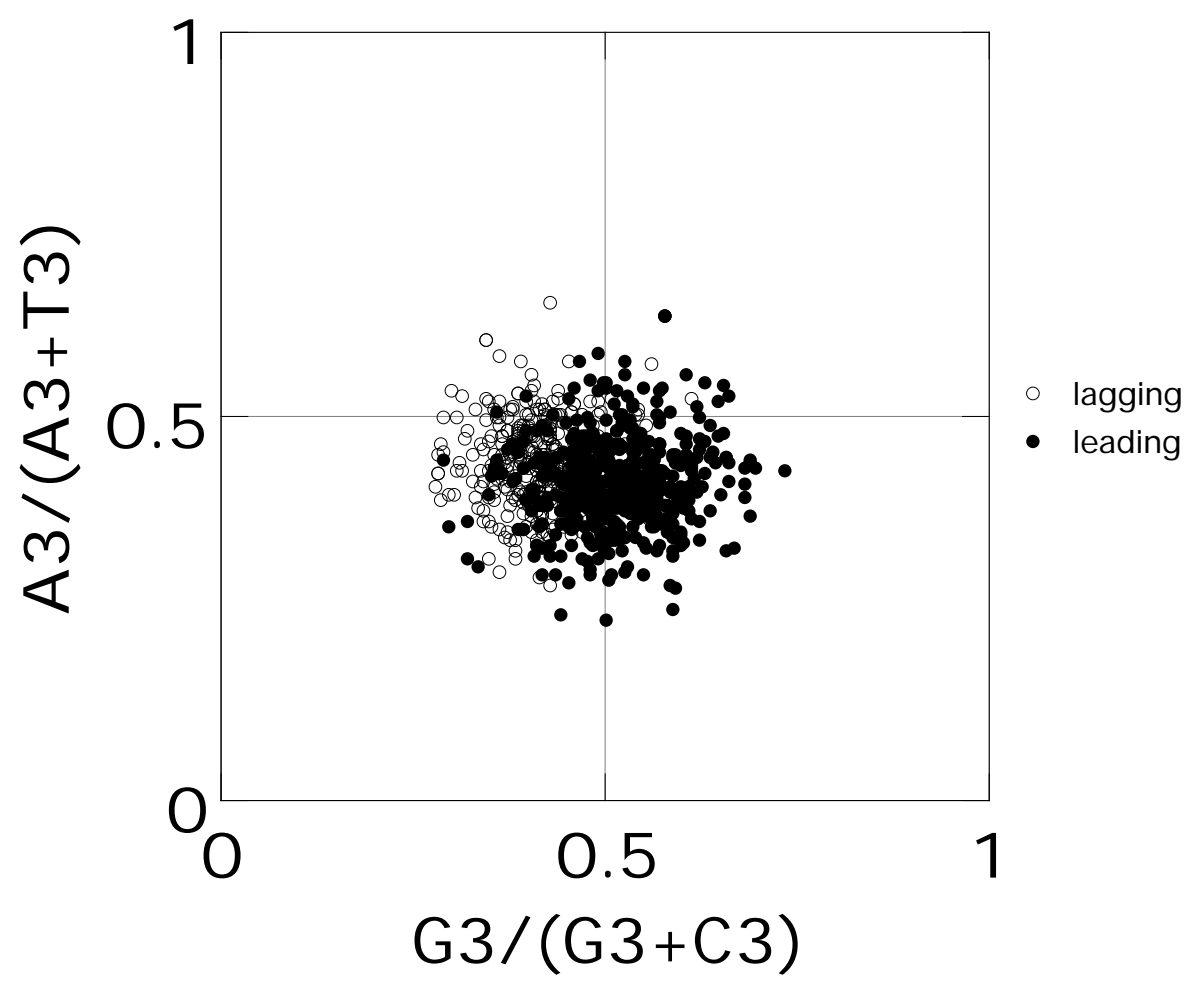
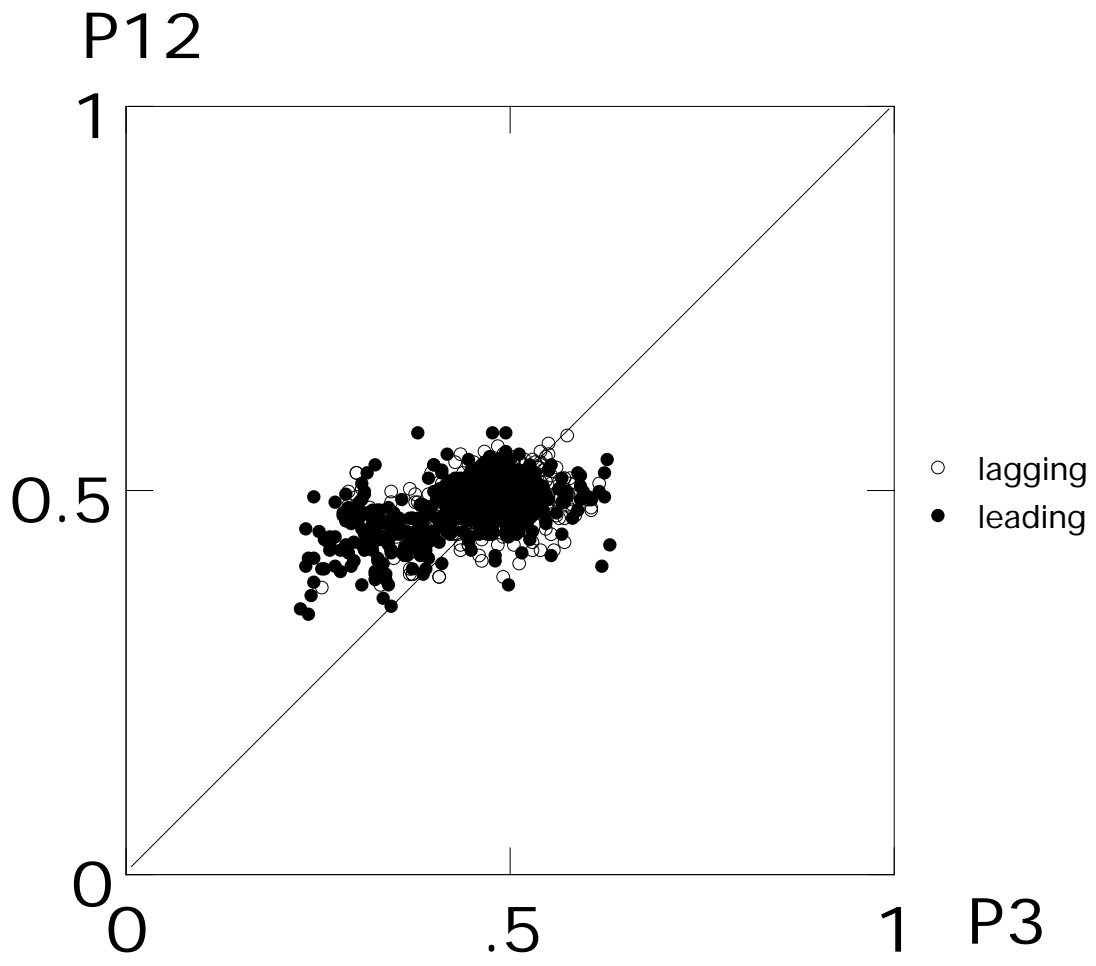
Treponema pallidum



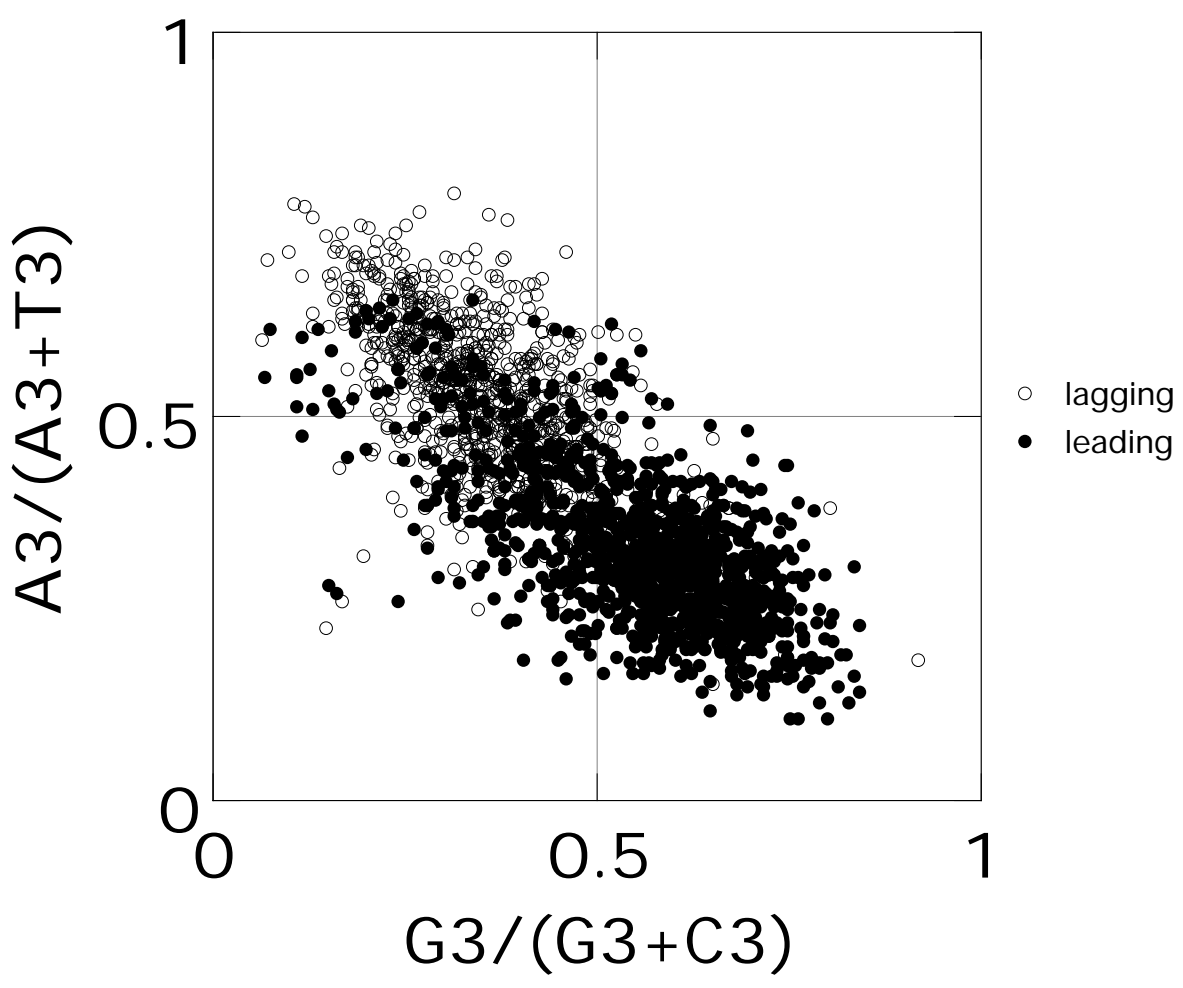
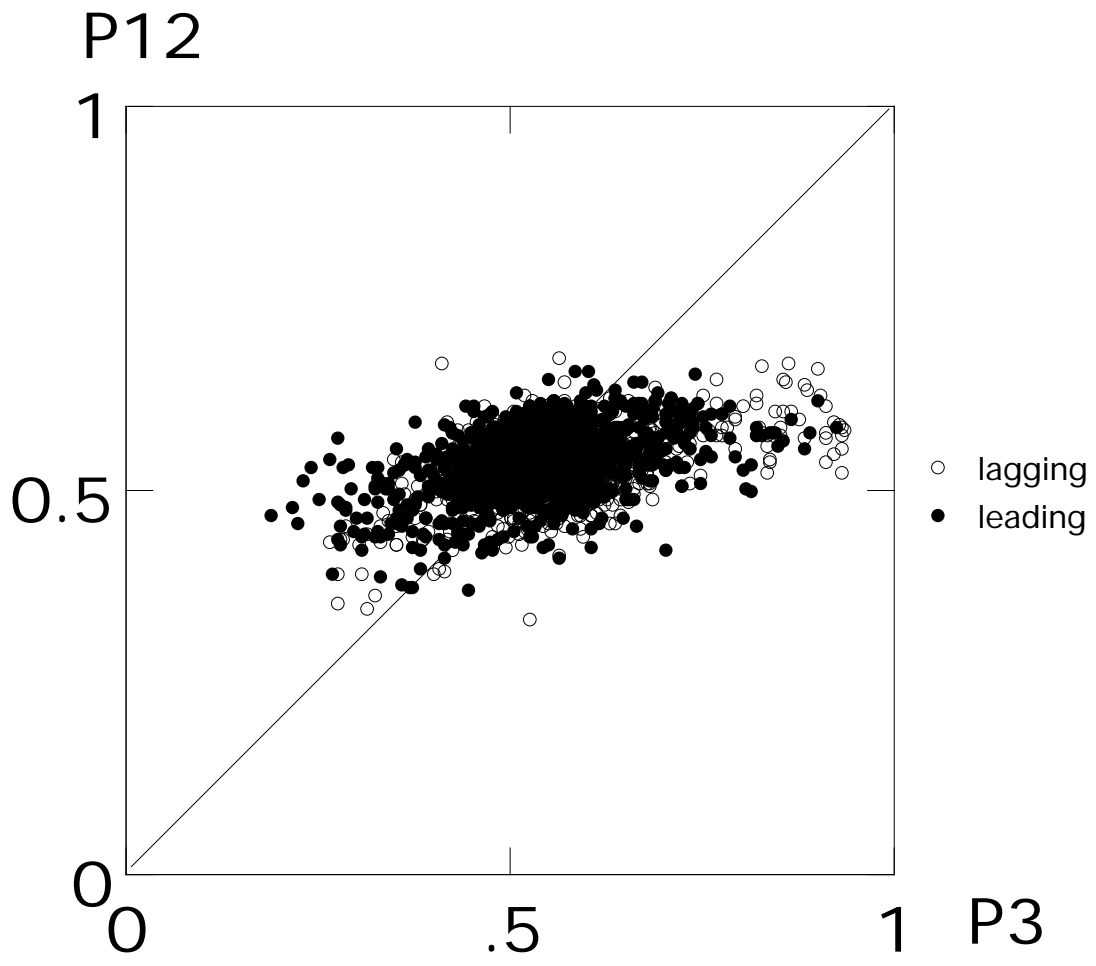
Ureaplasma urealyticum



Vibrio cholerae chromosome 1



Vibrio cholerae chromosome 2



Xylella fastidiosa

Chromosome.	Published Seq		GC_{IGR}			$G/(G+C)$			$A (A+T)$			Midpoint		Difference in PR2-bias		
	#lead	#lagg	lead	lagg	Sig.	x_1	x_2	Sig.	y_1	y_2	Sig.	x_c	y_c	B_I	B_{II}	$B_I\%$
B. hal	912	1013	0.385	0.382	ns	0.559	0.450	***	0.516	0.491	***	0.505	0.504	0.112	0.006	95.1
B. sub	829	934	0.365	0.362	ns	0.545	0.454	***	0.511	0.489	***	0.500	0.500	0.094	0.000	99.6
B. bur	85	76	0.213	0.210	ns	0.616	0.400	***	0.425	0.573	***	0.508	0.499	0.261	0.008	97.0
Buch	118	123	0.159	0.152	ns	0.541	0.488	***	0.482	0.530	***	0.514	0.506	0.072	0.016	82.0
C. cre	630	753	0.623	0.626	ns	0.514	0.491	***	0.484	0.513	***	0.502	0.498	0.037	0.003	92.7
C. jej	150	118	0.200	0.211	ns	0.535	0.477	***	0.488	0.514	***	0.506	0.501	0.064	0.006	91.3
C. mur	166	190	0.359	0.362	ns	0.579	0.435	***	0.490	0.513	***	0.507	0.502	0.146	0.007	95.3
C. pne	191	236	0.326	0.320	ns	0.541	0.451	***	0.477	0.521	***	0.496	0.499	0.101	0.004	96.0
C. pneAR39	256	198	0.337	0.344	ns	0.548	0.459	***	0.474	0.523	***	0.504	0.498	0.102	0.004	96.4
C. pneJ138	190	240	0.329	0.318	*	0.540	0.451	***	0.476	0.522	***	0.496	0.499	0.100	0.005	95.6
C. tra	170	176	0.359	0.361	ns	0.578	0.430	***	0.497	0.519	**	0.504	0.508	0.150	0.009	94.6

D. rad1	417	439	0.609	0.636	***	0.505	0.496	*	0.495	0.512	**	0.500	0.504	0.019	0.004	84.5
D. rad2	47	50	0.579	0.606	ns	0.491	0.483	ns	0.490	0.538	**	0.487	0.514	0.049	0.019	71.8
E. col	912	863	0.428	0.423	ns	0.522	0.479	***	0.497	0.506	**	0.501	0.502	0.044	0.002	96.4
E.colEDL	1153	1077	0.429	0.421	**	0.523	0.478	***	0.495	0.507	***	0.500	0.501	0.047	0.001	97.7
E.colRIMD	1088	1000	.425	.422	ns	0.523	0.479	***	0.494	0.507	***	0.501	0.500	0.046	0.001	97.6
H. inf	351	347	0.313	0.310	ns	0.525	0.475	***	0.494	0.510	***	0.500	0.502	0.052	0.002	96.6
H. pyl	221	250	0.303	0.301	ns	0.516	0.474	***	0.500	0.494	ns	0.495	0.497	0.042	0.006	87.6
H. pylJ99	204	240	0.304	0.311	ns	0.524	0.475	***	0.497	0.502	ns	0.500	0.500	0.049	0.000	99.1
L.lac	606	507	0.277	0.274	ns	0.566	0.426	***	0.526	0.465	***	0.496	0.496	0.153	0.006	96.2
M.lep	703	717	0.546	0.546	ns	0.536	0.470	***	0.459	0.536	***	0.503	0.498	0.101	0.004	96.3
M. tub	656	649	0.623	0.627	ns	0.515	0.482	***	0.489	0.516	***	0.498	0.503	0.043	0.003	93.4
M.tubCDC	593	628	0.628	0.626	ns	0.516	0.484	***	0.486	0.515	***	0.500	0.500	0.043	0.000	98.9
M. gen	33	48	0.305	0.249	***	0.490	0.490	ns	0.523	0.507	ns	0.490	0.515	0.016	0.018	45.9
M. pne	104	131	0.342	0.336	ns	0.495	0.494	ns	0.501	0.502	ns	0.494	0.501	0.002	0.006	23.7
M.pul	161	110	0.184	0.178	ns	0.504	0.482	*	0.506	0.498	ns	0.493	0.502	0.023	0.007	76.3

N. menA	605	385	0.447	0.439	ns	0.524	0.462	***	0.488	0.506	***	0.493	0.497	0.065	0.008	89.4
N. menB	552	459	0.448	0.459	ns	0.538	0.468	***	0.491	0.515	***	0.503	0.503	0.074	0.004	94.6
P.mul	415	304	0.332	0.323	*	0.541	0.465	***	0.492	0.513	***	0.503	0.502	0.079	0.004	95.3
P. aer	871	1344	0.620	0.614	ns	0.526	0.476	***	0.476	0.529	***	0.501	0.502	0.073	0.003	96.4
P. aby	175	202	0.386	0.373	ns	0.508	0.495	ns	0.489	0.504	*	0.501	0.496	0.020	0.004	83.4
P. hor	141	308	0.381	0.373	ns	0.526	0.482	***	0.496	0.507	ns	0.504	0.501	0.046	0.004	91.7
R. pro	267	213	0.237	0.248	**	0.535	0.465	***	0.485	0.518	***	0.500	0.501	0.077	0.001	98.1
S.aur	655	735	0.278	0.276	ns	0.570	0.435	***	0.514	0.487	***	0.502	0.500	0.138	0.003	98.2
S.aurN315	683	702	0.273	0.275	ns	0.573	0.426	***	0.515	0.485	***	0.499	0.500	0.150	0.001	99.7
S.pyo	408	381	0.328	0.322	ns	0.567	0.440	***	0.517	0.486	***	.503	.502	.131	.004	97.2
T. aci	301	297	0.360	0.363	ns	0.512	0.491	***	0.498	0.506	**	0.502	0.502	0.022	0.003	90.0
T. mar	122	127	0.400	0.394	ns	0.518	0.500	ns	0.494	0.507	ns	0.509	0.500	0.023	0.009	71.0
T. pal	135	117	0.538	0.546	ns	0.583	0.432	***	0.452	0.525	***	0.508	0.489	0.167	0.014	92.4
U. ure	122	62	0.178	0.178	ns	0.515	0.469	**	0.497	0.504	ns	0.492	0.500	0.047	0.008	85.3
V. cho1	553	460	0.408	0.416	*	0.529	0.476	***	0.483	0.511	***	0.502	0.497	0.060	0.004	93.9

V. cho2	301	228	0.444	0.414	***	0.545	0.466	***	0.459	0.519	***	0.506	0.489	0.099	0.012	89.0
X. fas	842	404	0.467	0.470	ns	0.582	0.441	***	0.428	0.557	***	0.511	0.493	0.191	0.014	93.3

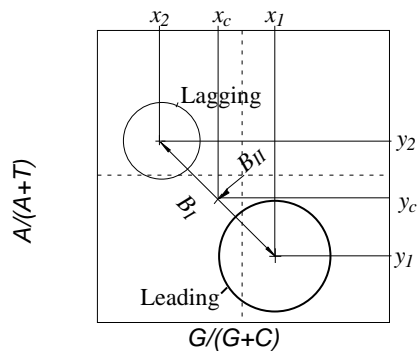
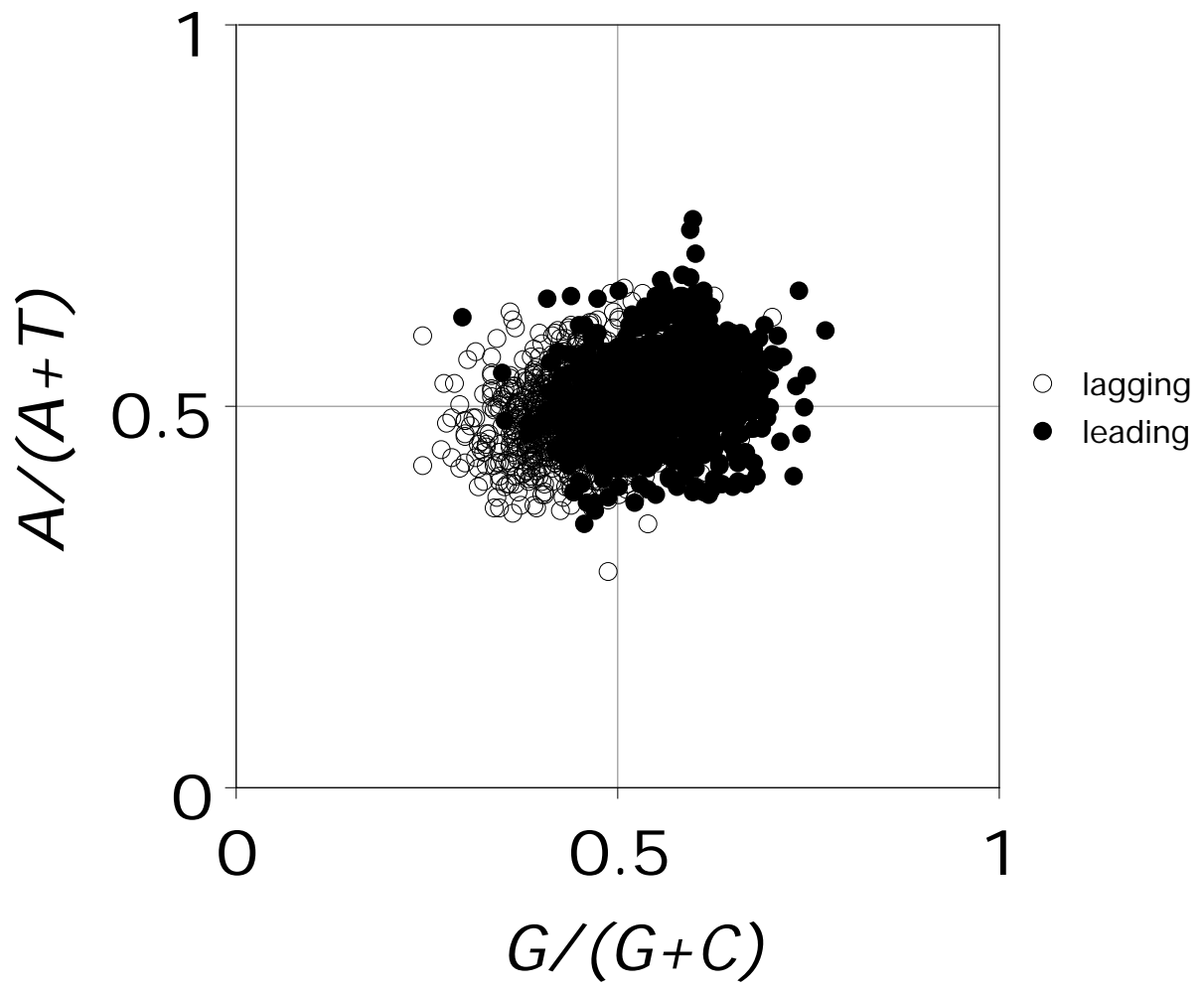
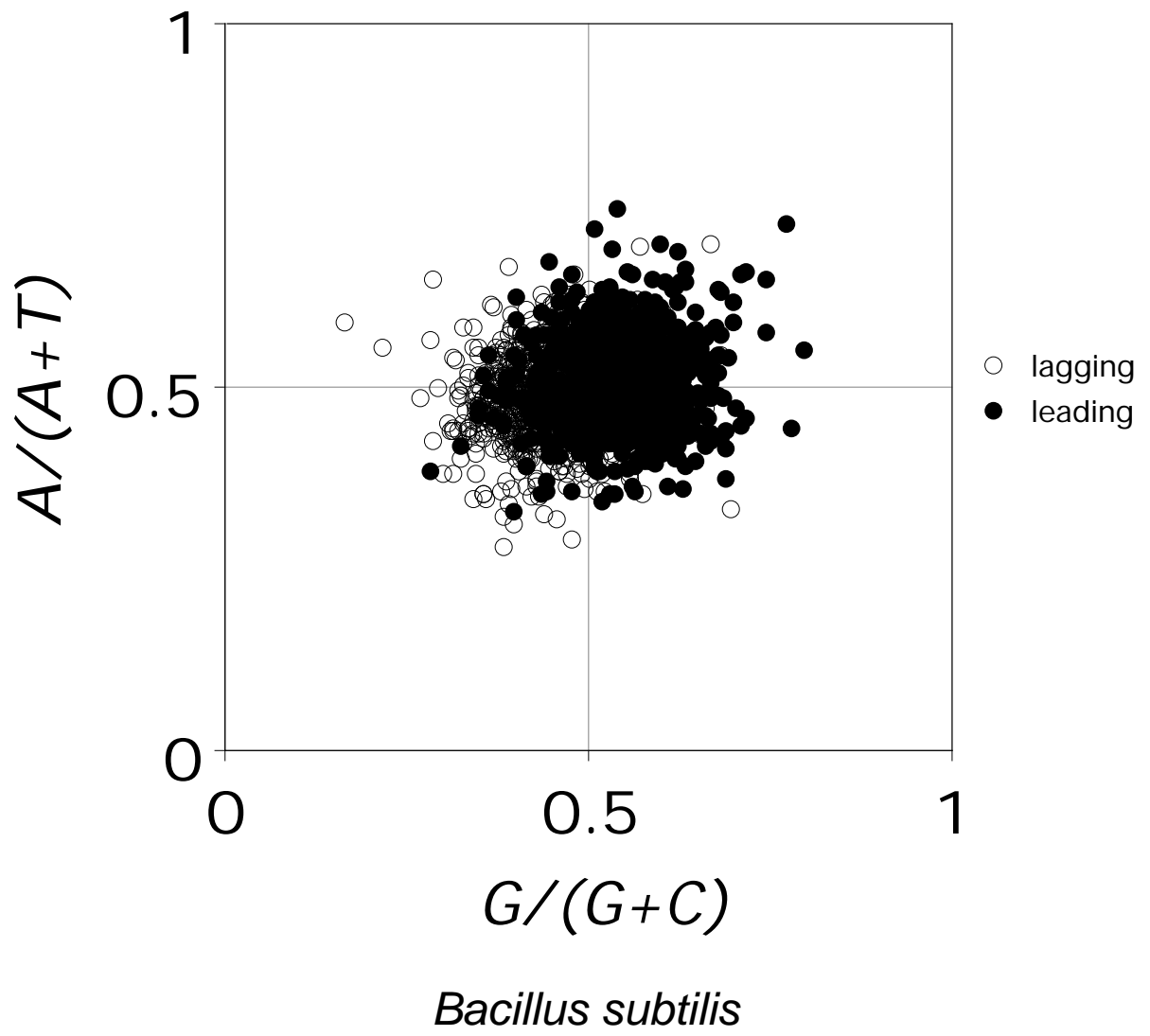
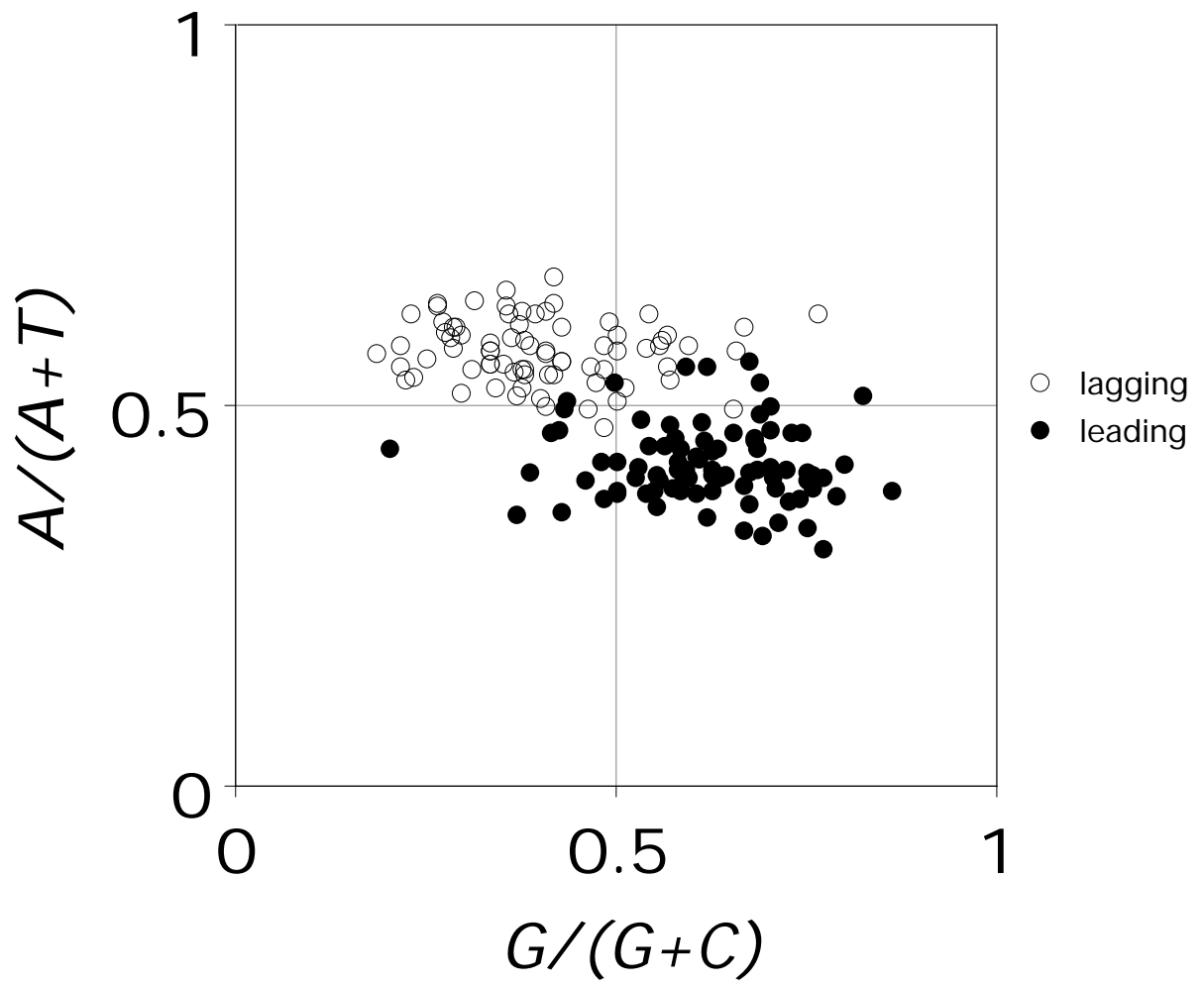


Table 3. Base composition in intergenic spaces (>100 bp) between the leading and the lagging groups. Indices are defined in the material and method section. #lead and #lag are the number of intergenic spaces in the leading and the lagging strand. The significance level (Sig.) for a difference between the two groups are: ns (not significant, $p \geq 0.05$); * ($0.01 \leq p < 0.05$); ** ($0.001 \leq p < 0.01$); *** ($p < 0.001$). The contribution in percent of replication-associated effects to PR2 deviations (B_l %) is given in **bold** when both differences $x_l - x_2$ and $y_l - y_2$ are highly significant ($p < 0.01$). When a difference is significant between the two groups a red color outlines the **highest** value and a blue color the lowest **value**.

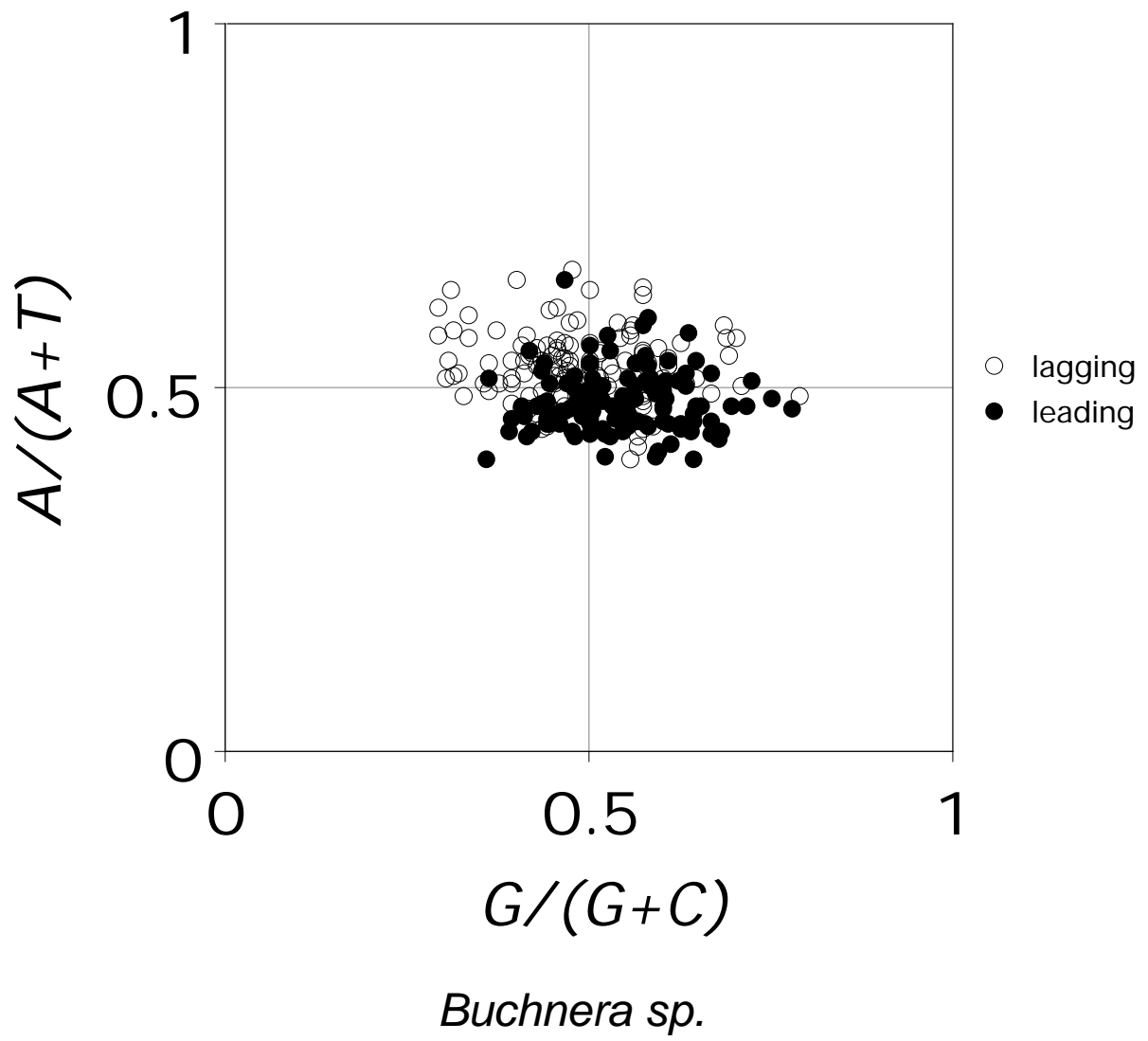


Bacillus halodurans



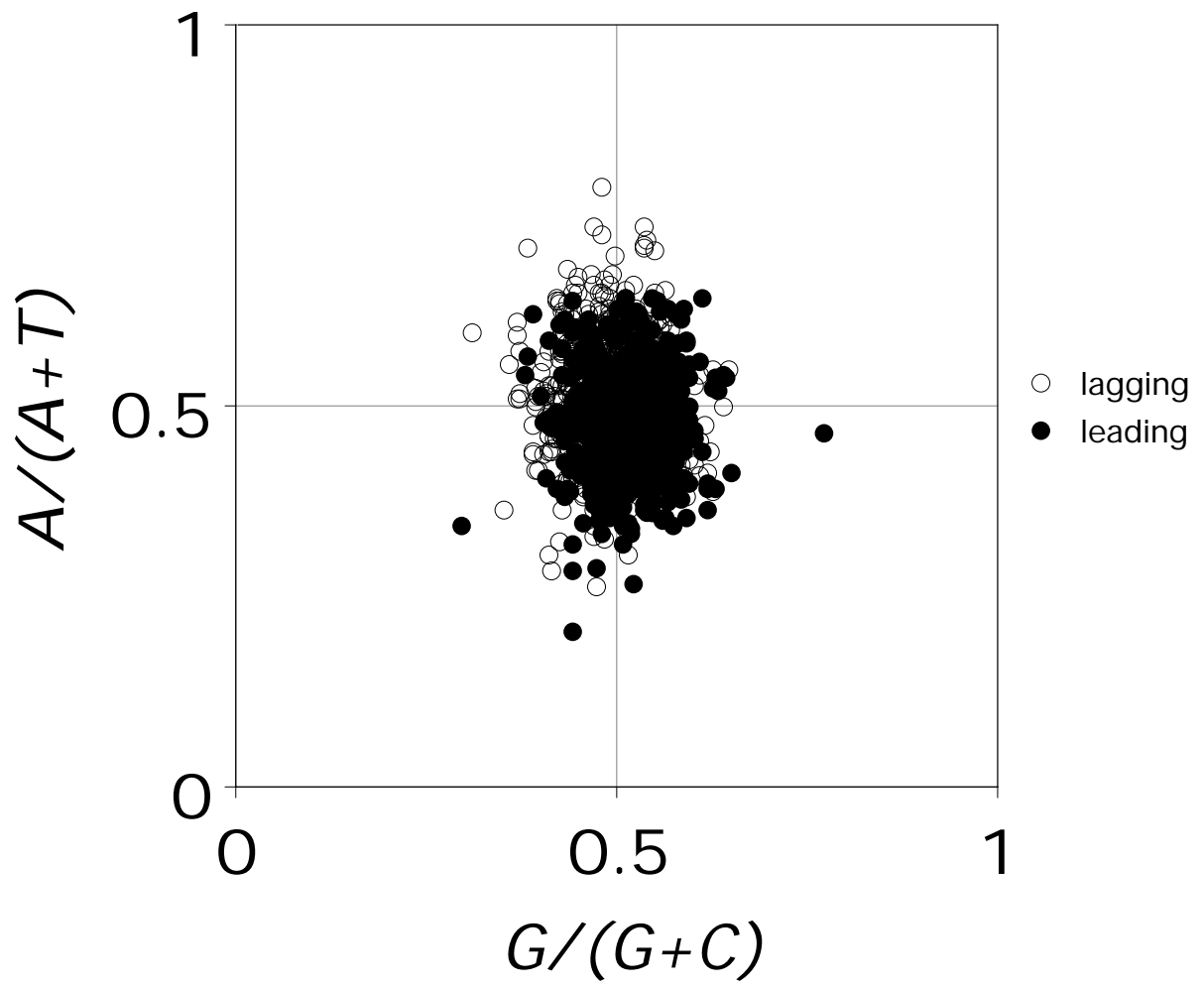


Borrelia burgdorferi

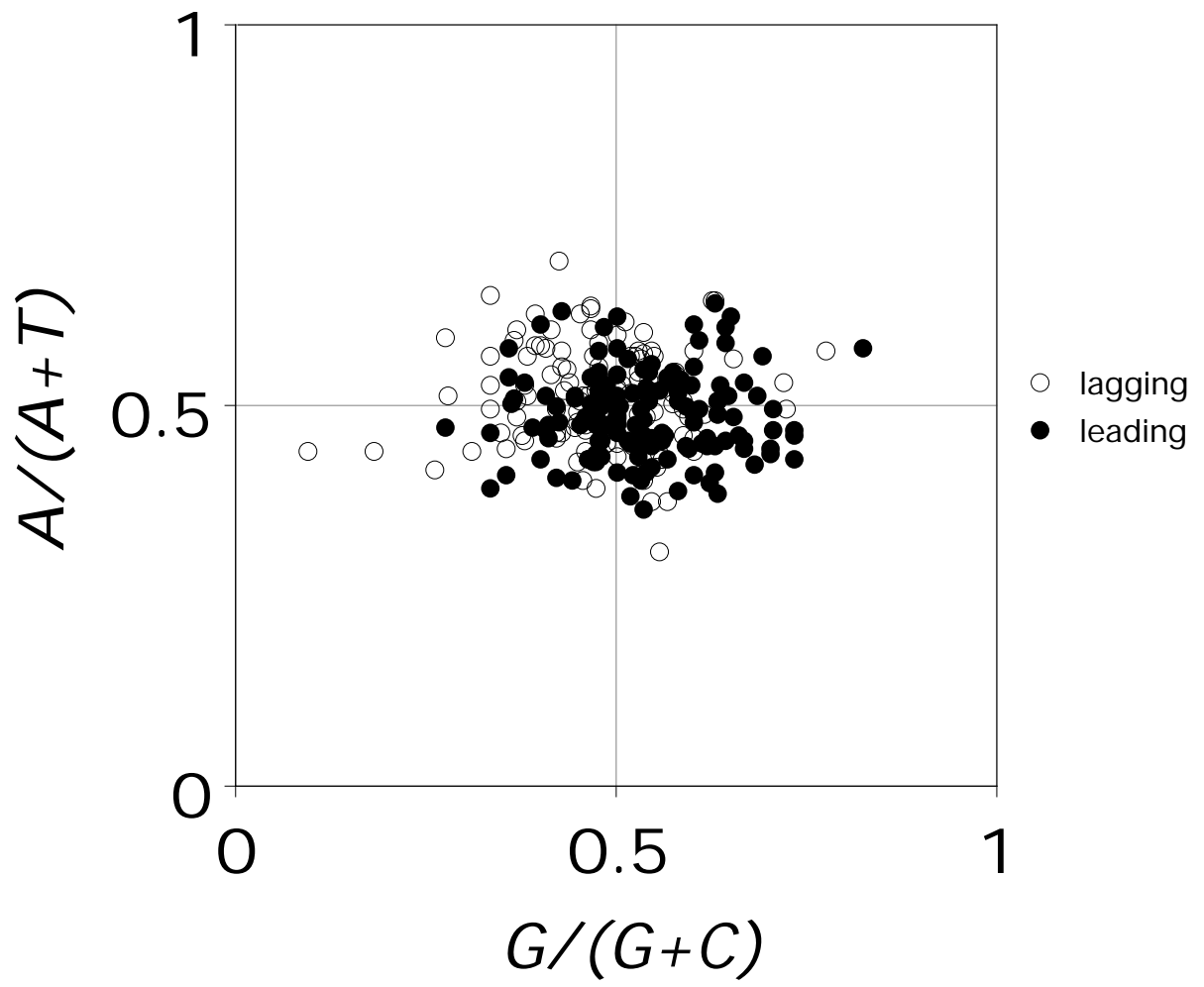


To coding sequences in Buch

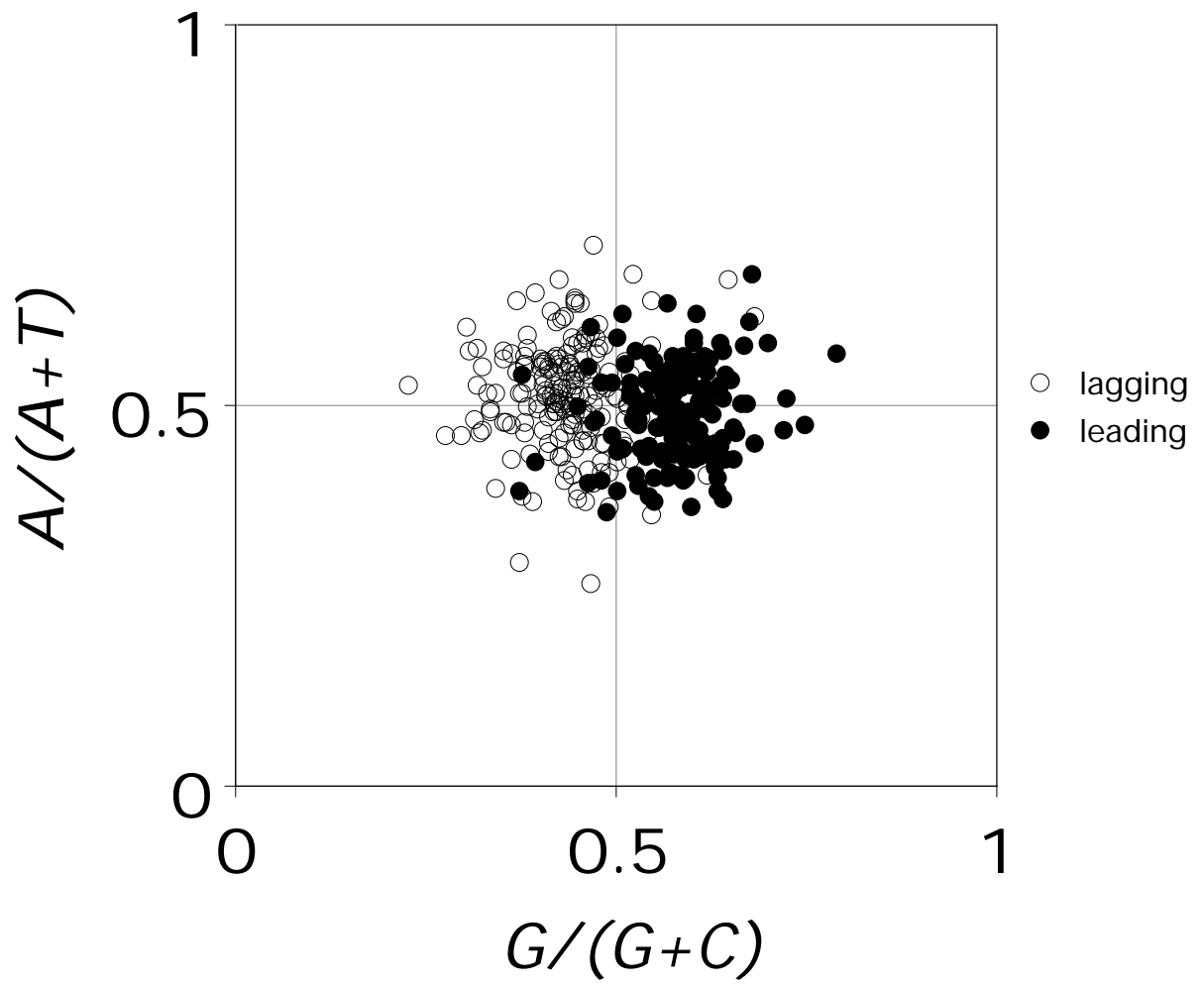
To small intergenic spaces in Buch



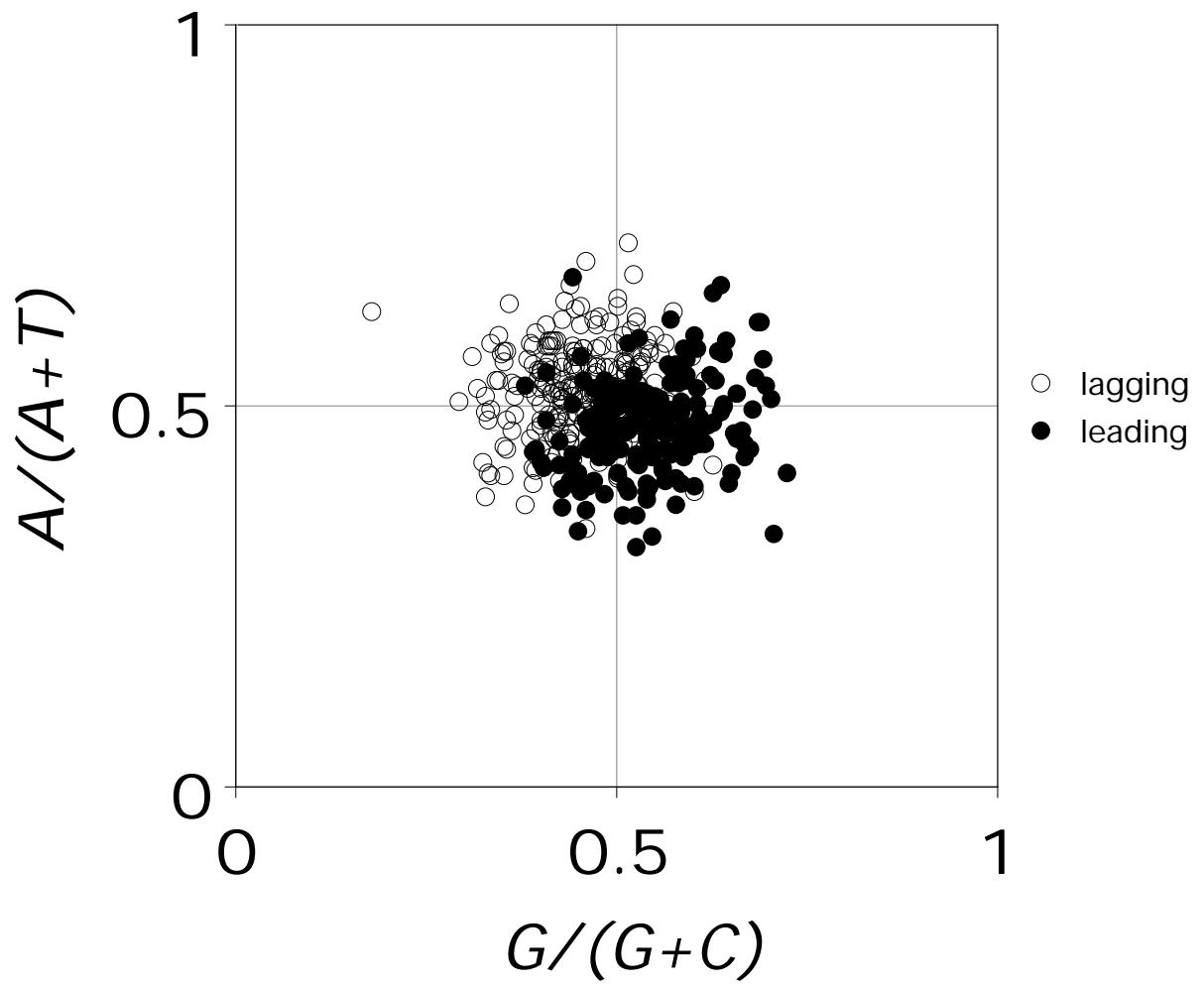
Caulobacter crescentus



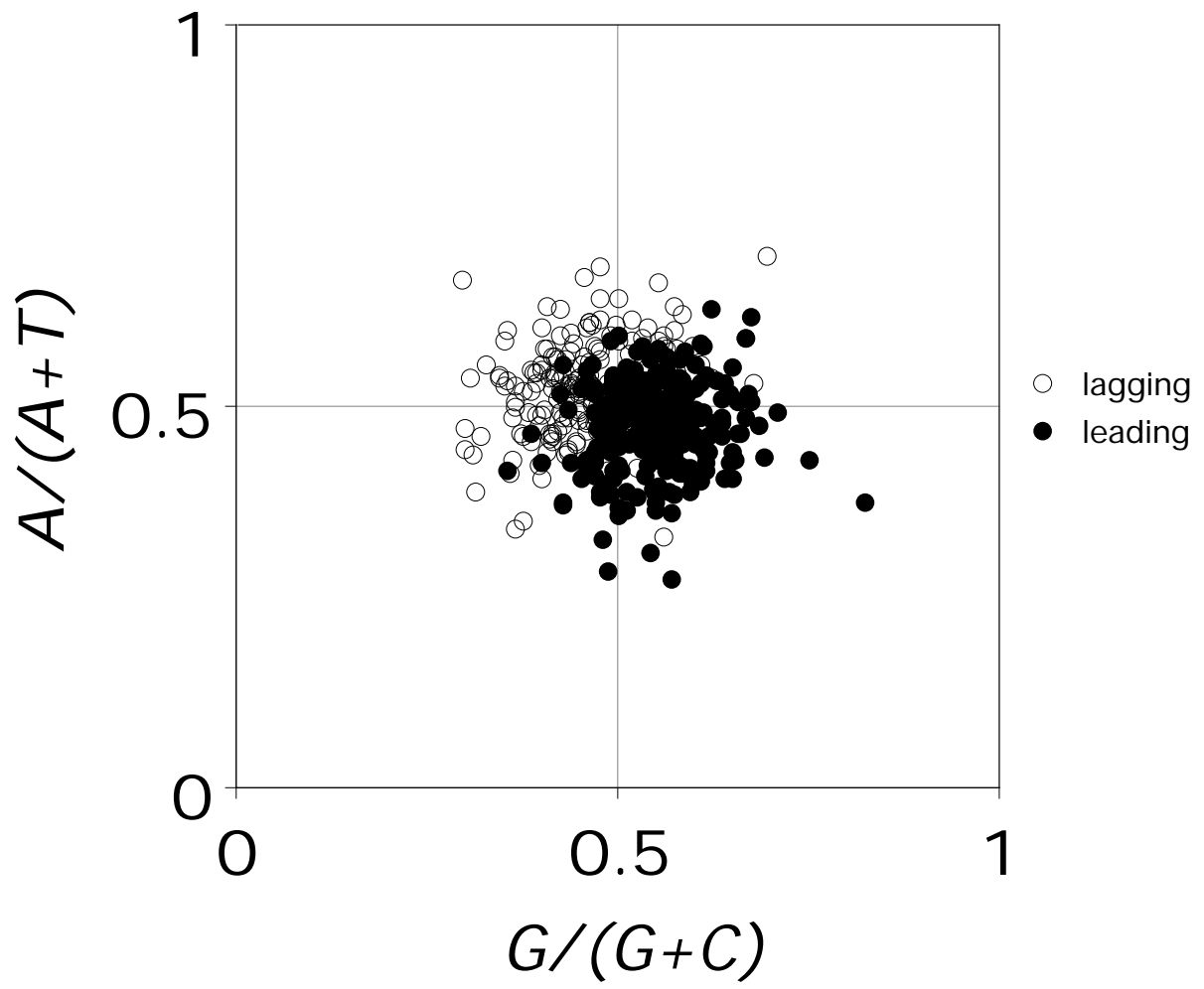
Campylobacter jejuni



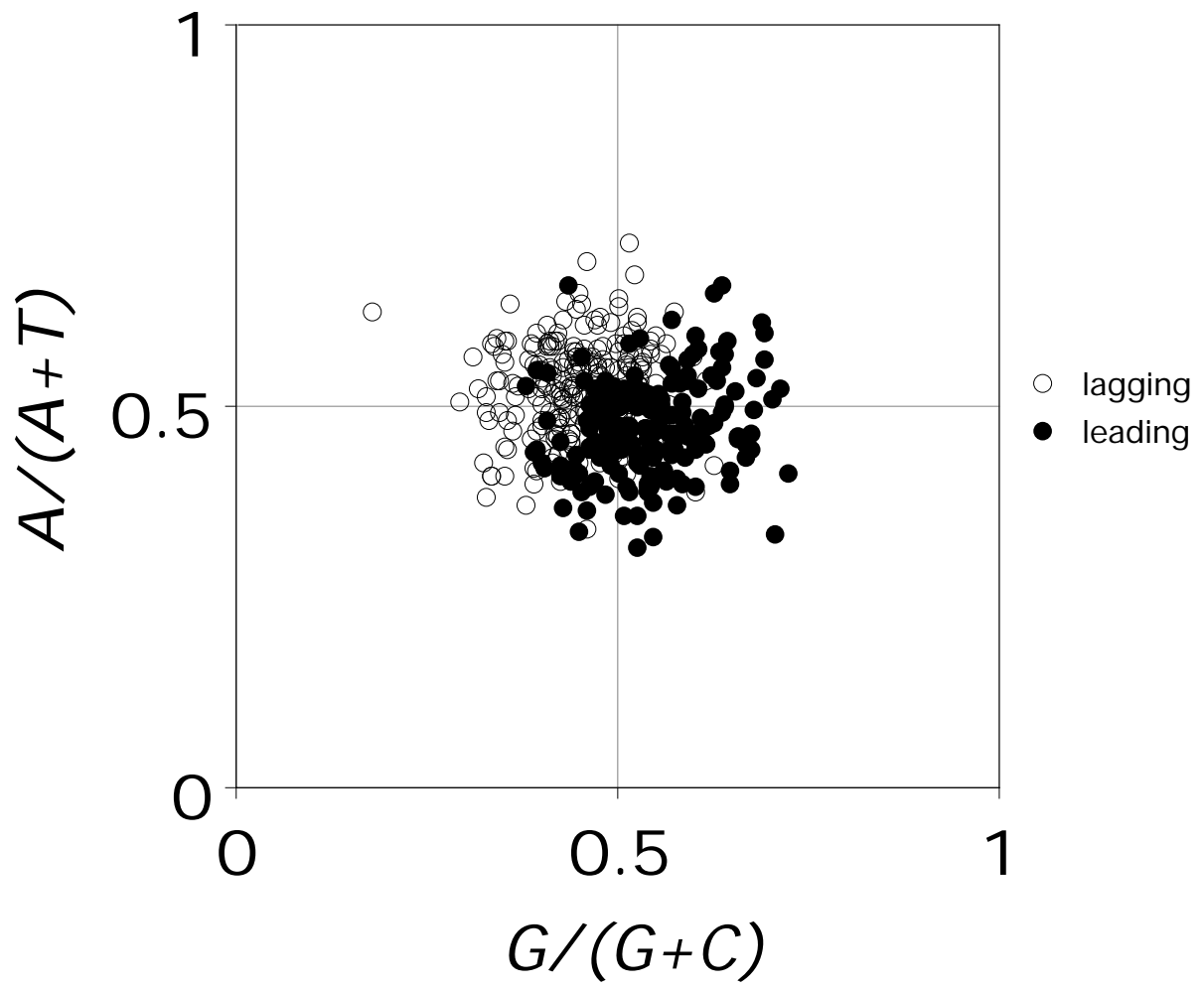
Chlamydia muridarum



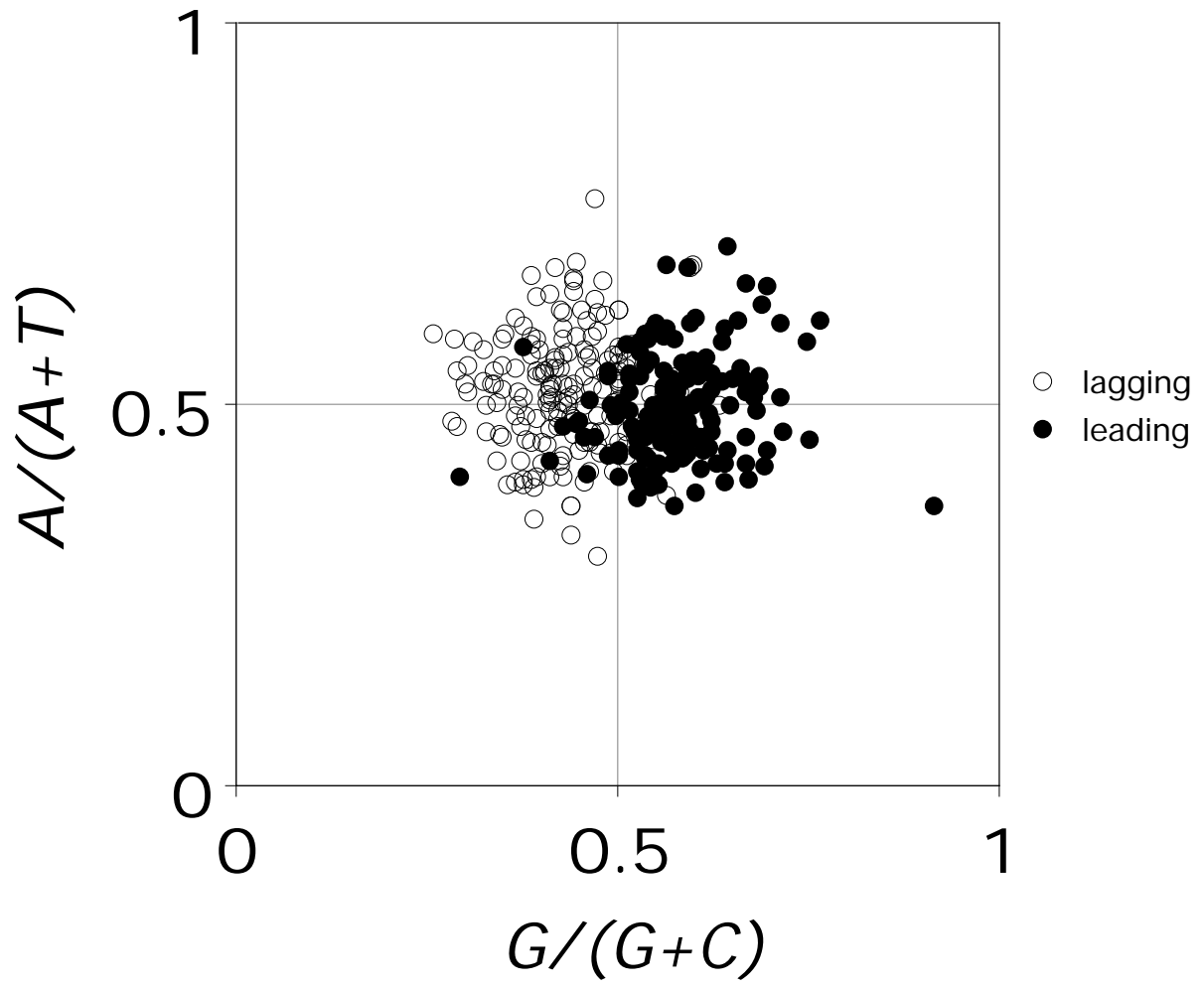
Chlamydophila pneumoniae CWL029



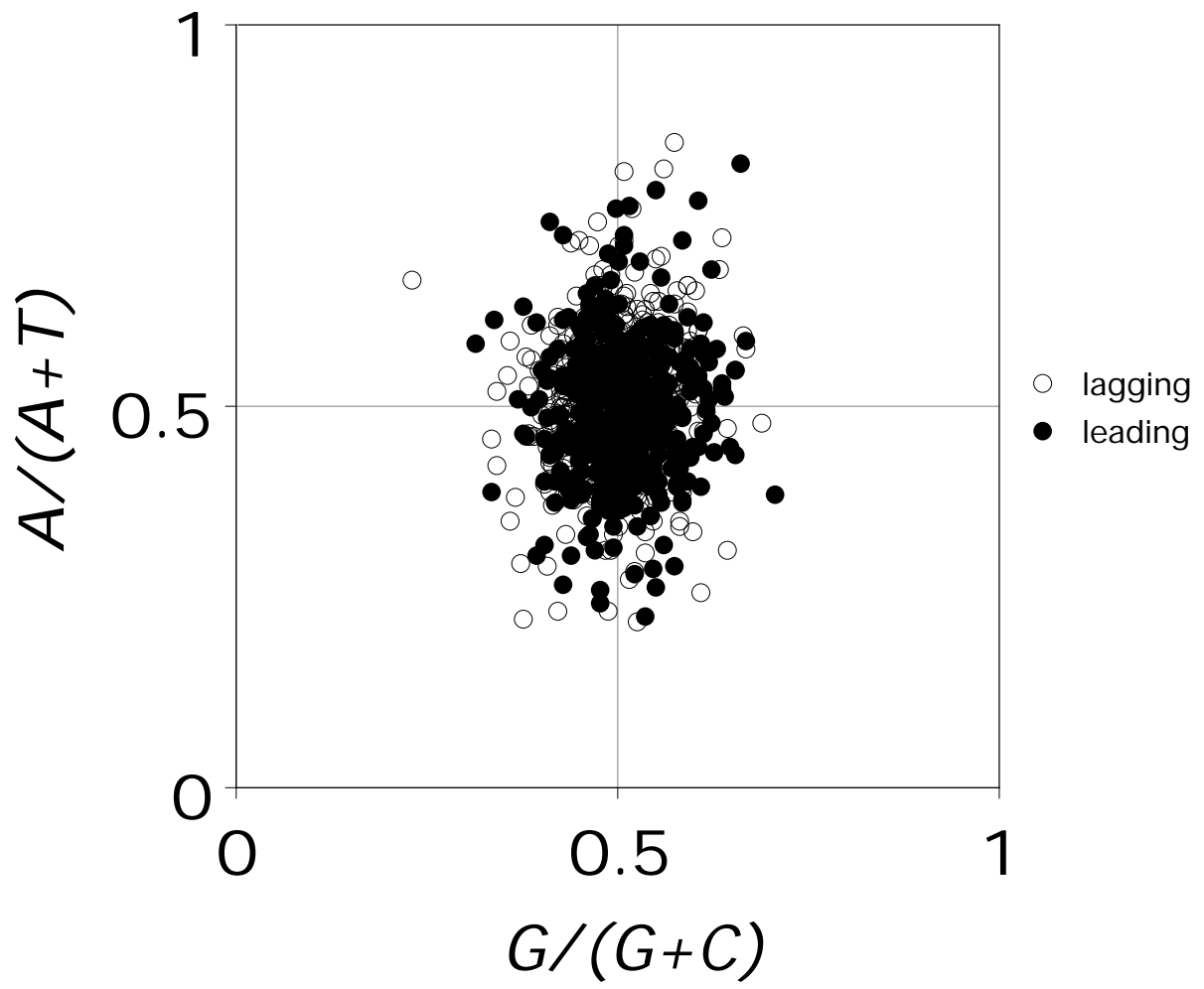
Chlamydomonas reinhardtii AR39



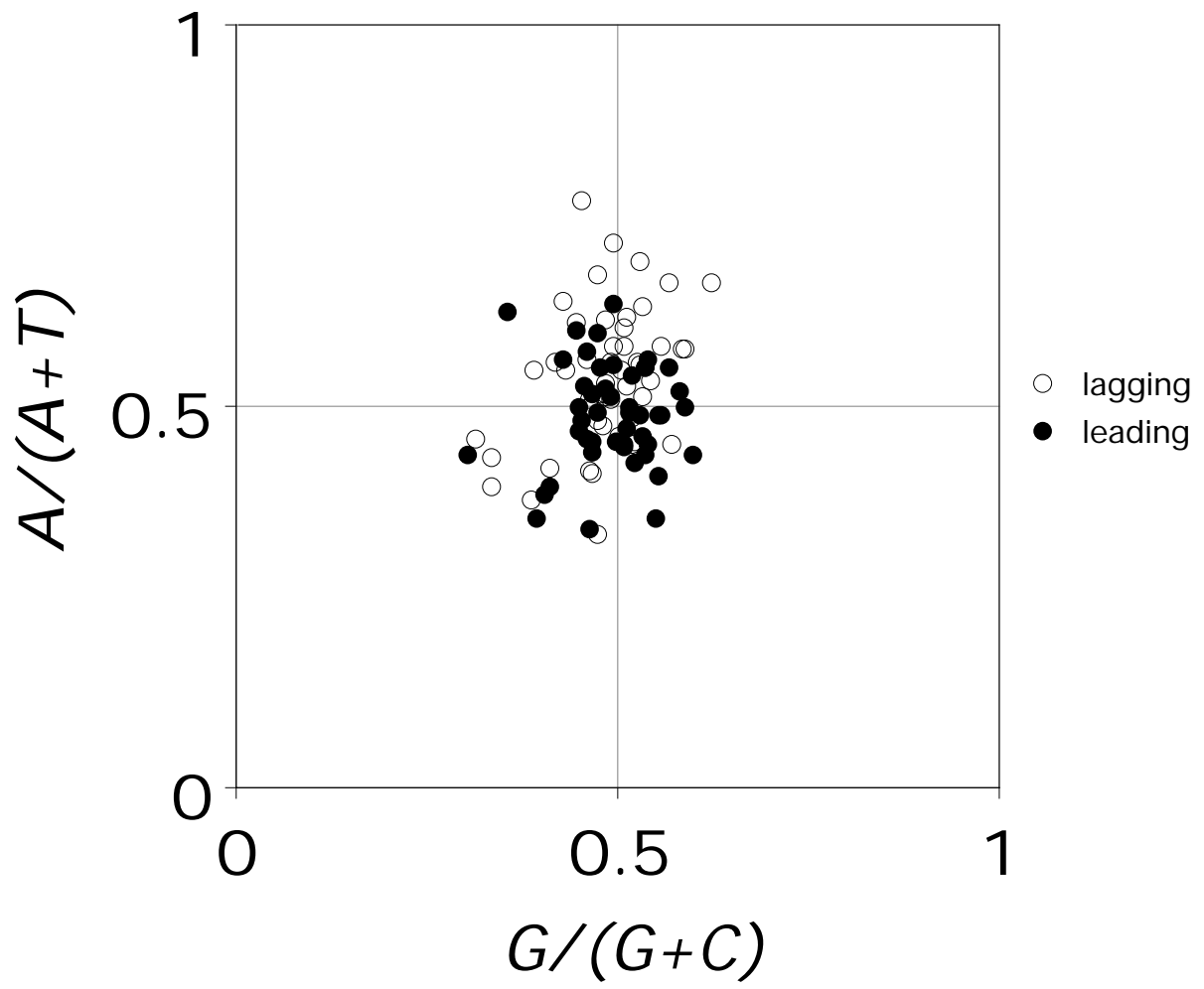
Chlamydomonas reinhardtii J138



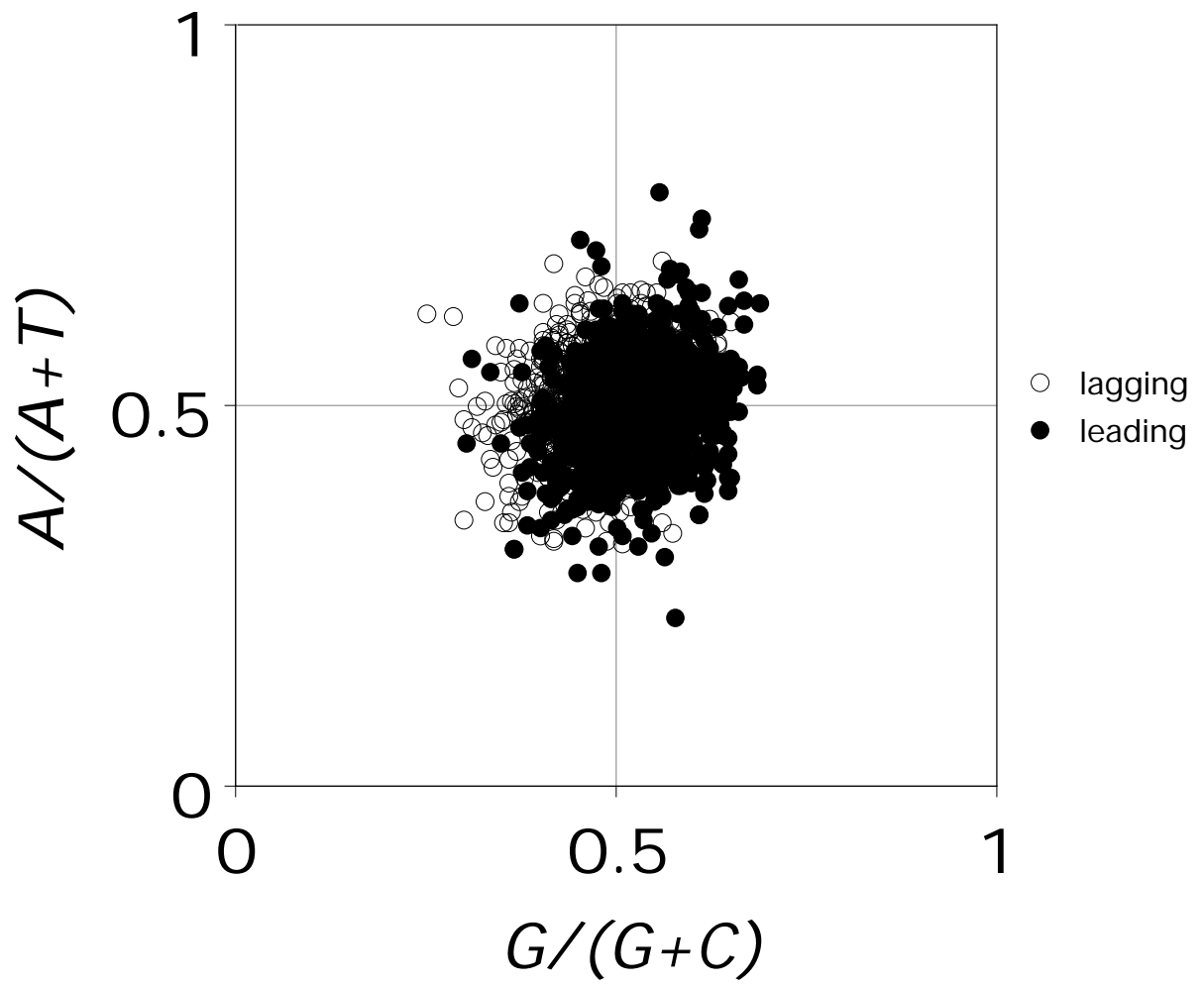
Chlamydia trachomatis



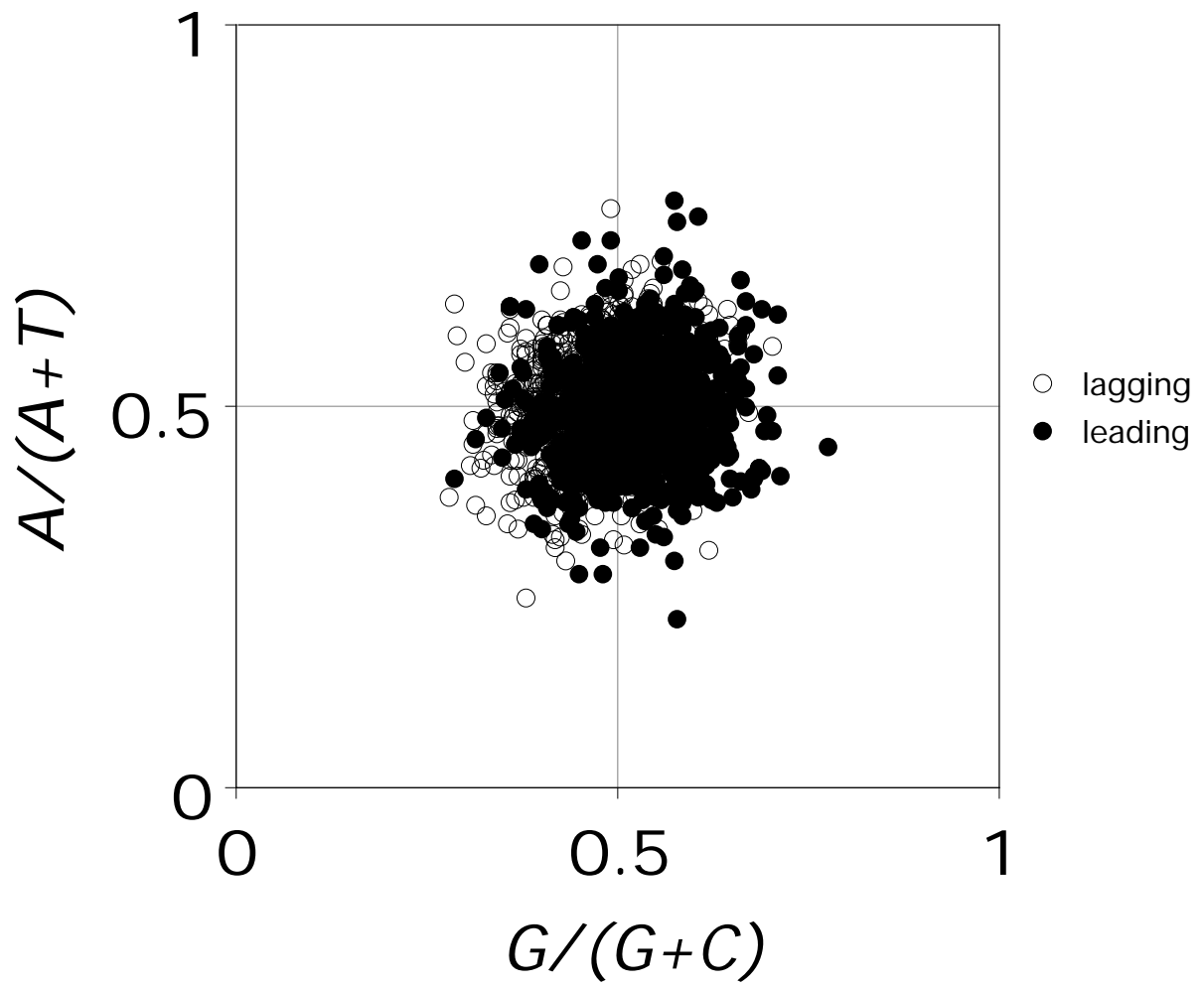
Deinococcus radiodurans chromosome 1



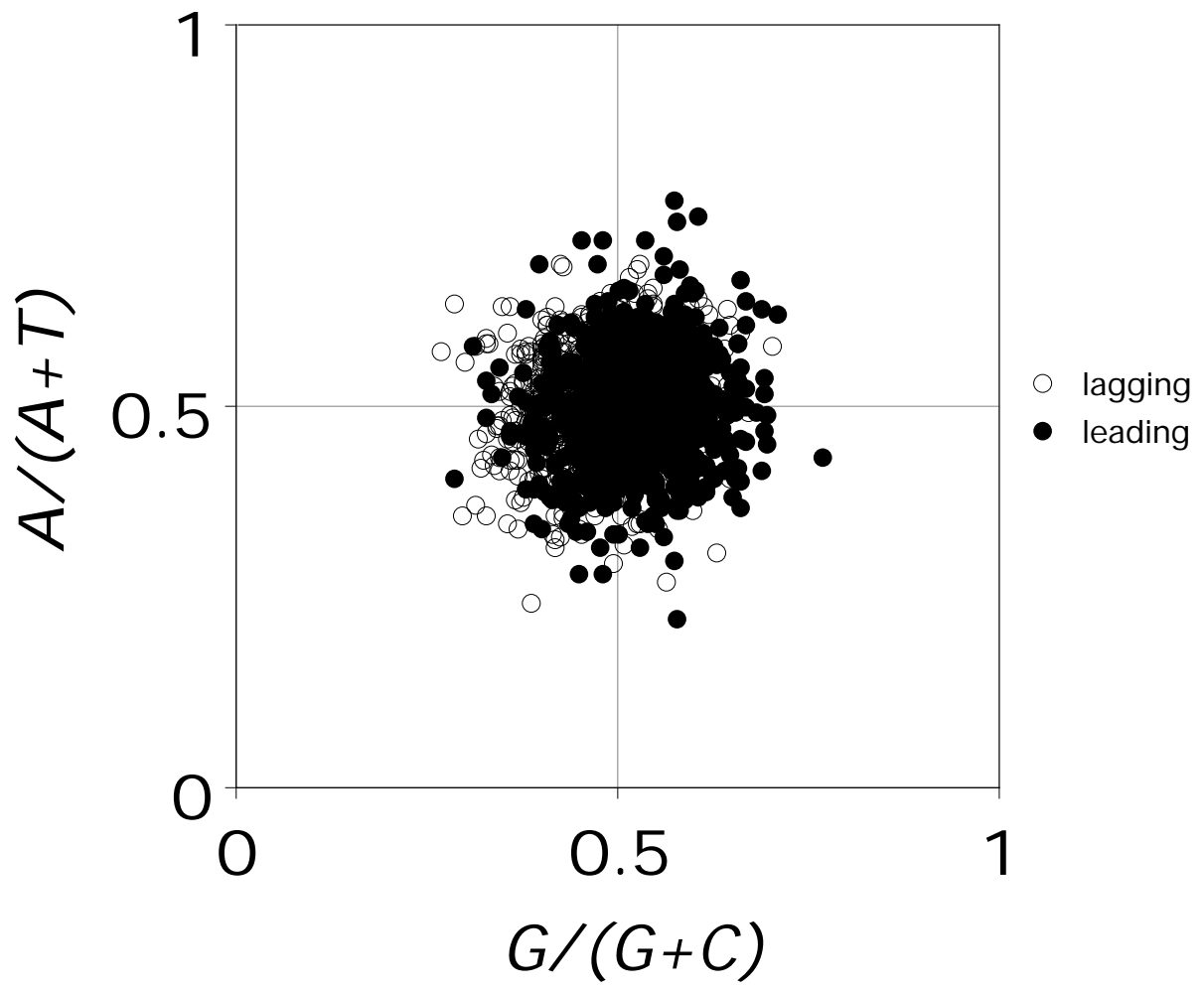
Deinococcus radiodurans chromosome 2



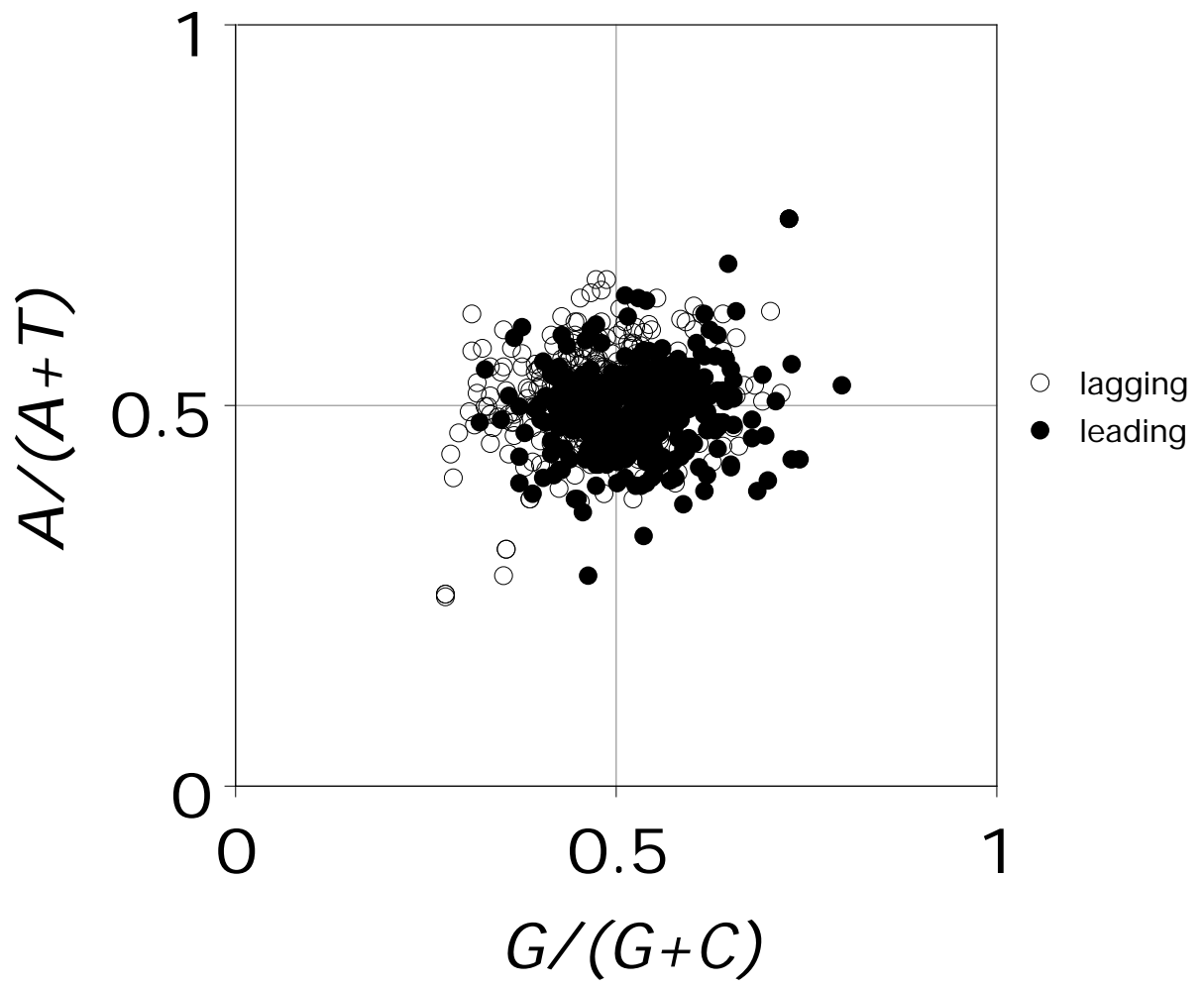
Escherichia coli K-12



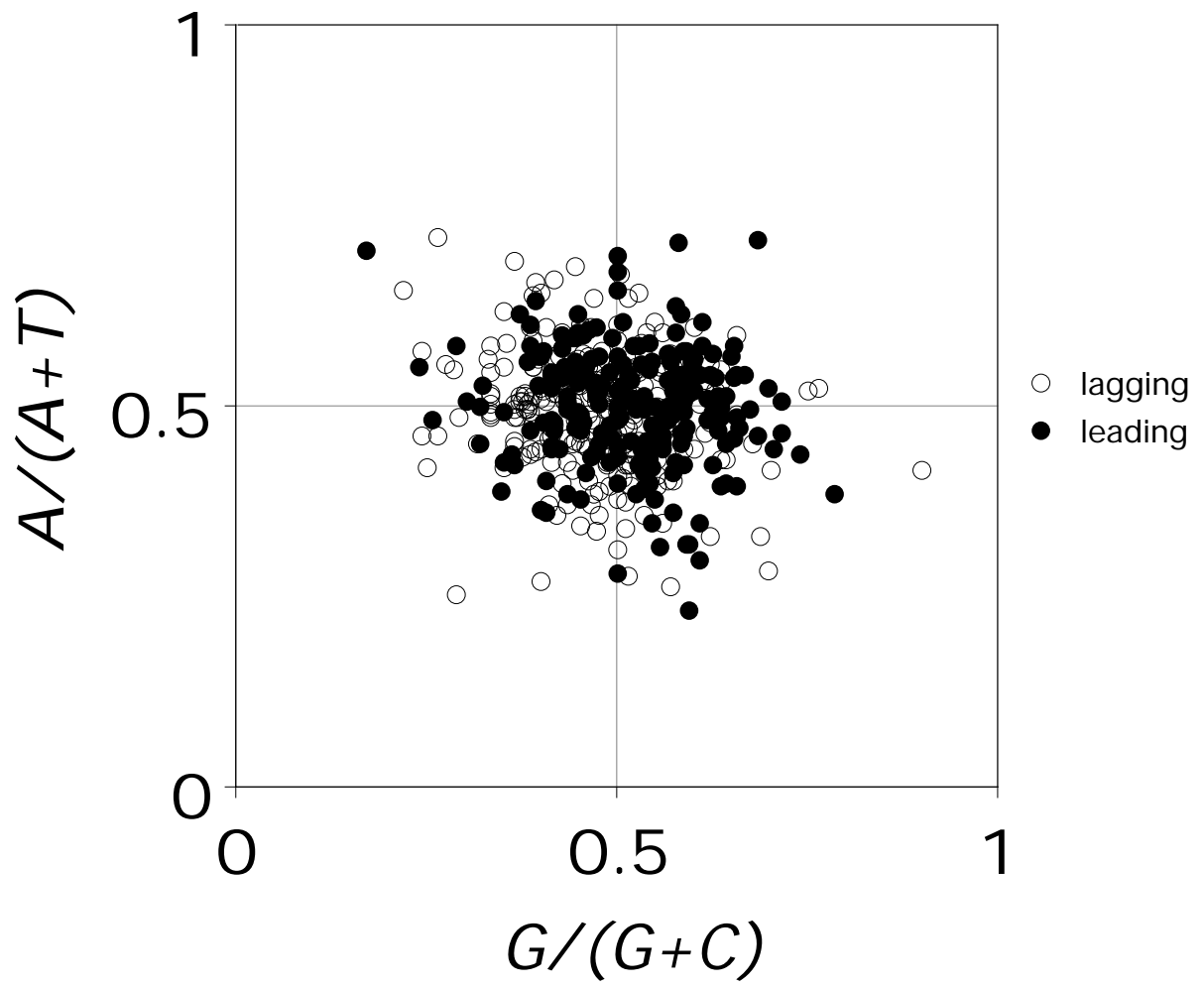
Escherichia coli EDL933



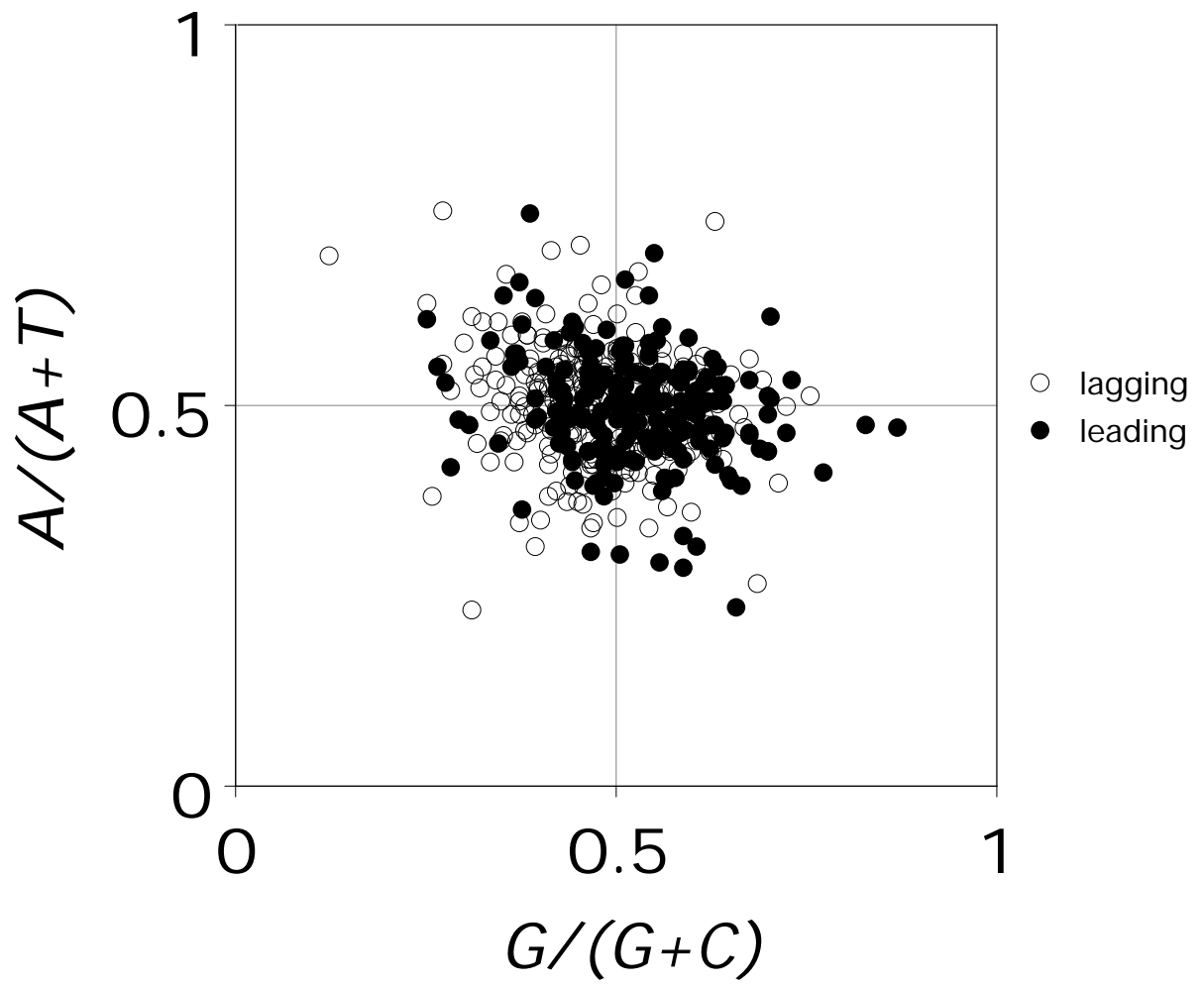
Escherichia coli RIMD 0509952



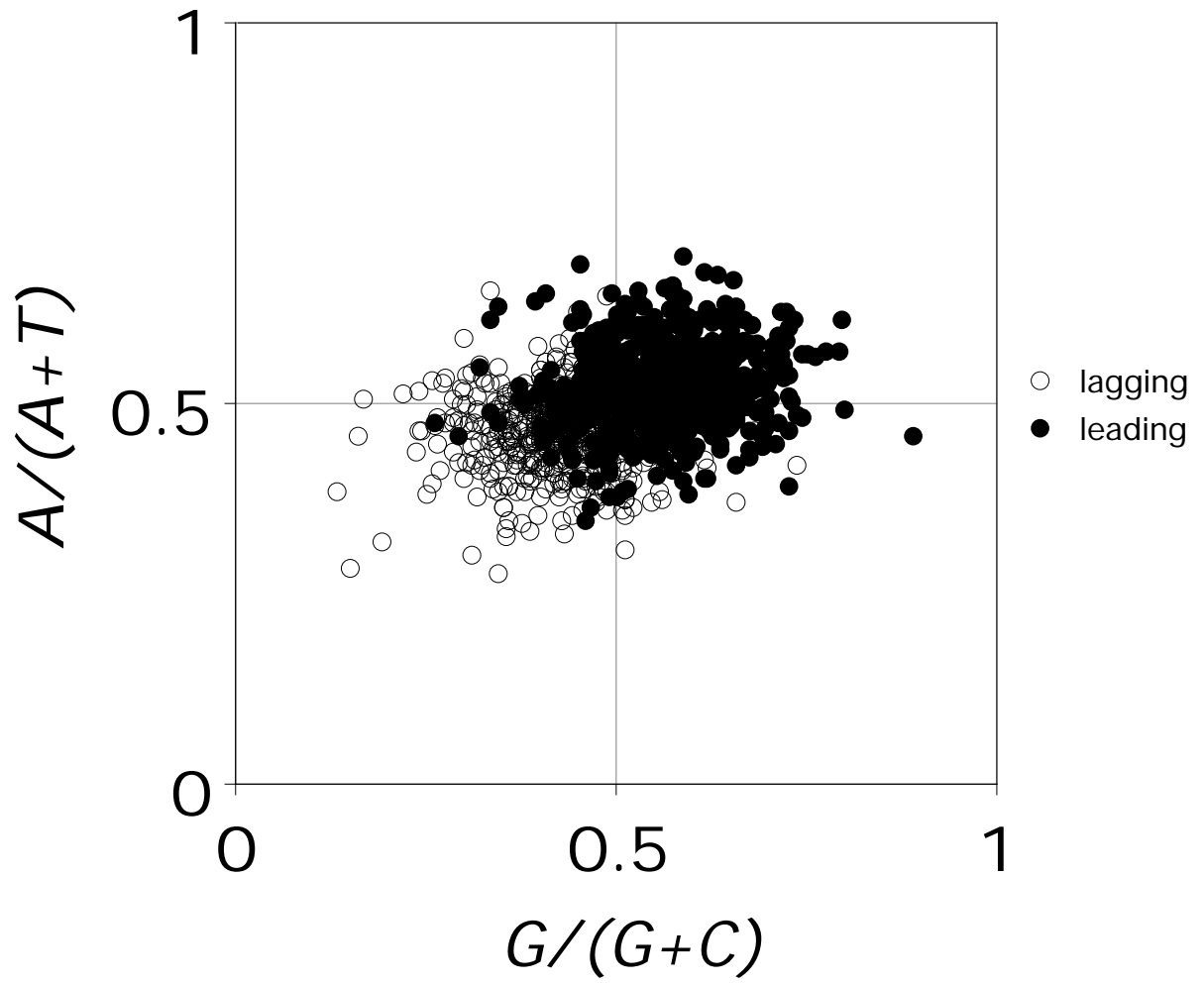
Haemophilus influenzae



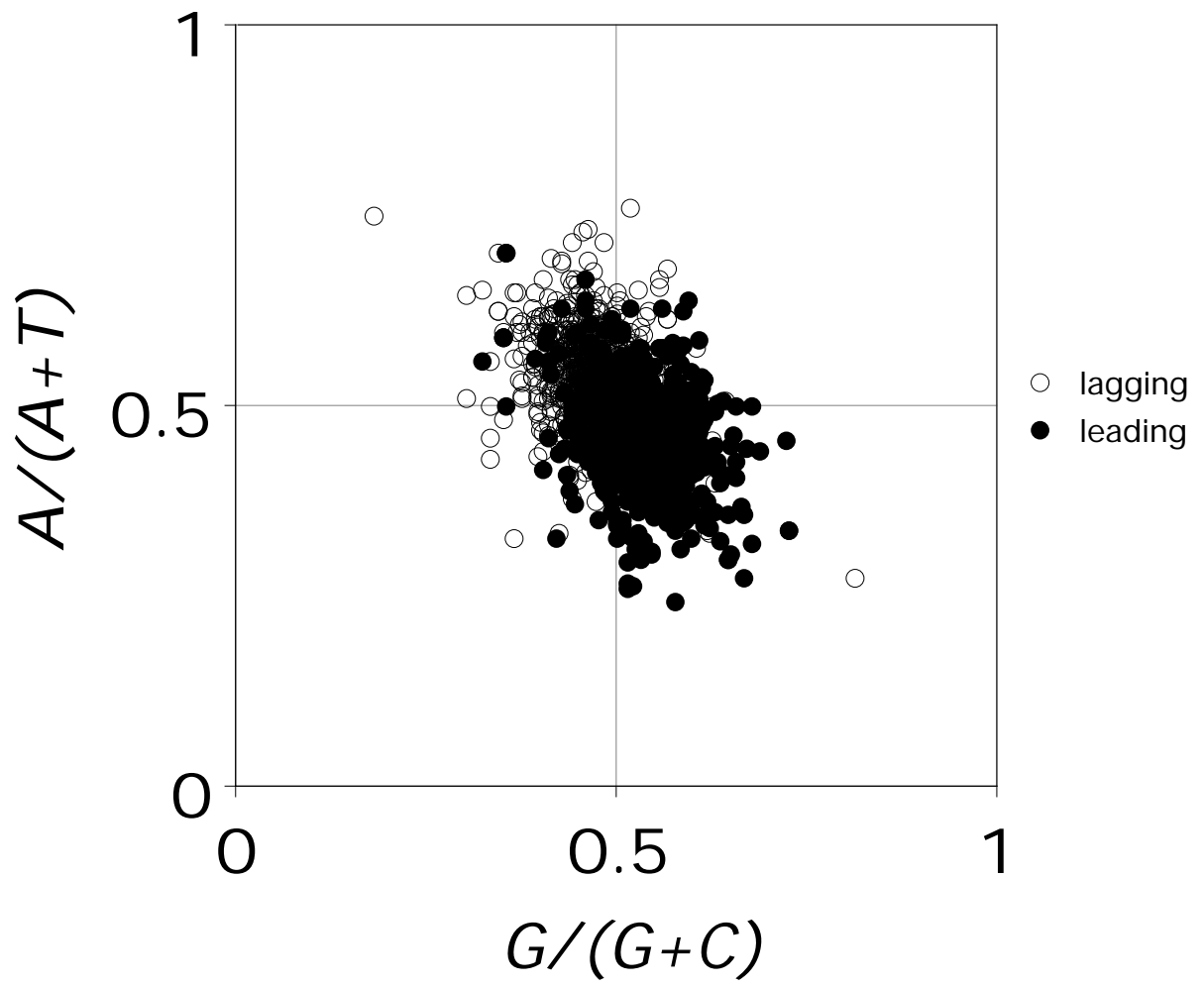
Helicobacter pylori 26695



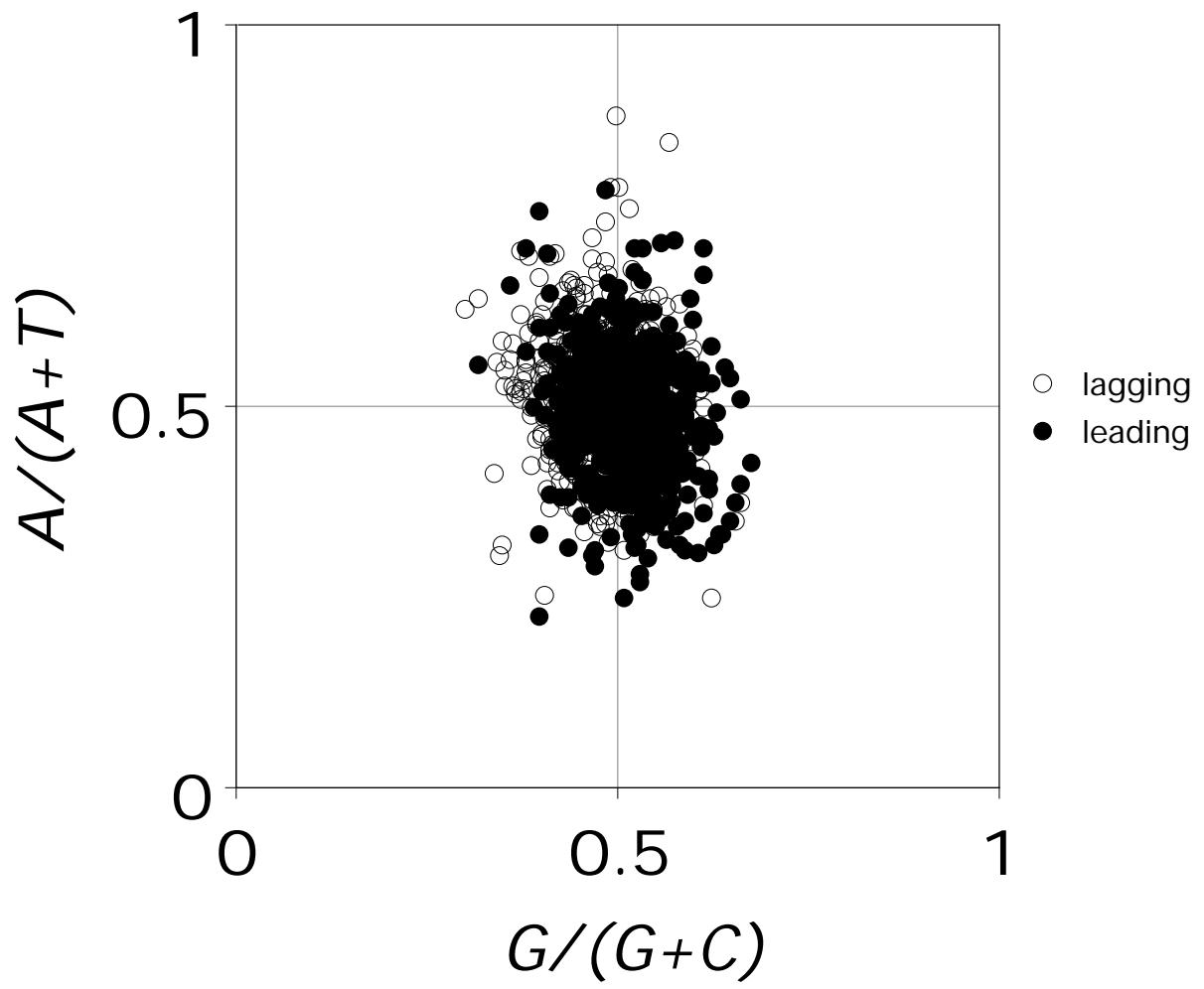
Helicobacter pylori J99



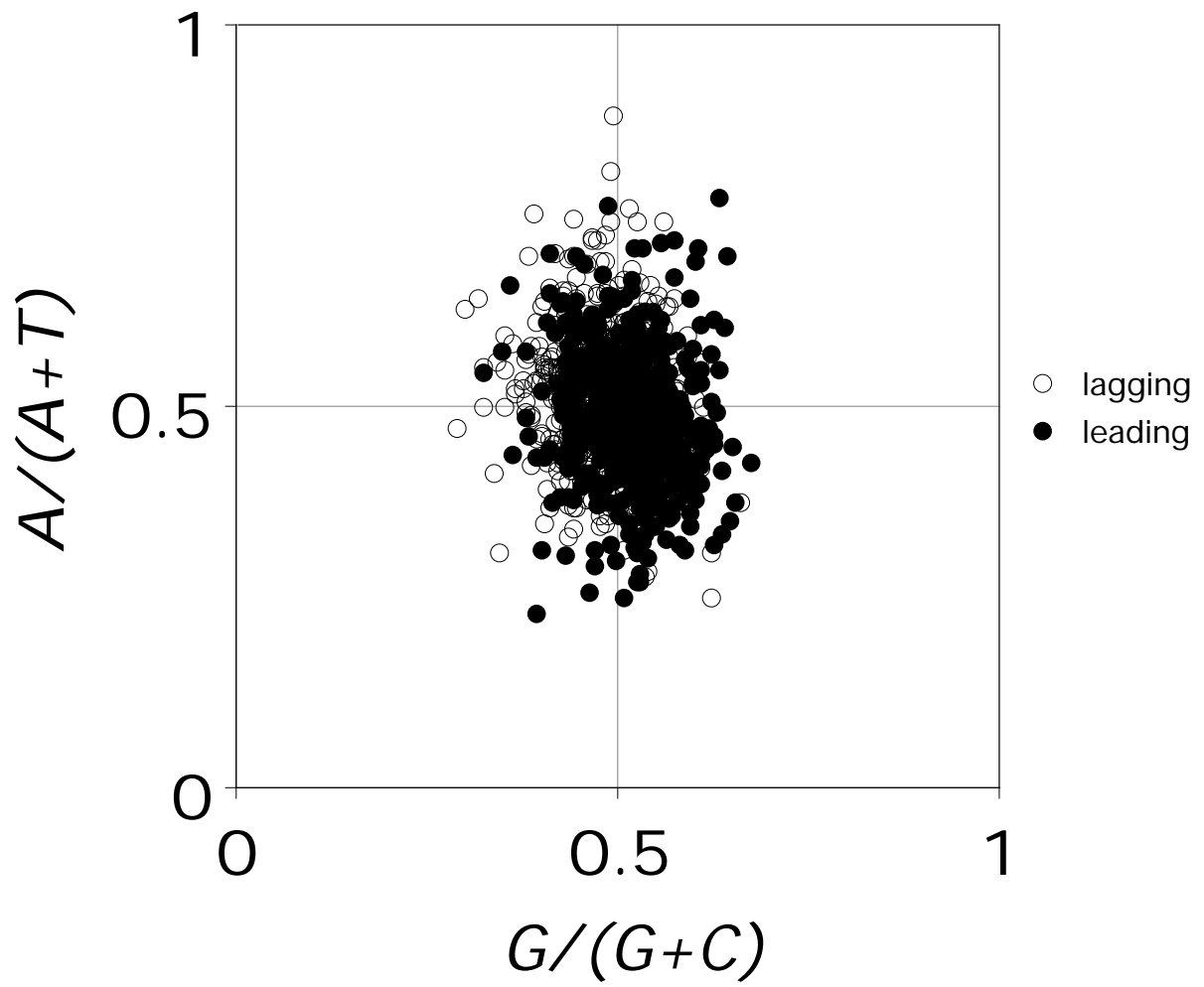
Lactococcus lactis



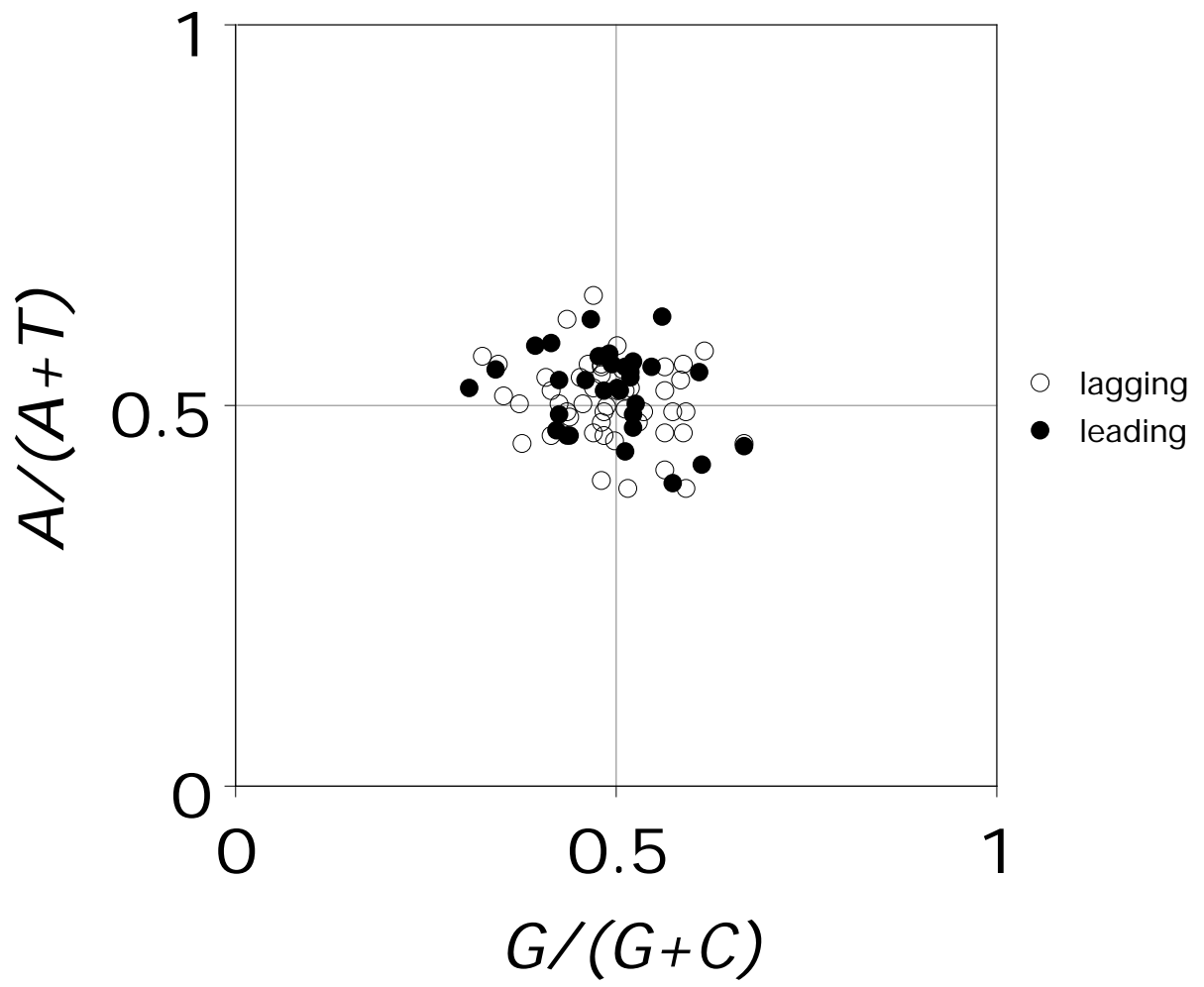
Mycobacterium leprae



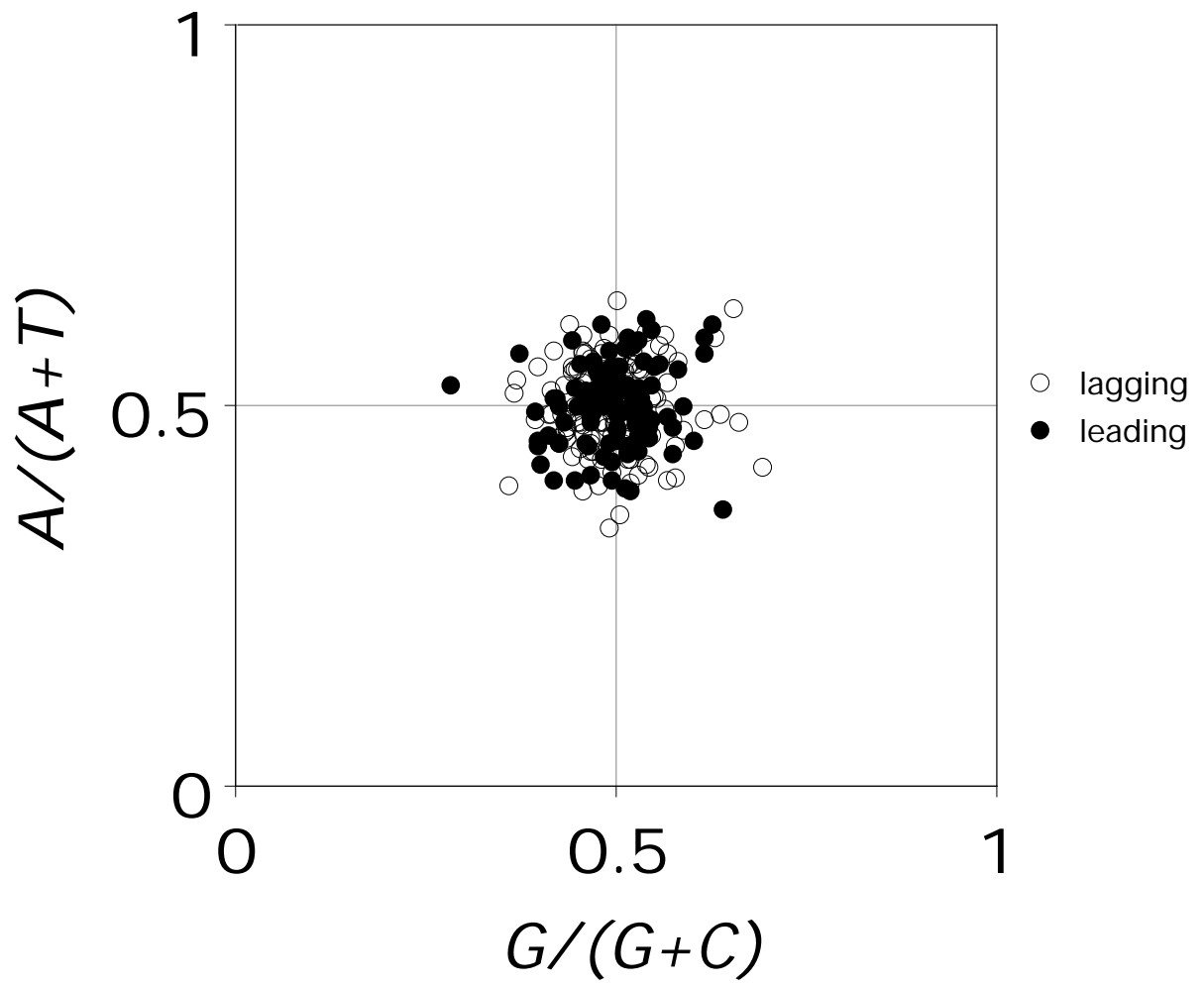
Mycobacterium tuberculosis H37Rv



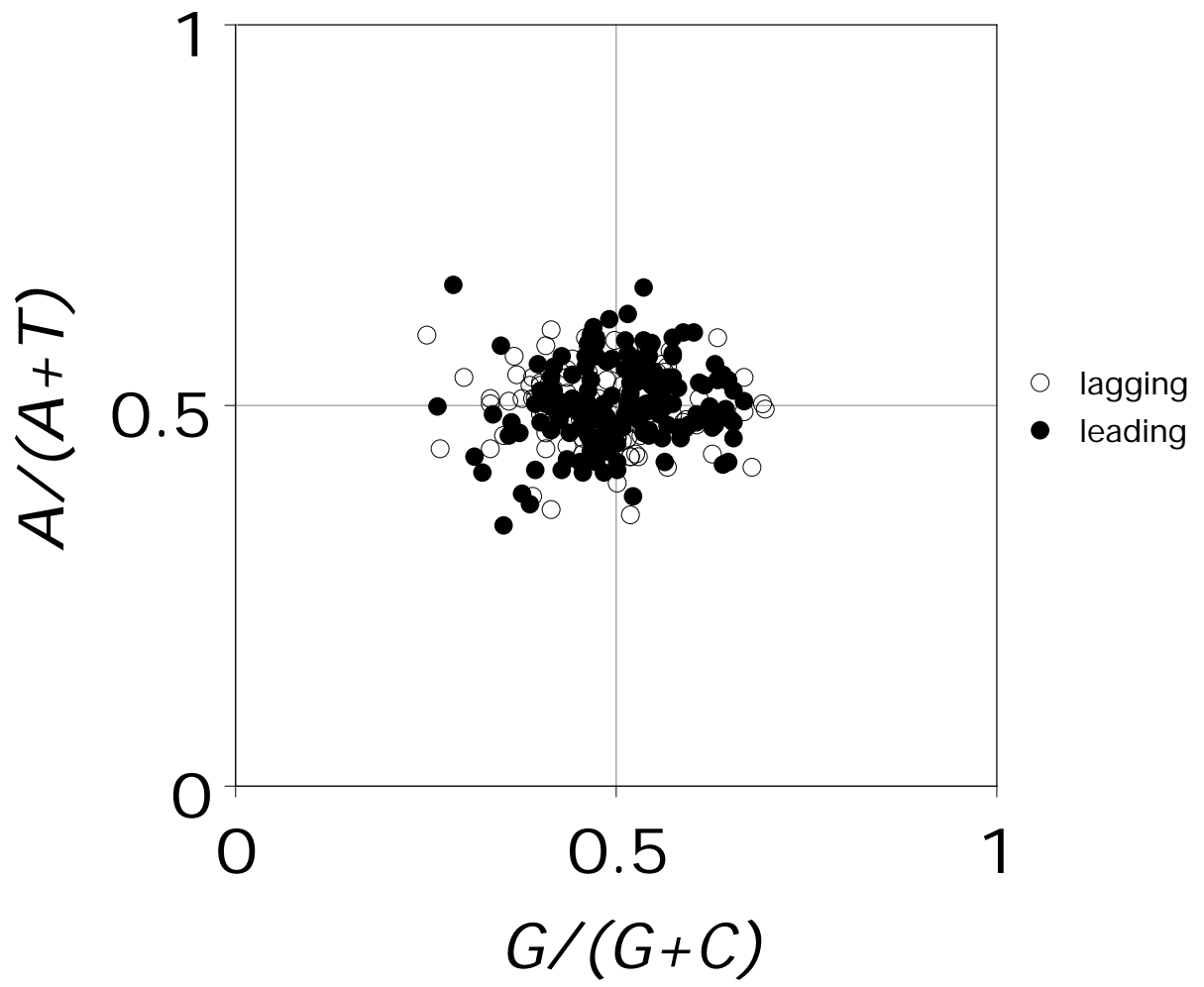
Mycobacterium tuberculosis CDC1551



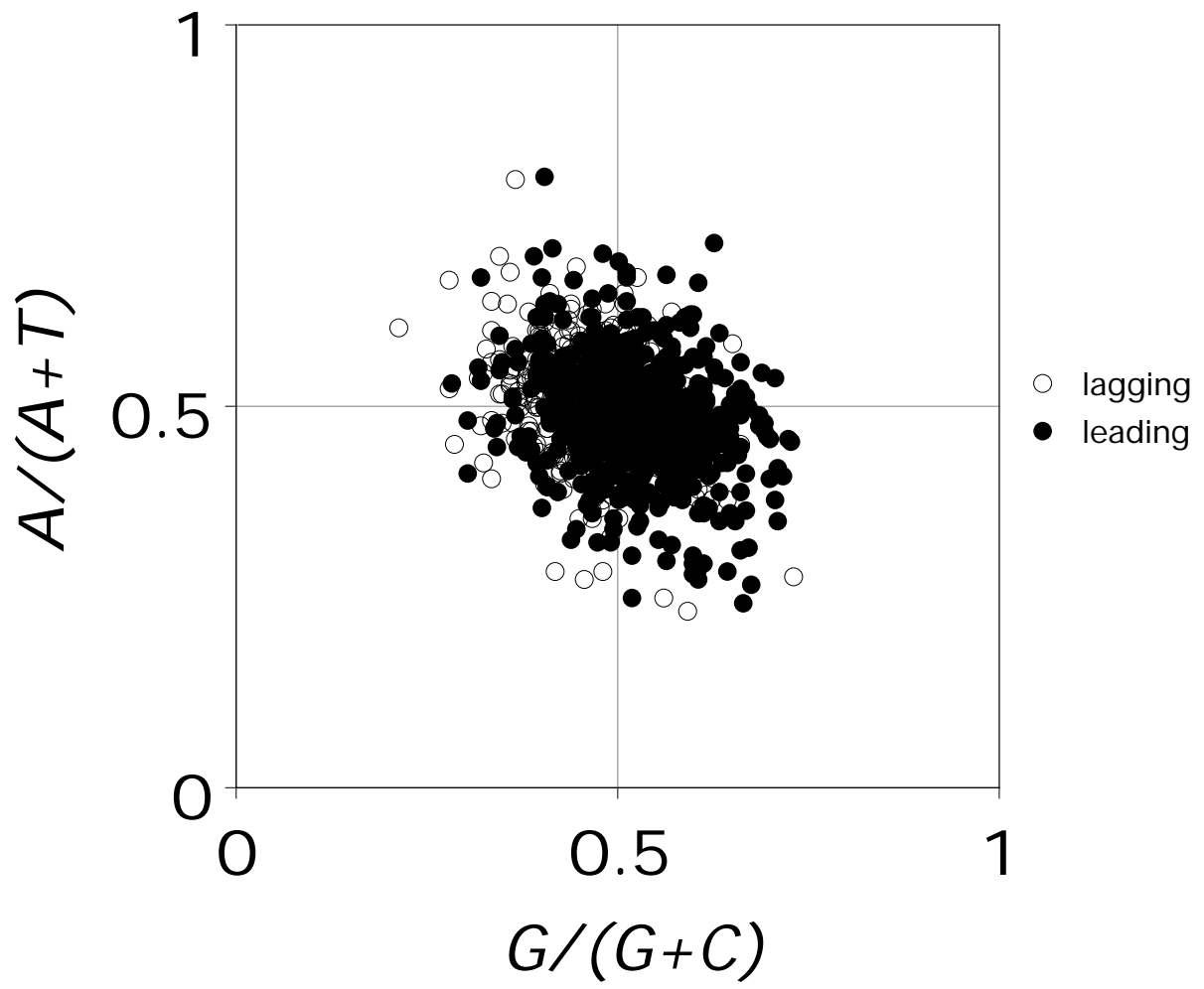
Mycoplasma genitalium



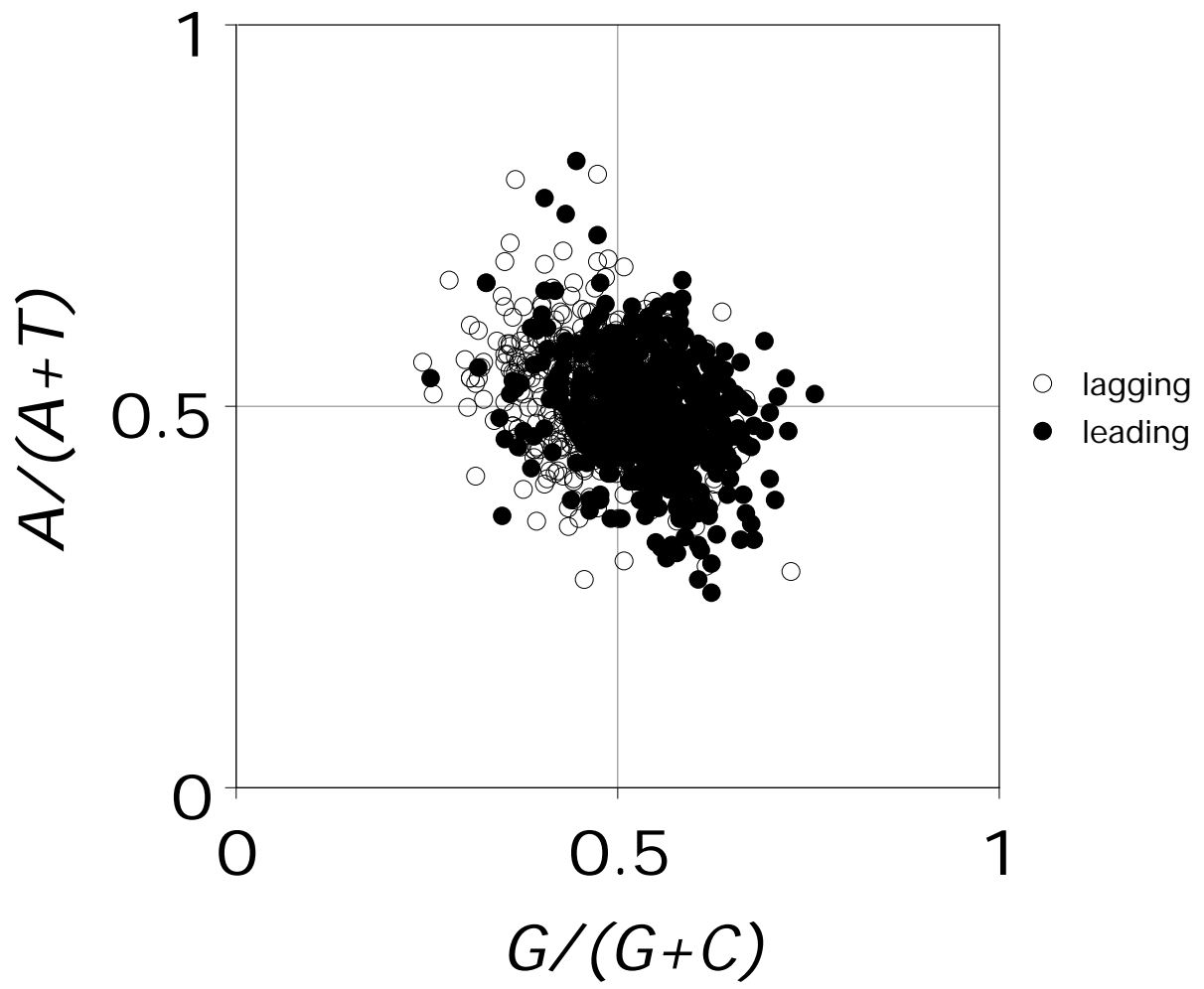
Mycoplasma pneumoniae



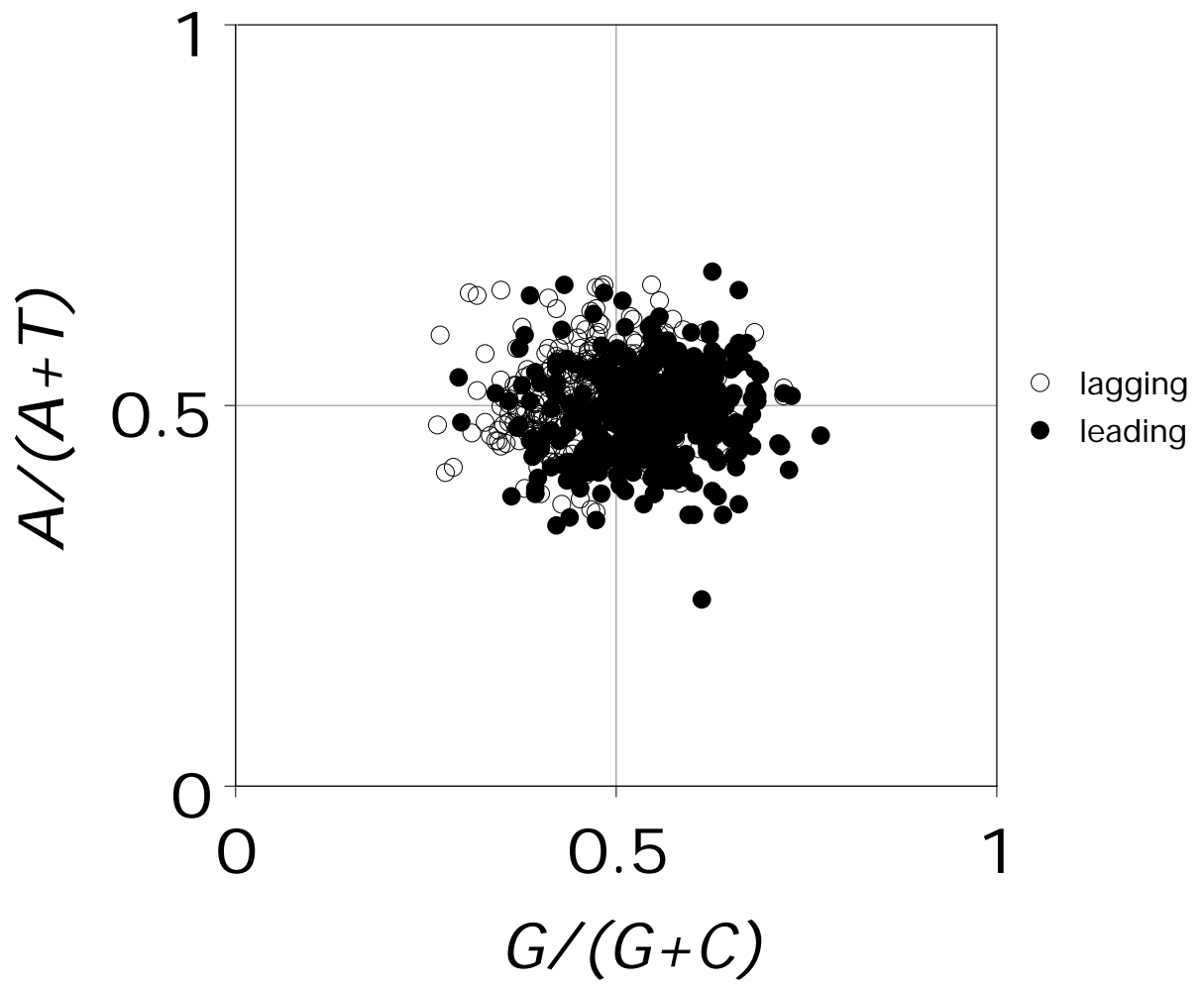
Mycoplasma pulmonis



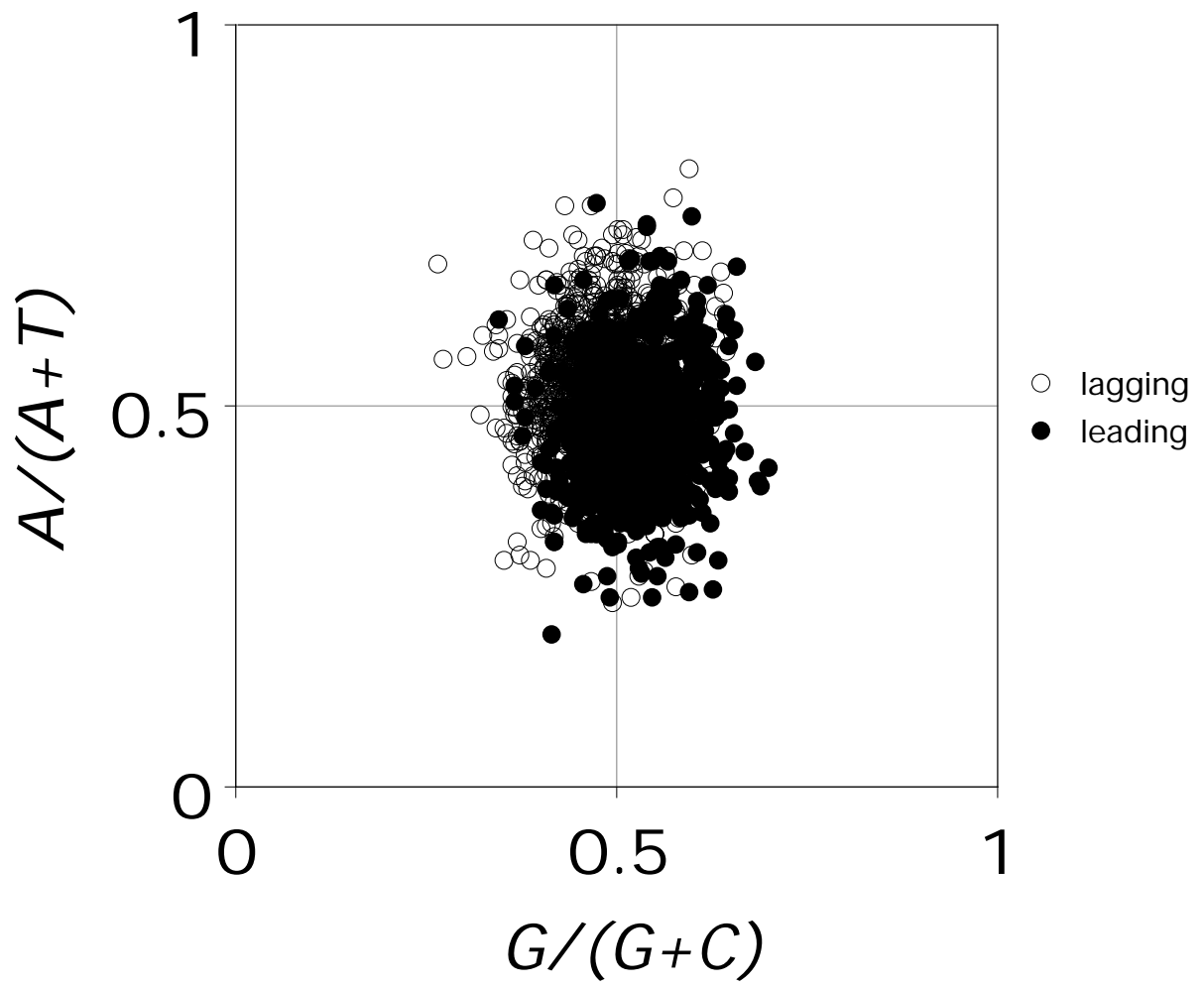
Neisseria meningitidis Z2491 (A)



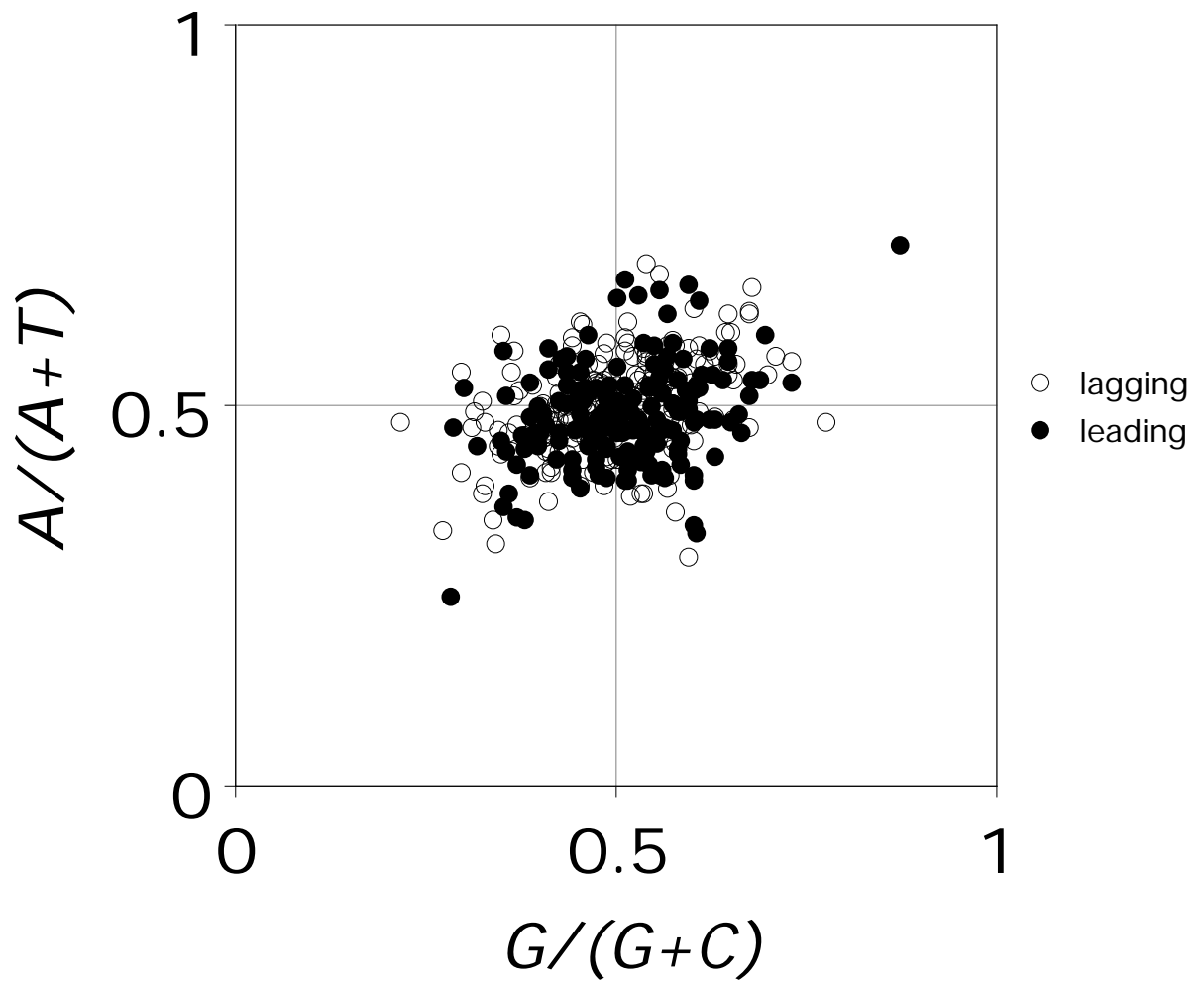
Neisseria meningitidis MC58 (B)



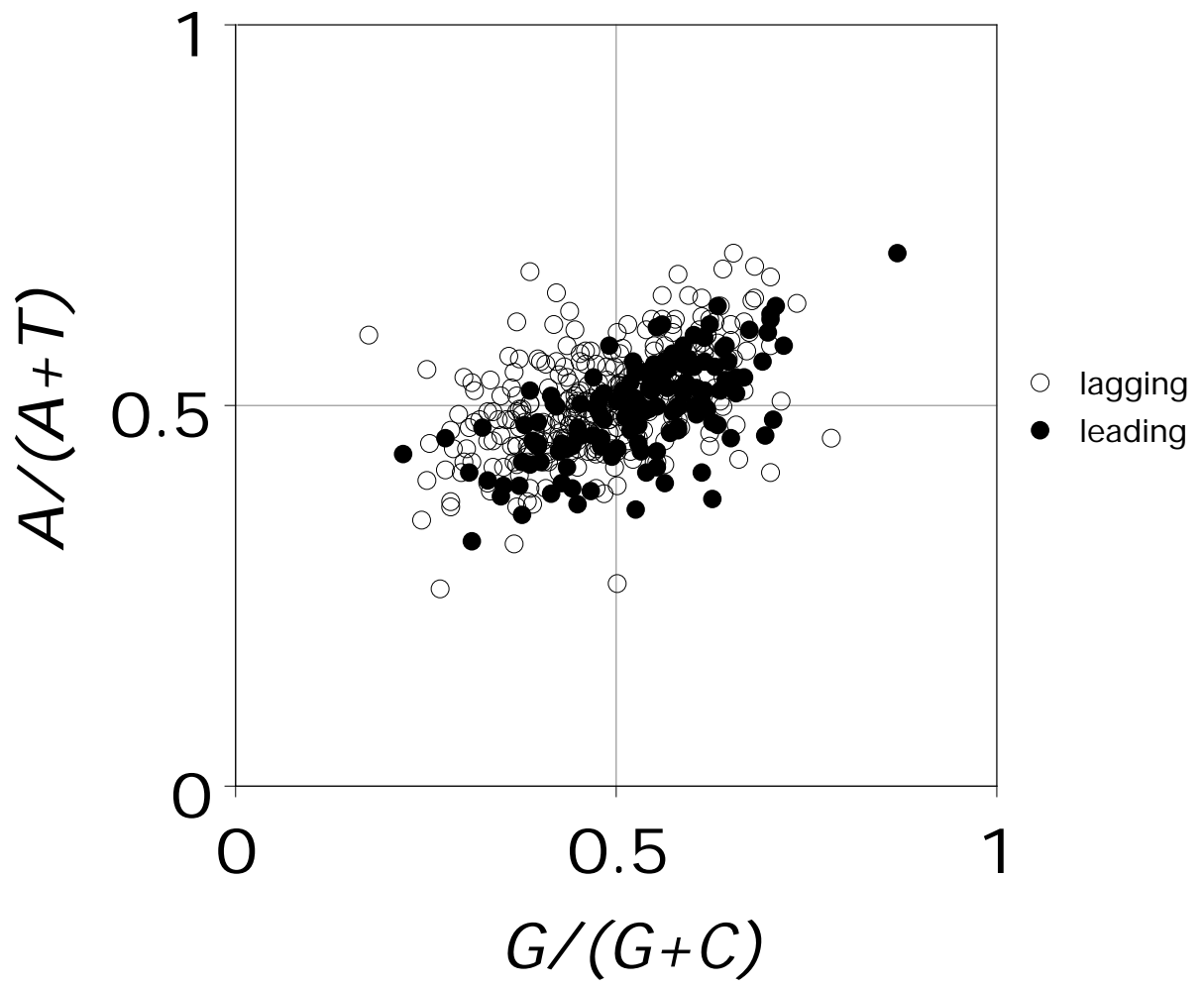
Pasteurella multocida



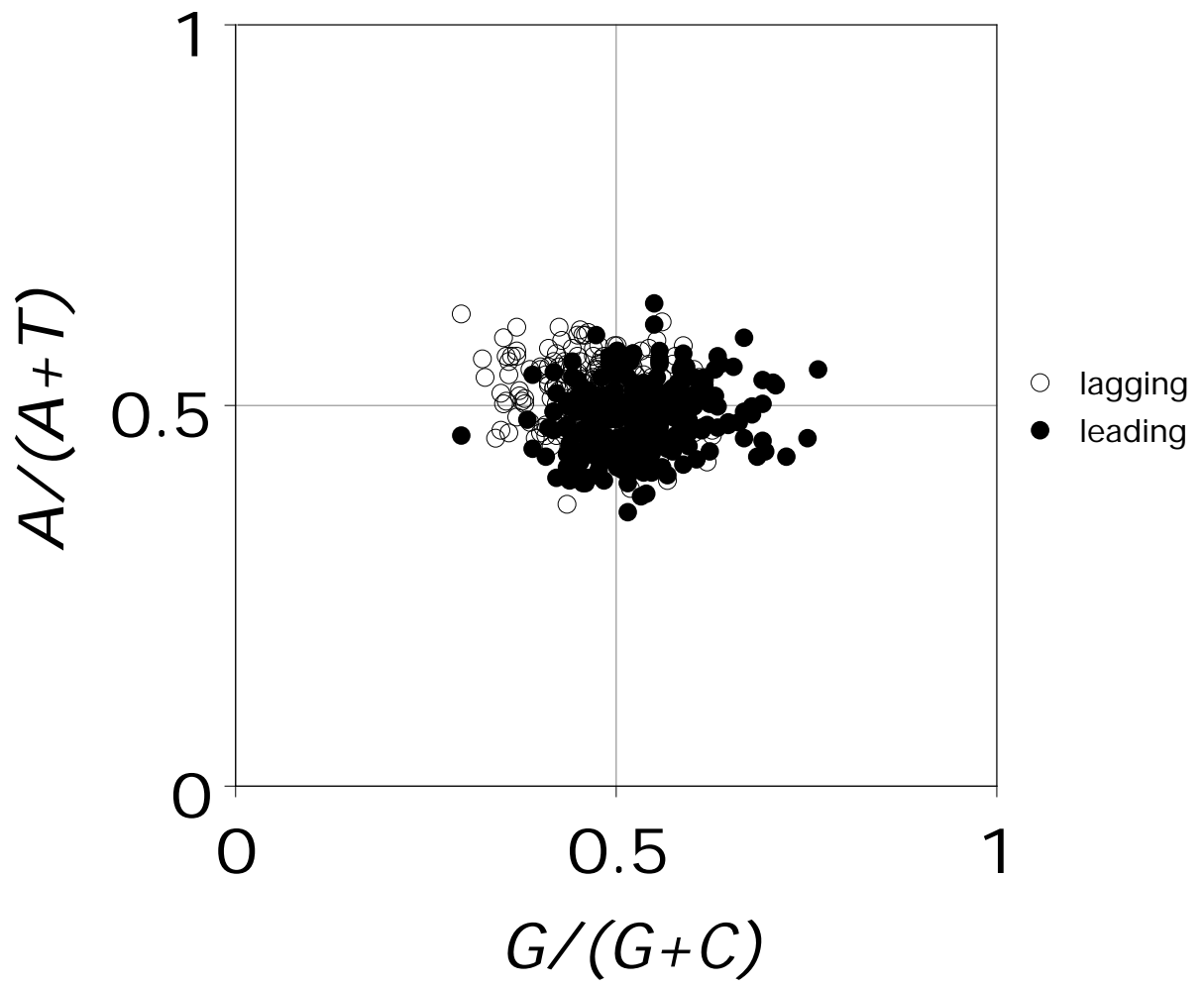
Pseudomonas aeruginosa



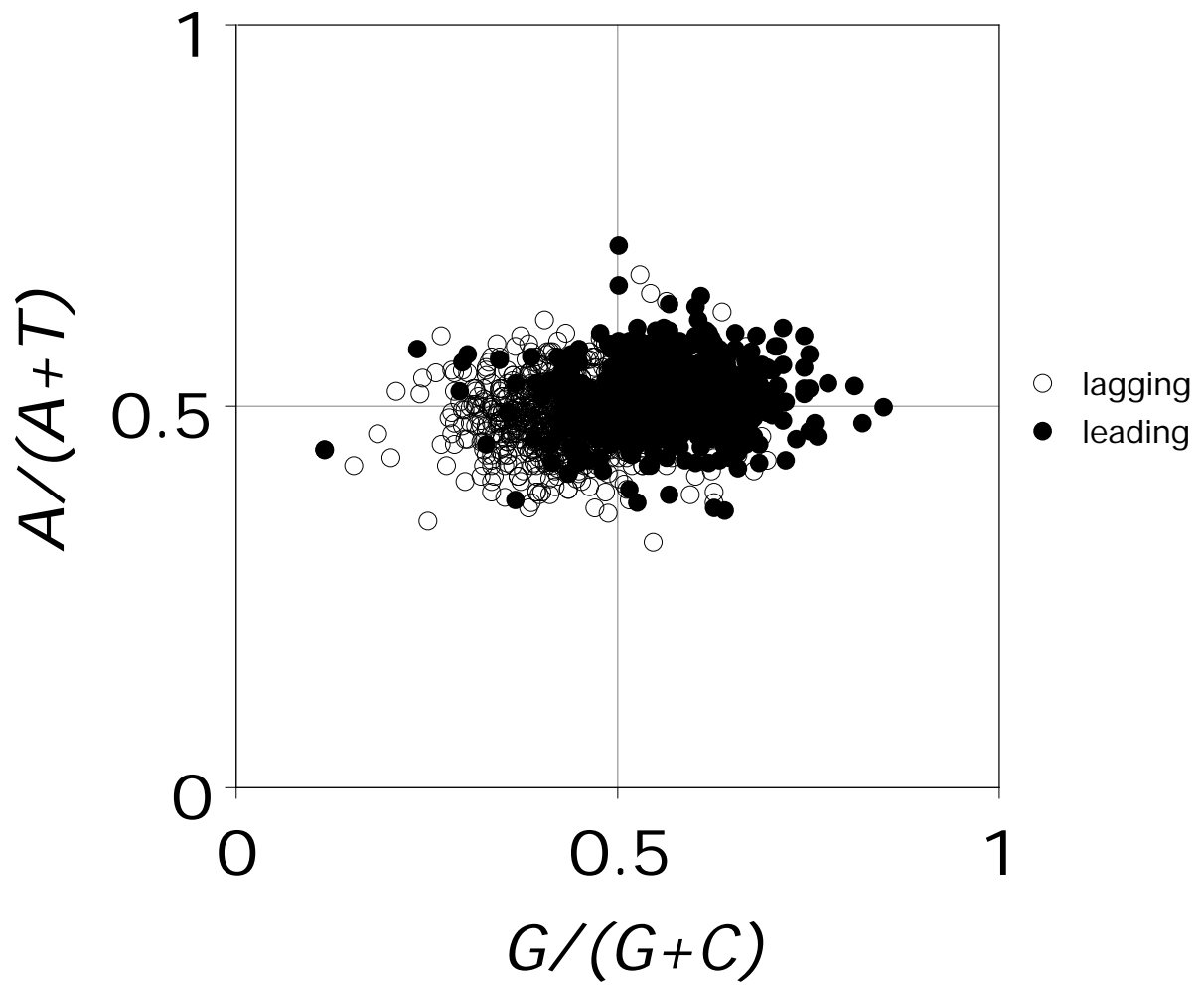
Pyrococcus abyssi



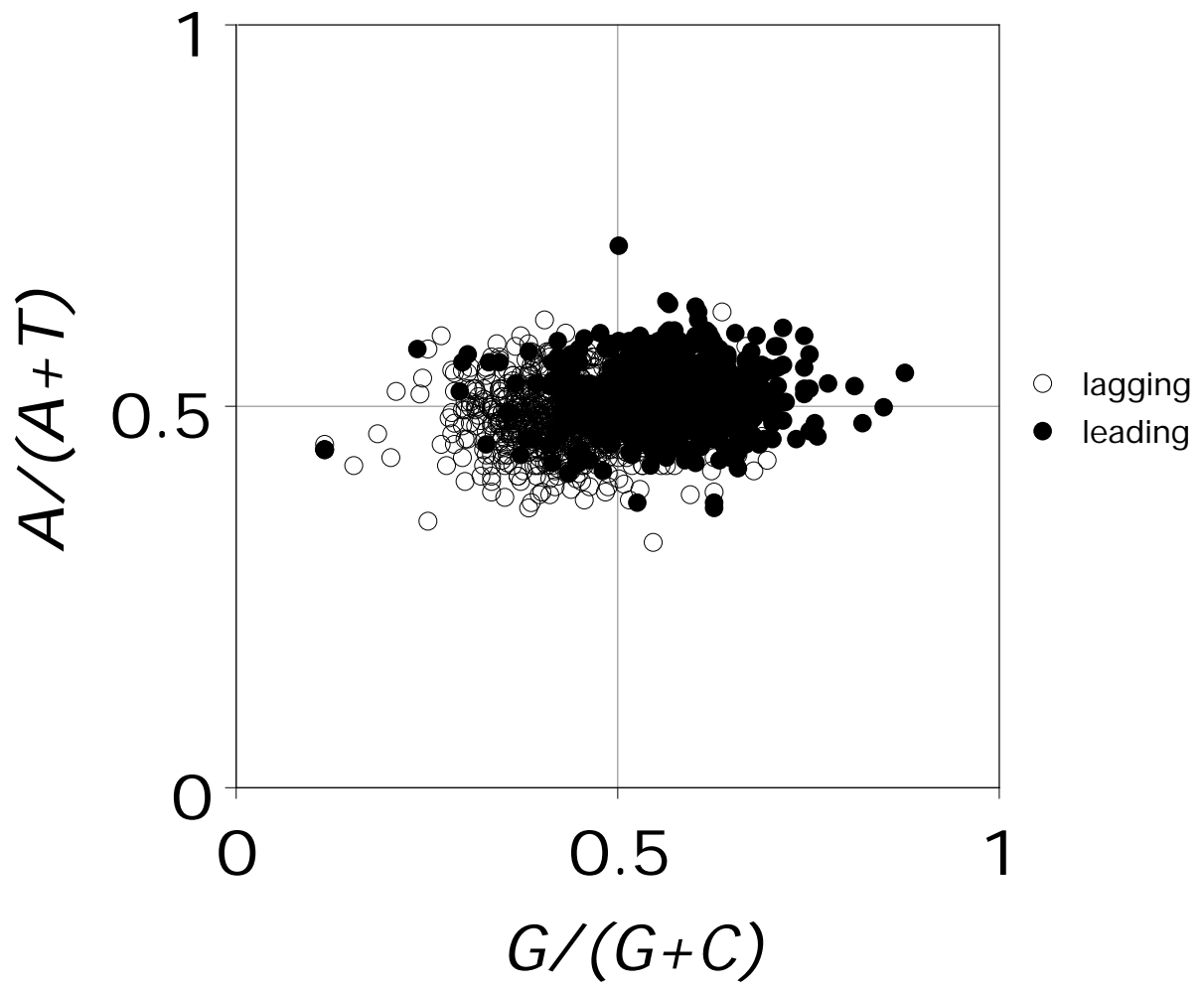
Pyrococcus horikoshii



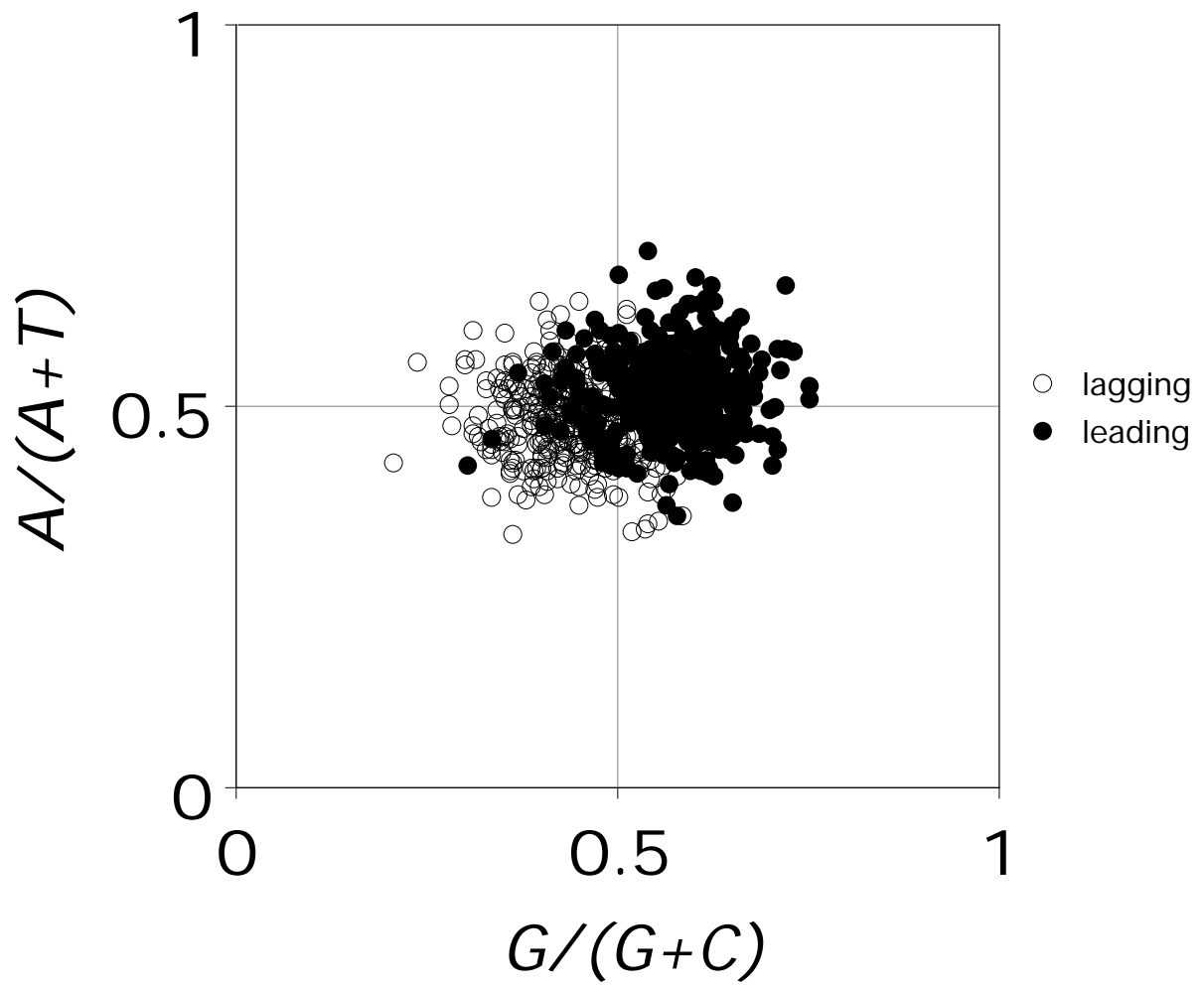
Rickettsia prowazekii



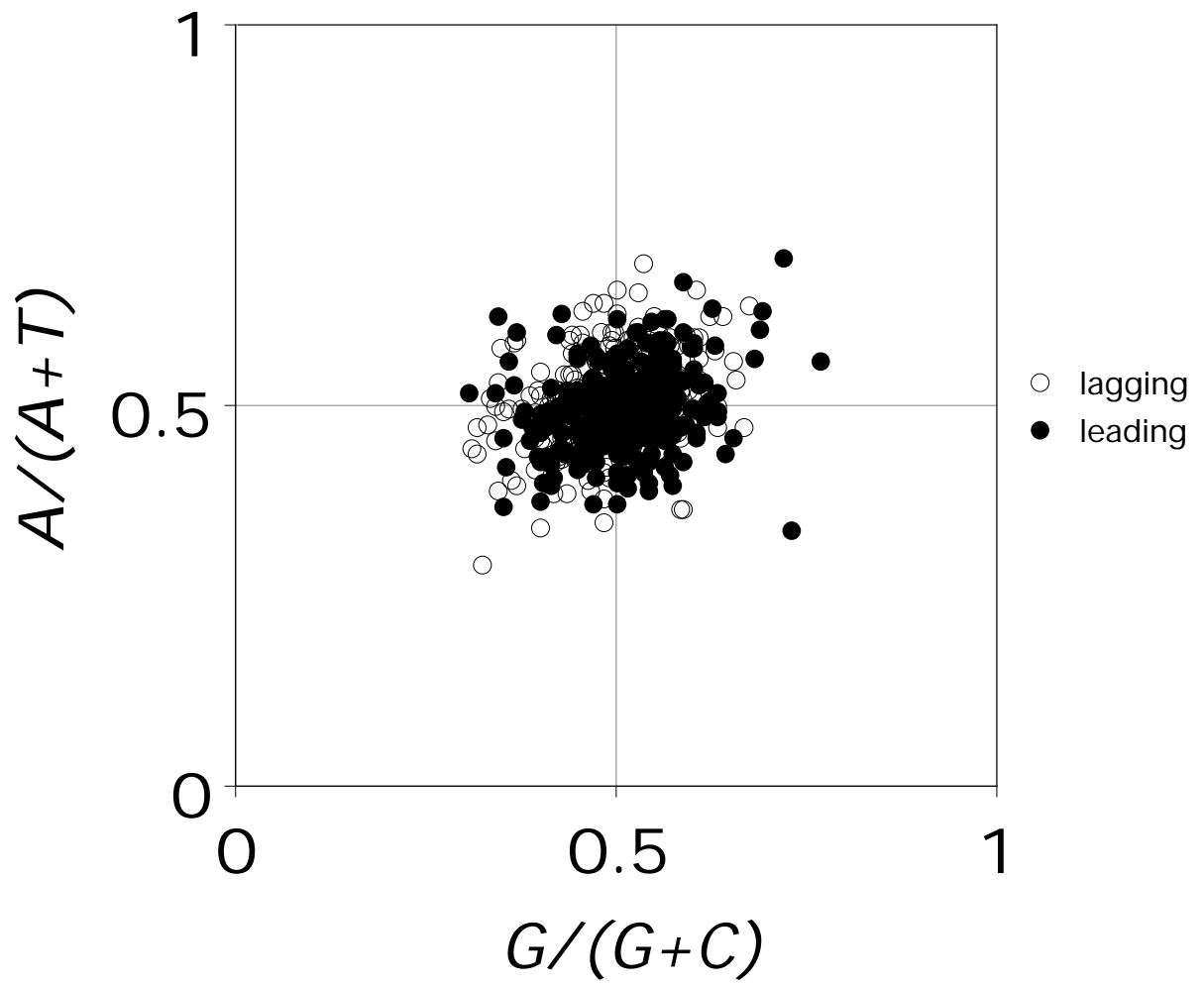
Staphylococcus aureus Mu50



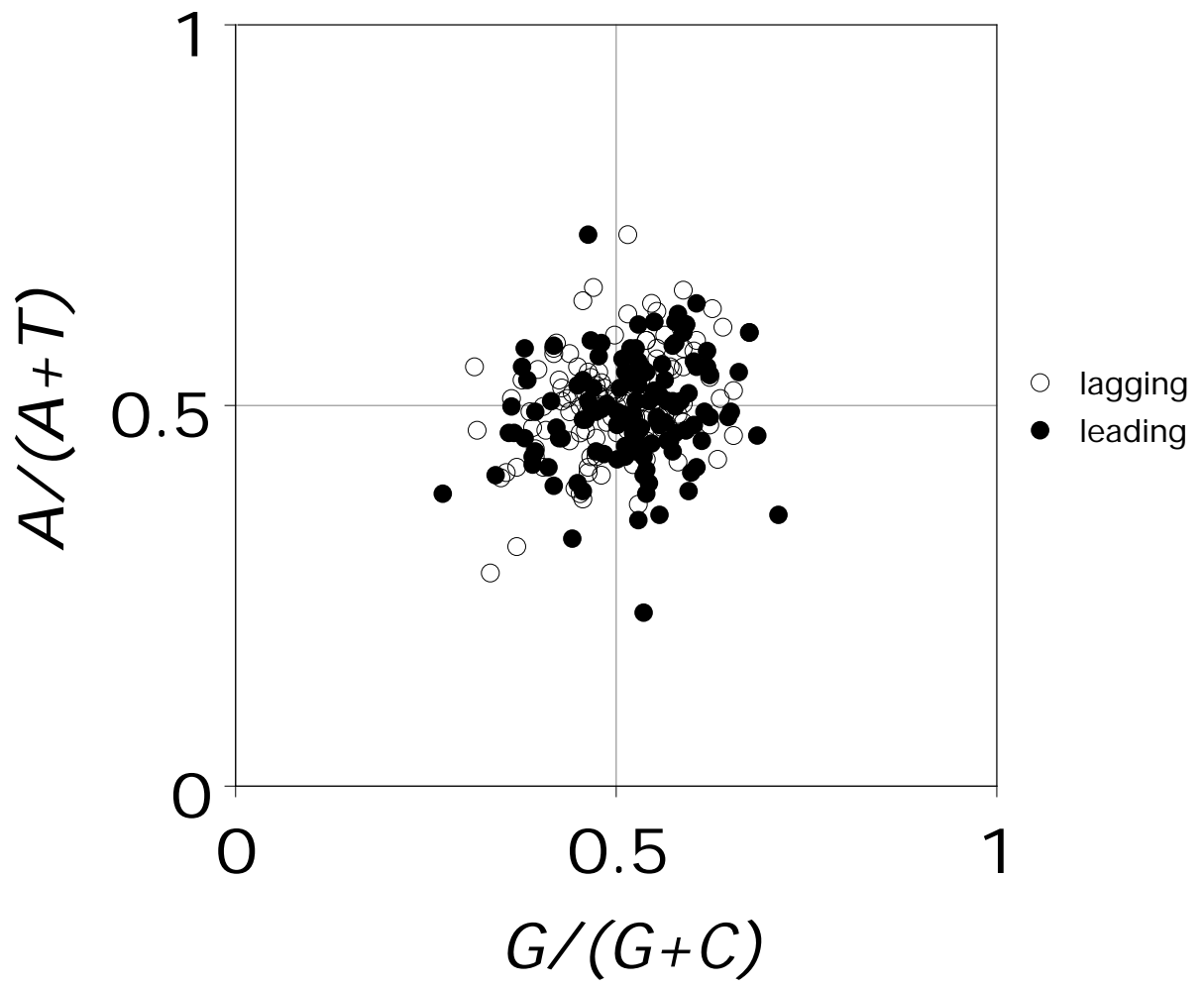
Staphylococcus aureus N315



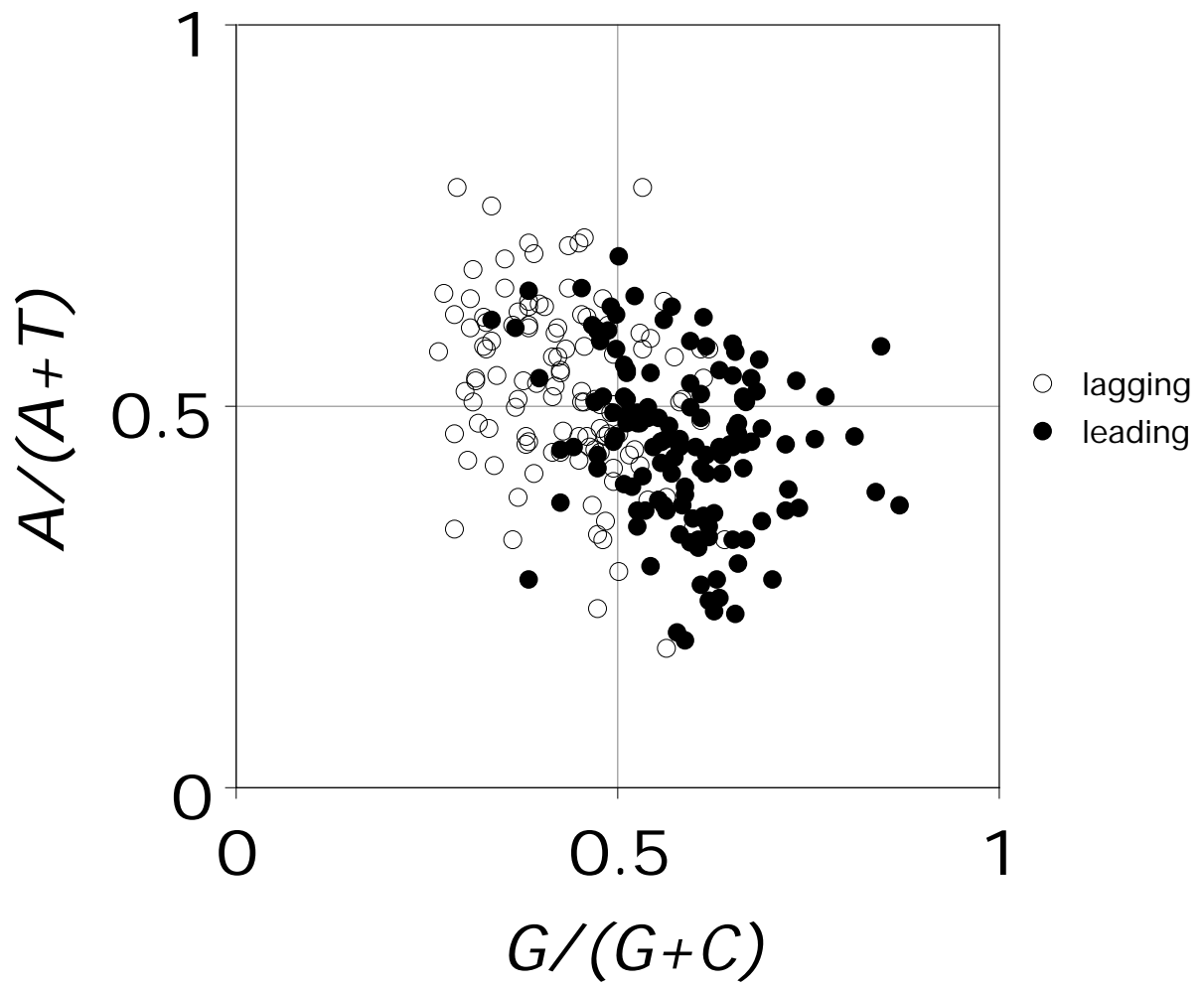
Streptococcus pyogenes



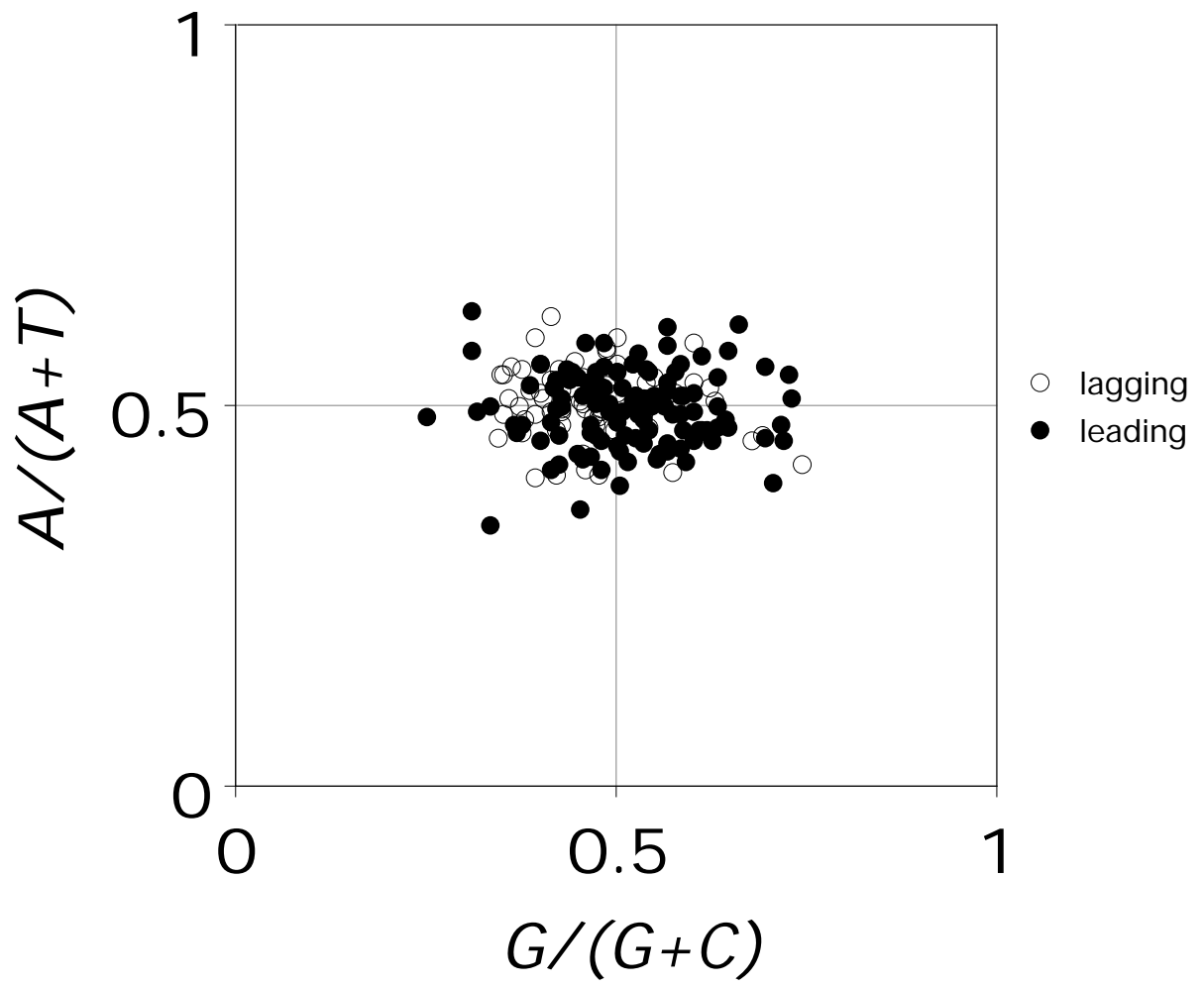
Thermoplasma acidophilum



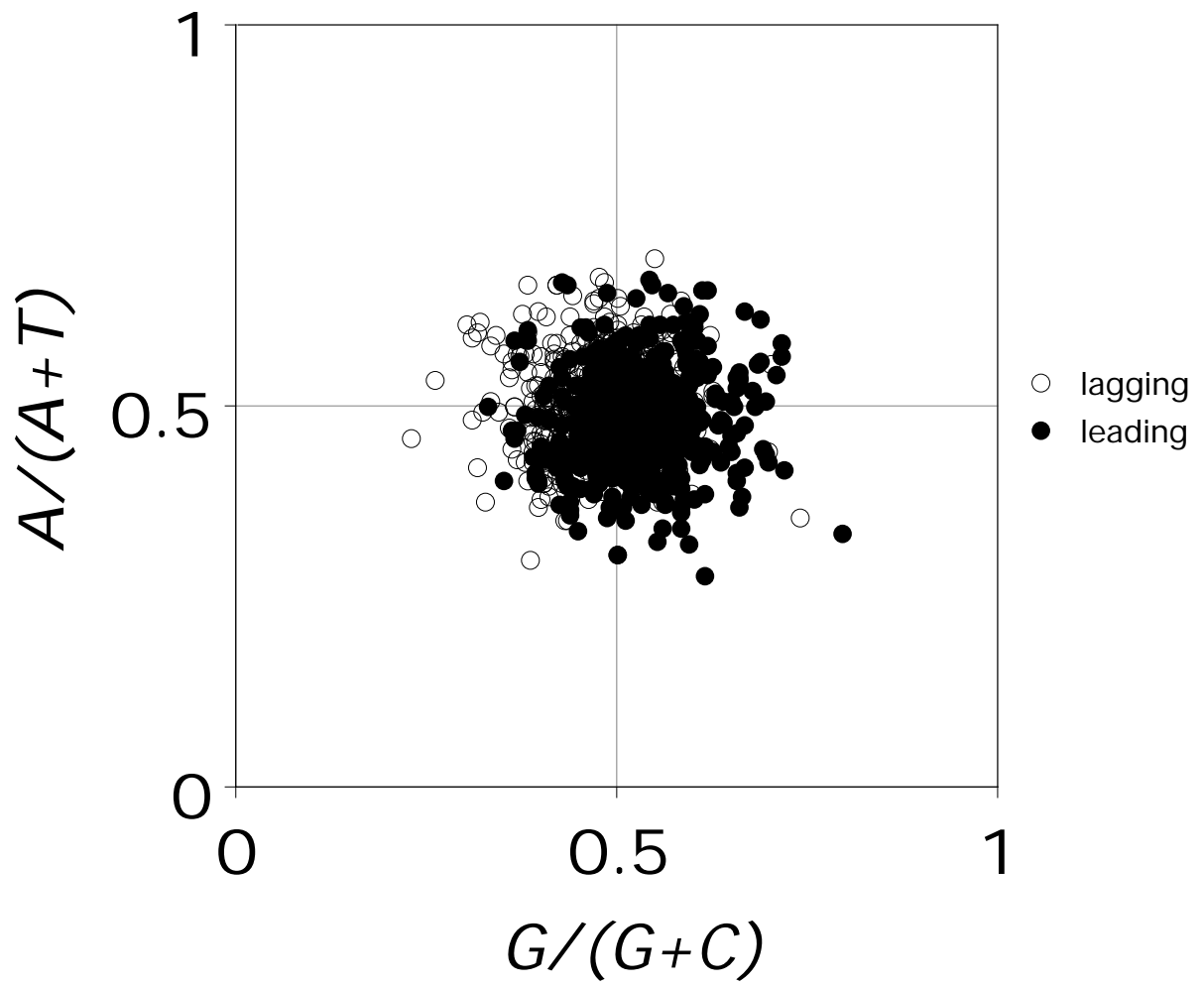
Thermotoga maritima



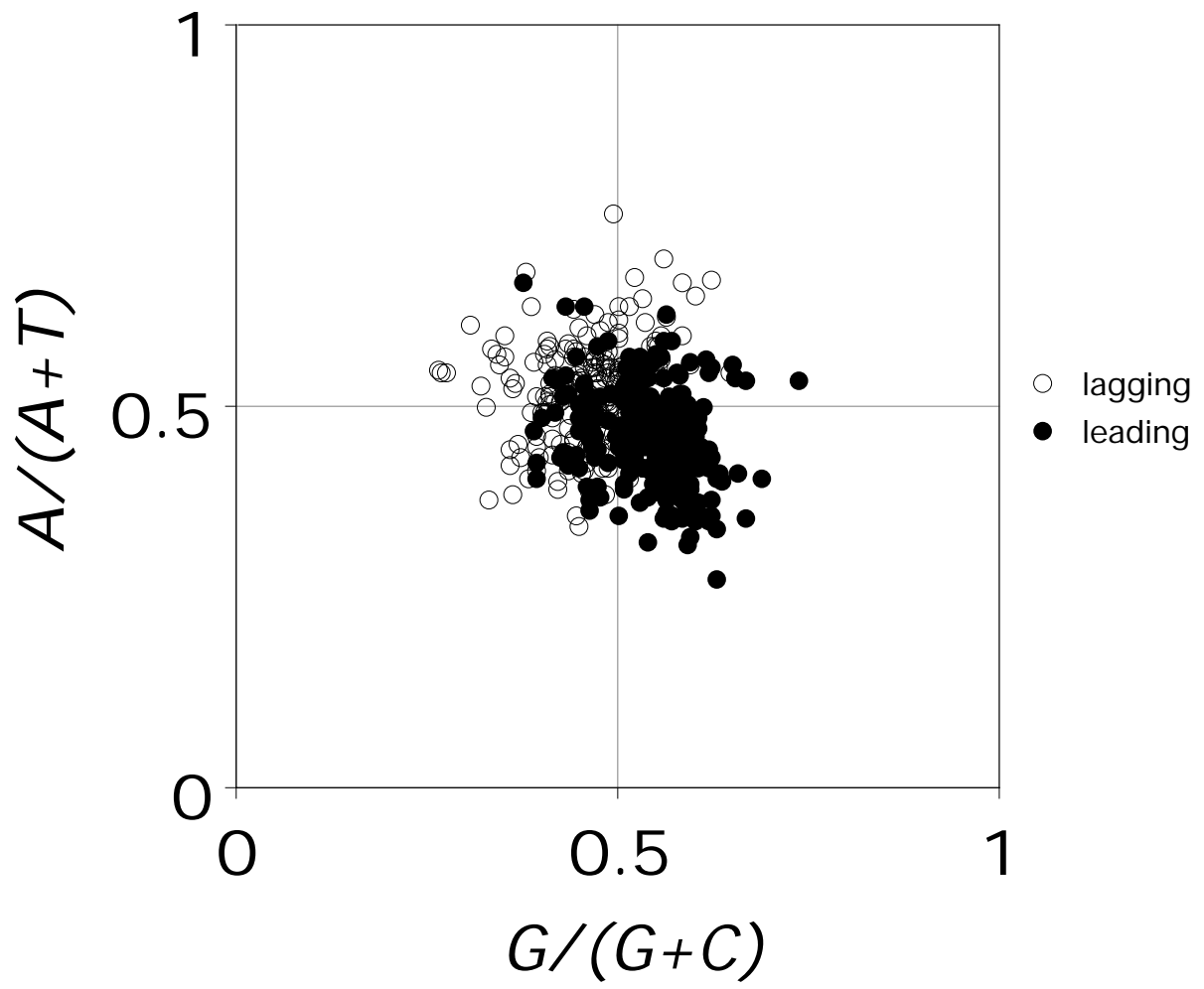
Treponema pallidum



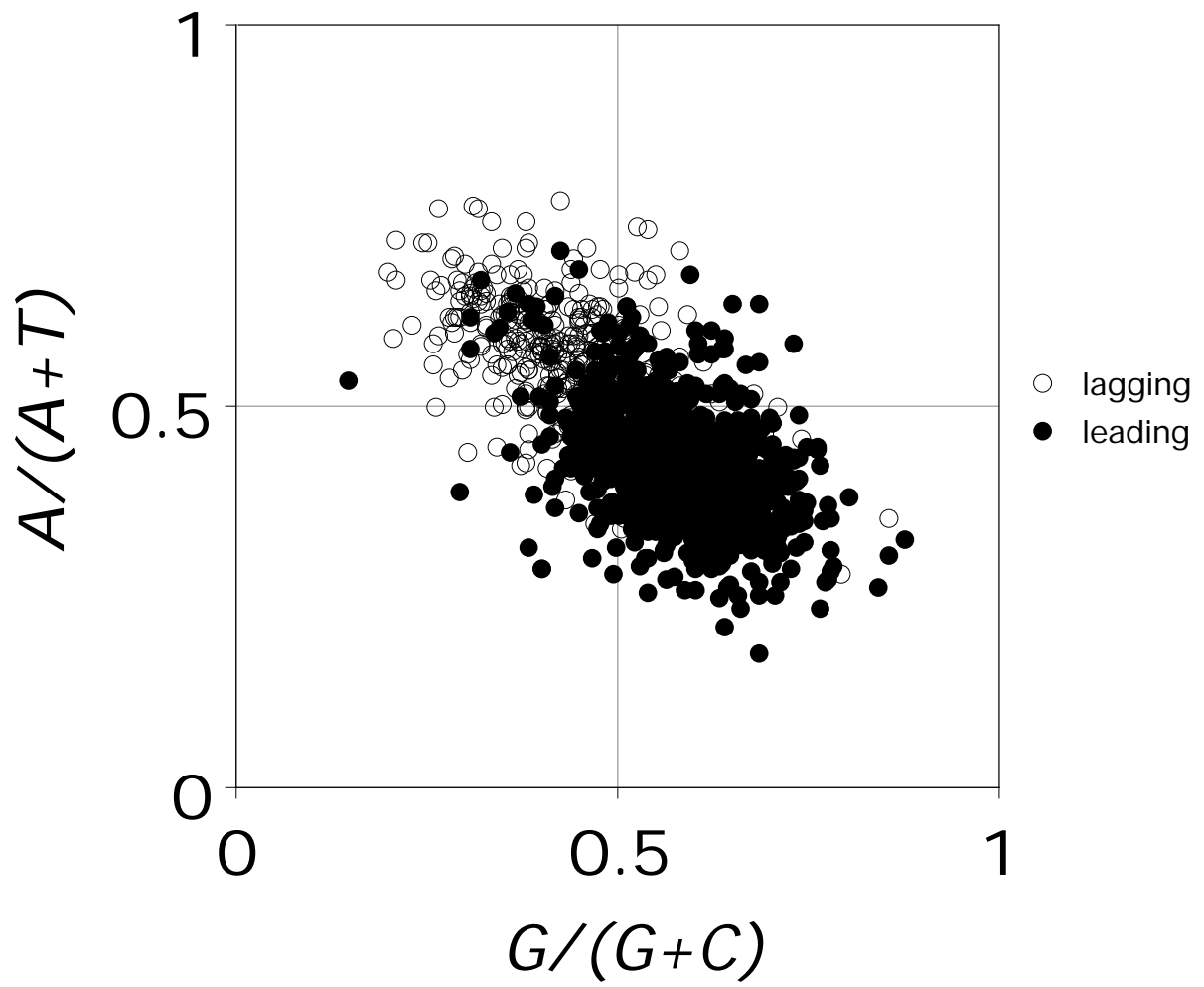
Ureaplasma urealyticum



Vibrio cholerae chromosome 1



Vibrio cholerae chromosome 2



Xylella fastidiosa

Chromosome	Template Seq.		GC_{IGR}			$G/(G+C)$			$A (A+T)$			x,y Midpoint		Difference in PR2-bias		
	#lead	#lagg	lead	lagg	Sig.	x_l	x_2	Sig.	y_l	y_2	Sig.	x_c	y_c	B_l	B_{II}	$B_l\%$
B. hal	348	70	0.407	0.397	ns	0.619	0.553	***	0.536	0.537	ns	0.586	0.536	0.066	0.093	41.4
B. sub	416	89	0.385	0.388	ns	0.604	0.558	***	0.536	0.507	**	0.581	0.522	0.054	0.084	39.4
B. bur	47	18	0.206	0.203	ns	0.697	0.492	***	0.445	0.589	***	0.595	0.517	0.251	0.096	72.3
Buch	47	36	0.145	0.154	ns	0.547	0.552	ns	0.502	0.542	*	0.550	0.522	0.040	0.054	42.7
C. cre	234	191	0.624	0.625	ns	0.495	0.478	*	0.485	0.504	ns	0.486	0.494	0.025	0.015	63.6
C. jej	91	51	0.198	0.193	ns	0.620	0.555	*	0.526	0.512	ns	0.588	0.519	0.066	0.090	42.6
C. mur	34	30	0.329	0.324	ns	0.626	0.428	***	0.445	0.464	ns	0.527	0.455	0.199	0.053	79.0
C. pne	44	38	0.327	0.312	ns	0.552	0.491	*	0.469	0.519	*	0.522	0.494	0.079	0.022	77.9
C. pneAR39	43	41	0.317	0.312	ns	0.544	0.464	**	0.466	0.501	ns	0.504	0.484	0.087	0.017	83.7
C. pneJ138	138	93	0.373	0.378	ns	0.654	0.506	***	0.510	0.471	ns	0.580	0.490	0.153	0.081	65.5
C. tra	46	36	0.344	0.363	ns	0.604	0.452	***	0.489	0.467	ns	0.528	0.478	0.154	0.036	81.2

D. rad1	172	165	0.630	0.645	ns	0.473	0.455	ns	0.458	0.469	ns	0.464	0.464	0.021	0.051	29.2
D. rad2	25	14	0.610	0.633	ns	0.452	0.403	ns	0.498	0.387	ns	0.427	0.443	0.121	0.093	56.7
E. col	260	167	0.446	0.444	ns	0.520	0.472	***	0.502	0.482	ns	0.496	0.492	0.052	0.009	85.3
E.colEDL	357	214	0.448	0.442	ns	0.525	0.482	***	0.492	0.491	ns	0.504	0.491	0.043	0.009	82.4
E.colRIMD	377	211	0.446	0.448	ns	0.531	0.480	***	0.492	0.491	ns	0.506	0.491	0.051	0.010	83.4
H. inf	120	80	0.305	0.316	ns	0.548	0.457	***	0.500	0.522	ns	0.503	0.511	0.094	0.011	89.2
H. pyl	86	57	0.307	0.284	ns	0.582	0.574	ns	0.508	0.511	ns	0.578	0.510	0.009	0.079	9.8
H. pylJ99	70	52	0.294	0.284	ns	0.609	0.580	ns	0.526	0.505	ns	0.595	0.516	0.036	0.096	27.2
L.lac	217	41	0.276	0.279	ns	0.621	0.554	***	0.545	0.543	ns	0.588	0.544	0.067	0.098	40.6
M.lep	185	94	0.553	0.546	ns	0.545	0.481	***	0.501	0.576	***	0.513	0.538	0.099	0.041	70.8
M. tub	218	169	0.630	0.631	ns	0.508	0.505	ns	0.520	0.522	ns	0.506	0.521	0.004	0.022	14.1
M.tubCDC	261	161	0.630	0.632	ns	0.520	0.492	***	0.511	0.531	ns	0.506	0.521	0.034	0.022	61.2
M. gen	14	4	0.265	0.258	ns	0.534	0.472	ns	0.463	0.516	ns	0.503	0.490	0.082	0.011	88.2
M. pne	35	6	0.331	0.415	*	0.438	0.445	ns	0.493	0.453	ns	0.442	0.473	0.041	0.064	38.7
M.pul	52	21	0.191	0.160	*	0.533	0.594	ns	0.539	0.500	ns	0.564	0.520	0.072	0.066	52.2

N. menA	157	145	0.443	0.465	*	0.498	0.447	***	0.531	0.542	ns	0.473	0.536	0.052	0.046	53.3
N. menB	174	120	0.443	0.465	*	0.523	0.428	***	0.518	0.555	**	0.476	0.536	0.102	0.044	69.9
P. mul	152	89	0.331	0.341	ns	0.573	0.480	***	0.486	0.512	*	.526	.499	.097	.027	78.5
P. aer	402	313	0.635	0.665	***	0.495	0.447	***	0.494	0.544	***	0.471	0.519	0.069	0.035	66.7
P. aby	81	78	0.347	0.363	ns	0.496	0.512	ns	0.451	0.485	*	0.504	0.468	0.038	0.032	53.8
P. hor	73	53	0.318	0.358	**	0.494	0.512	ns	0.452	0.478	ns	0.503	0.465	0.032	0.035	47.4
R. pro	50	27	0.232	0.235	ns	0.547	0.503	ns	0.493	0.533	*	0.525	0.513	0.059	0.028	67.8
S.aur	140	34	0.278	0.282	ns	0.653	0.543	***	0.548	0.519	ns	0.598	0.534	0.114	0.104	52.3
S.aurN315	128	30	0.279	0.287	ns	0.658	0.562	***	0.549	0.542	ns	0.610	0.546	0.096	0.119	44.7
S.pyo	137	30	0.327	0.331	ns	0.612	0.540	**	0.555	0.494	***	0.576	0.524	0.094	0.080	54.2
T. aci	85	72	0.331	0.345	ns	0.523	0.468	**	0.515	0.483	*	0.496	0.499	0.064	0.005	93.2
T. mar	61	53	0.437	0.419	ns	0.593	0.585	ns	0.511	0.519	ns	0.589	0.515	0.011	0.090	11.1
T. pal	75	64	0.541	0.557	ns	0.634	0.574	**	0.416	0.447	ns	0.604	0.431	0.068	0.125	35.2
U. ure	70	18	0.174	0.172	ns	0.610	0.631	ns	0.503	0.523	ns	0.621	0.513	0.029	0.121	19.3
V. cho1	174	102	0.420	0.420	ns	0.529	0.468	***	0.485	0.501	ns	0.499	0.493	0.063	0.007	89.8

V. cho2	51	31	0.459	0.431	ns	0.509	0.455	**	0.526	0.506	ns	0.482	0.516	0.058	0.024	70.5
X. fas	148	111	0.483	0.515	**	0.511	0.406	***	0.437	0.548	***	0.459	0.493	0.153	0.042	78.4

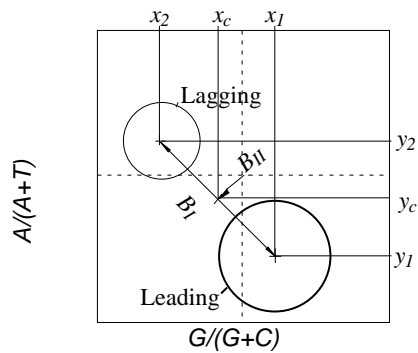
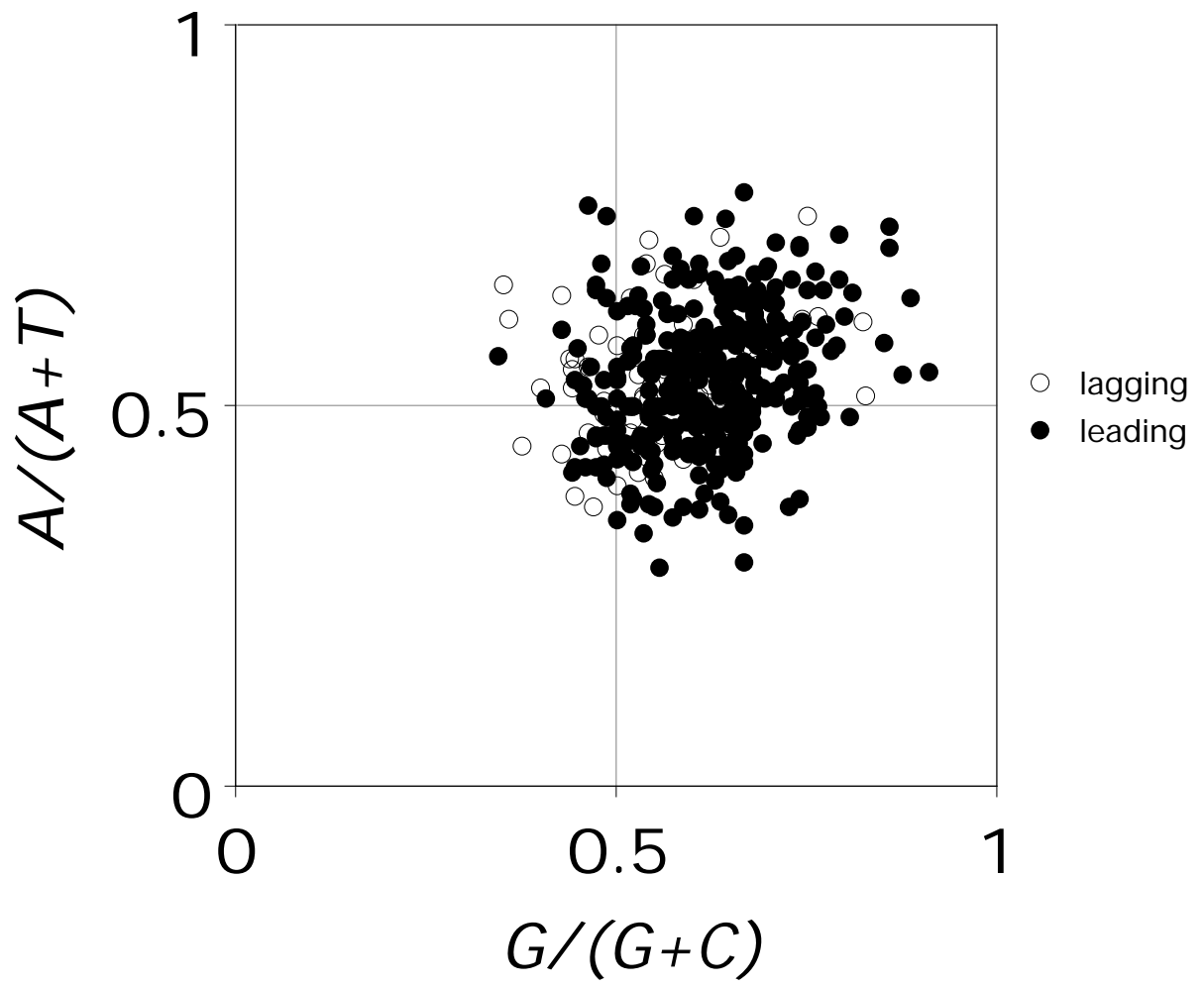
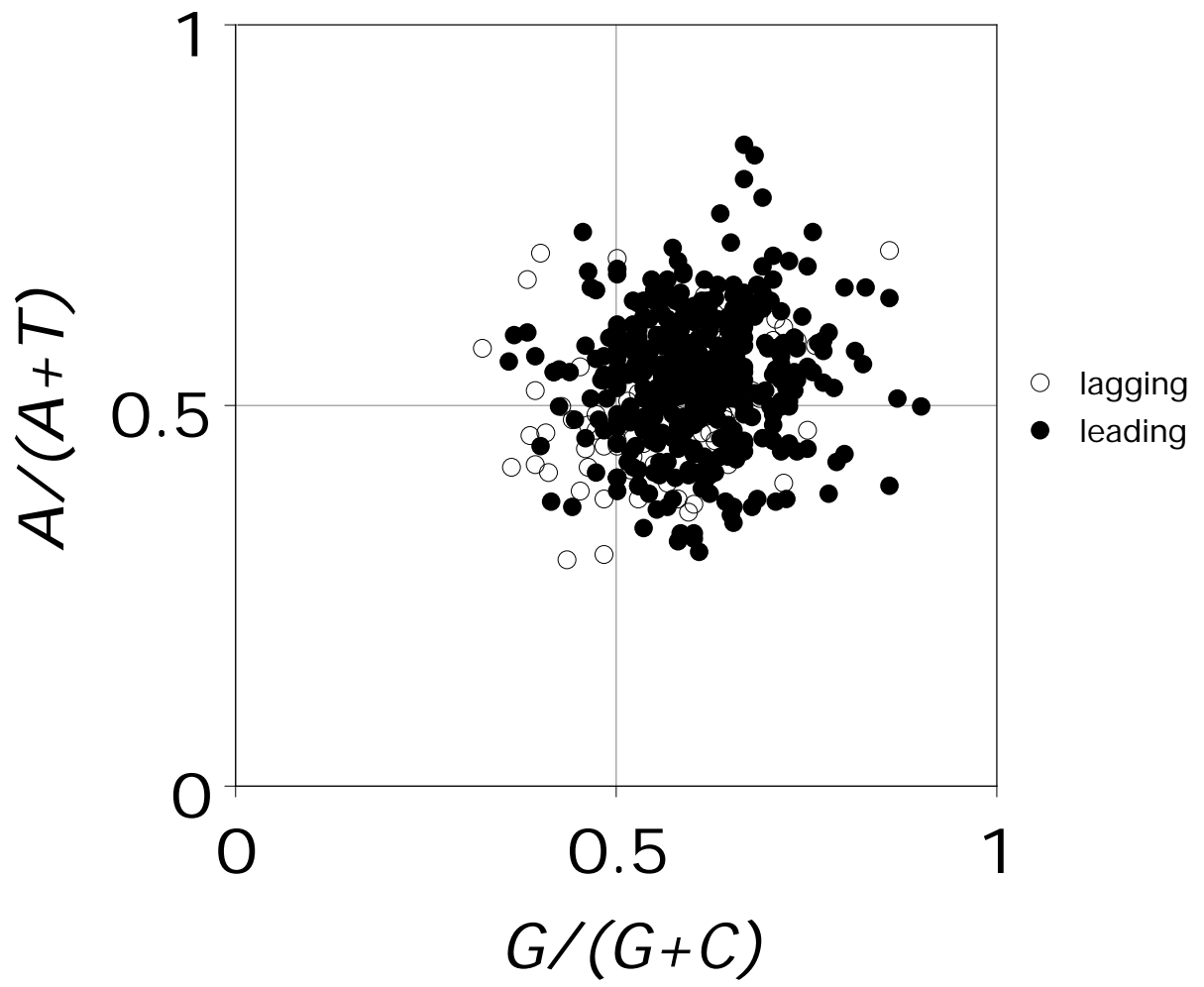


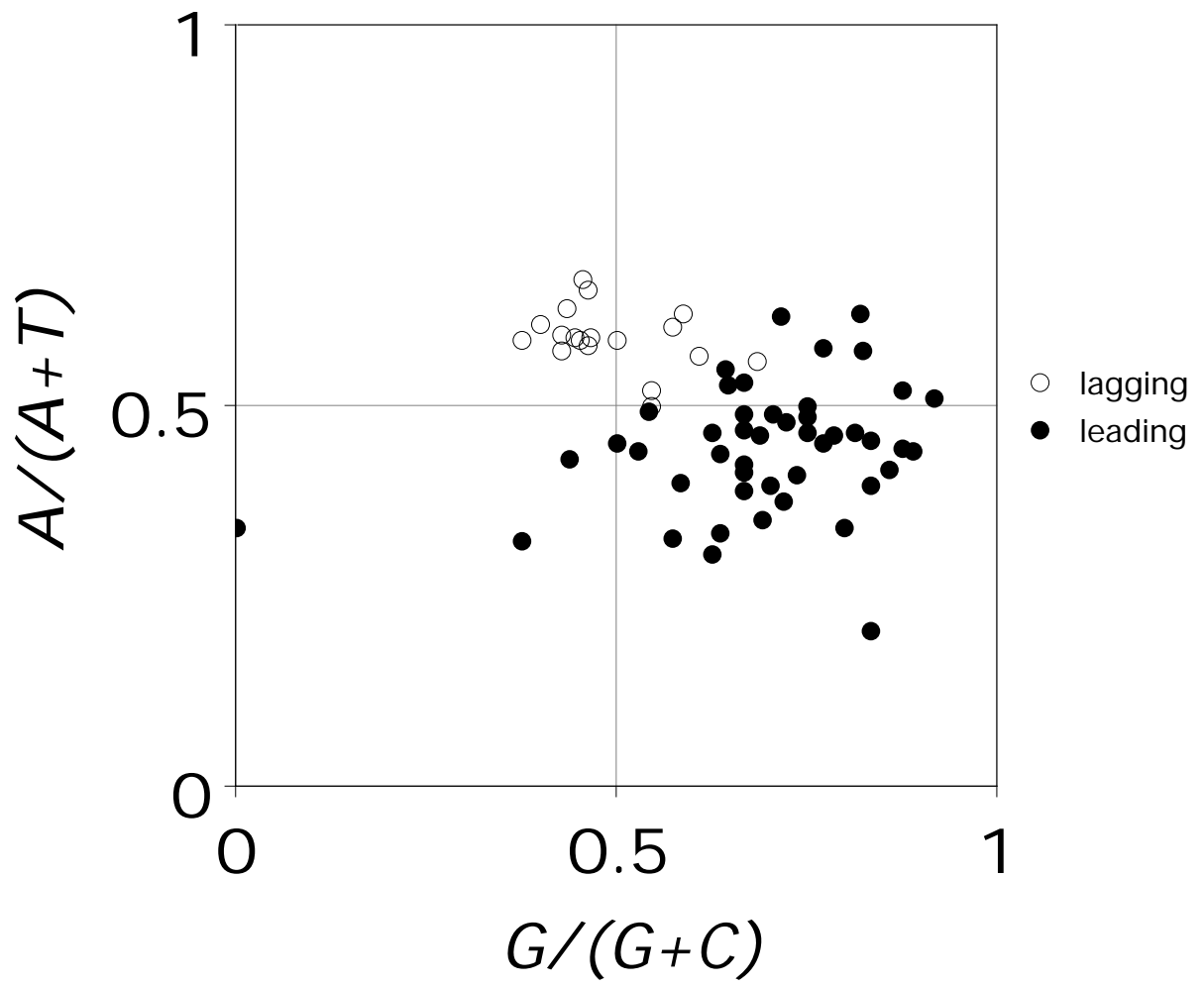
Table 4. Base composition in small intergenic regions (from 50 to 100 bp) among co-oriented genes.. Indices are defined in the material and method section. #lead and #lag are the number of regions in the leading and the lagging strand. The significance level (Sig.) for a difference between the two groups are: ns (not significant, $p > 0.05$); * ($0.01 < p < 0.05$); ** ($0.001 < p < 0.01$); *** ($p < 0.001$). The contribution in percent of replication-associated effects to PR2 deviations (B_l %) is given in **bold** when both differences $x_l - x_2$ and $y_l - y_2$ are highly significant ($p < 0.01$). When a difference is significant between the two groups a red color outlines the **highest** value and a blue color the lowest value.



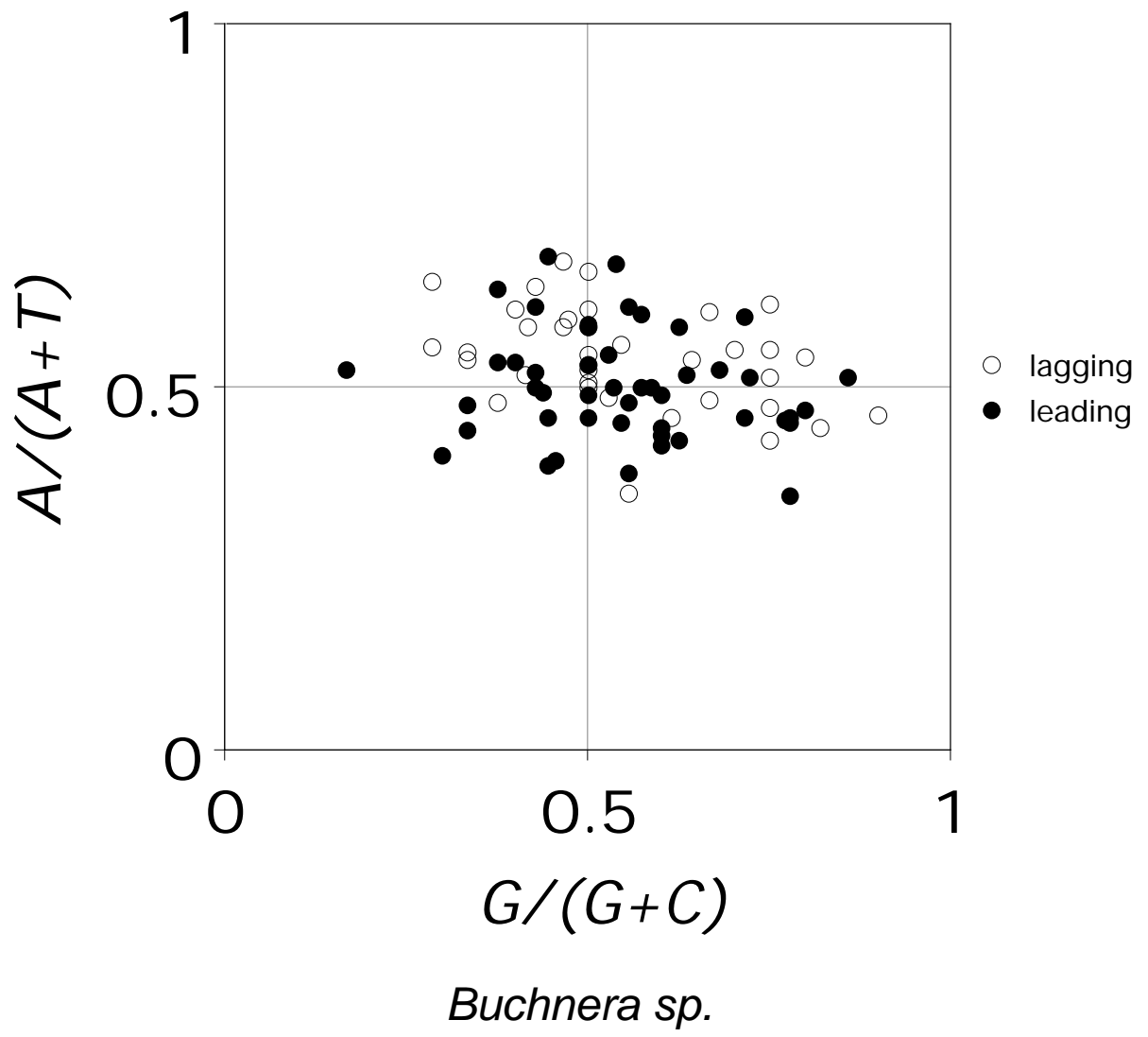
Bacillus halodurans

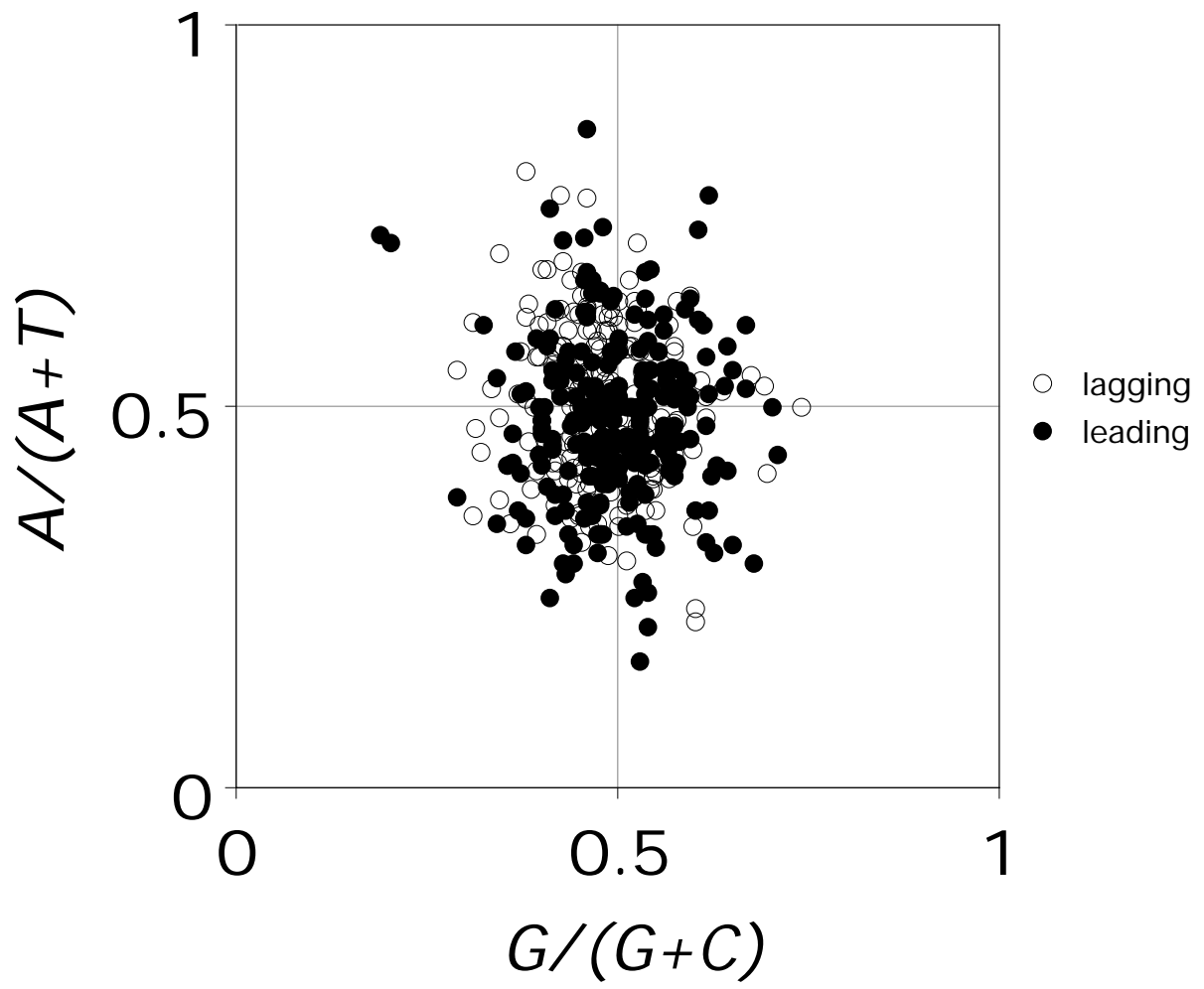


Bacillus subtilis

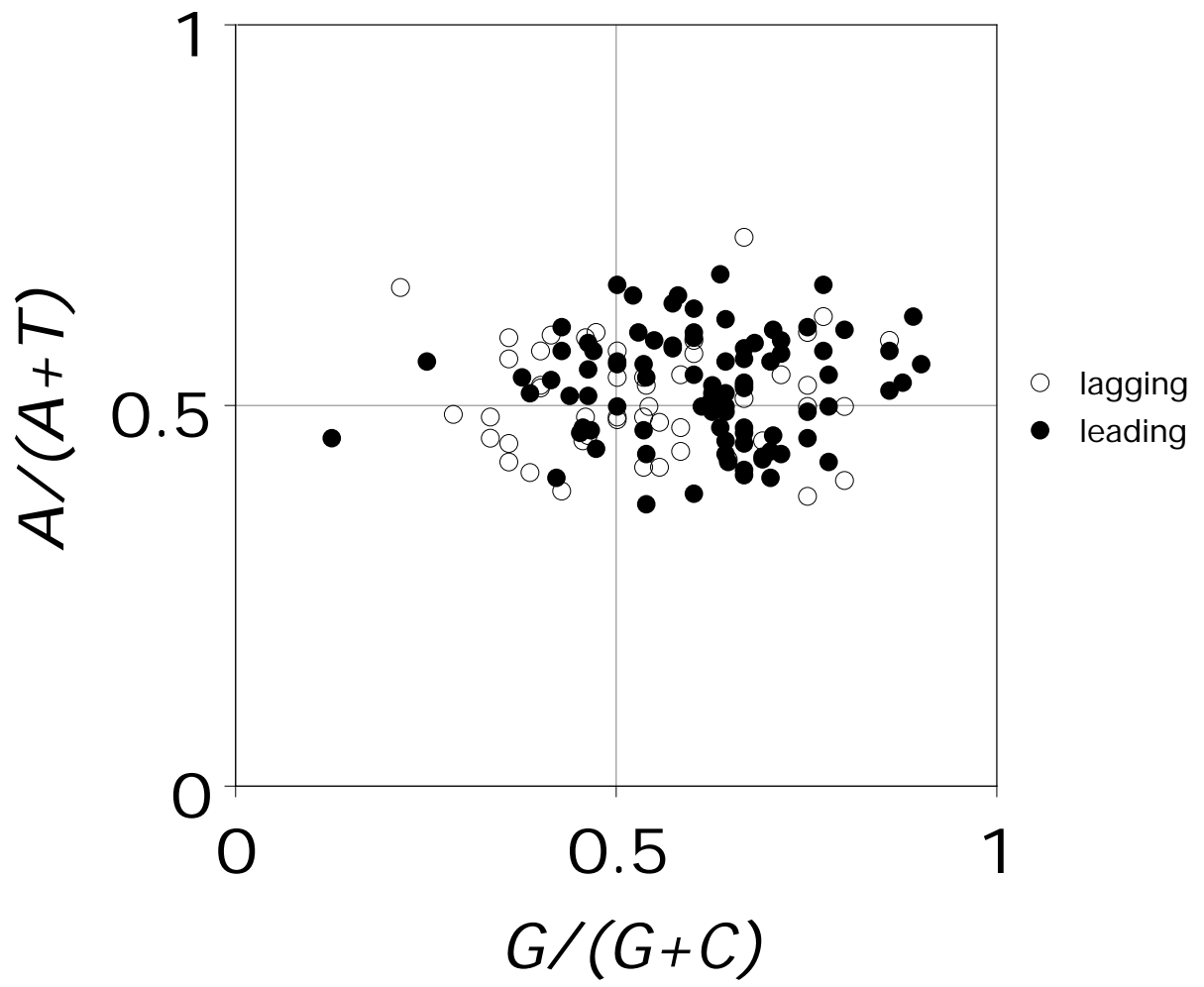


Borrelia burgdorferi

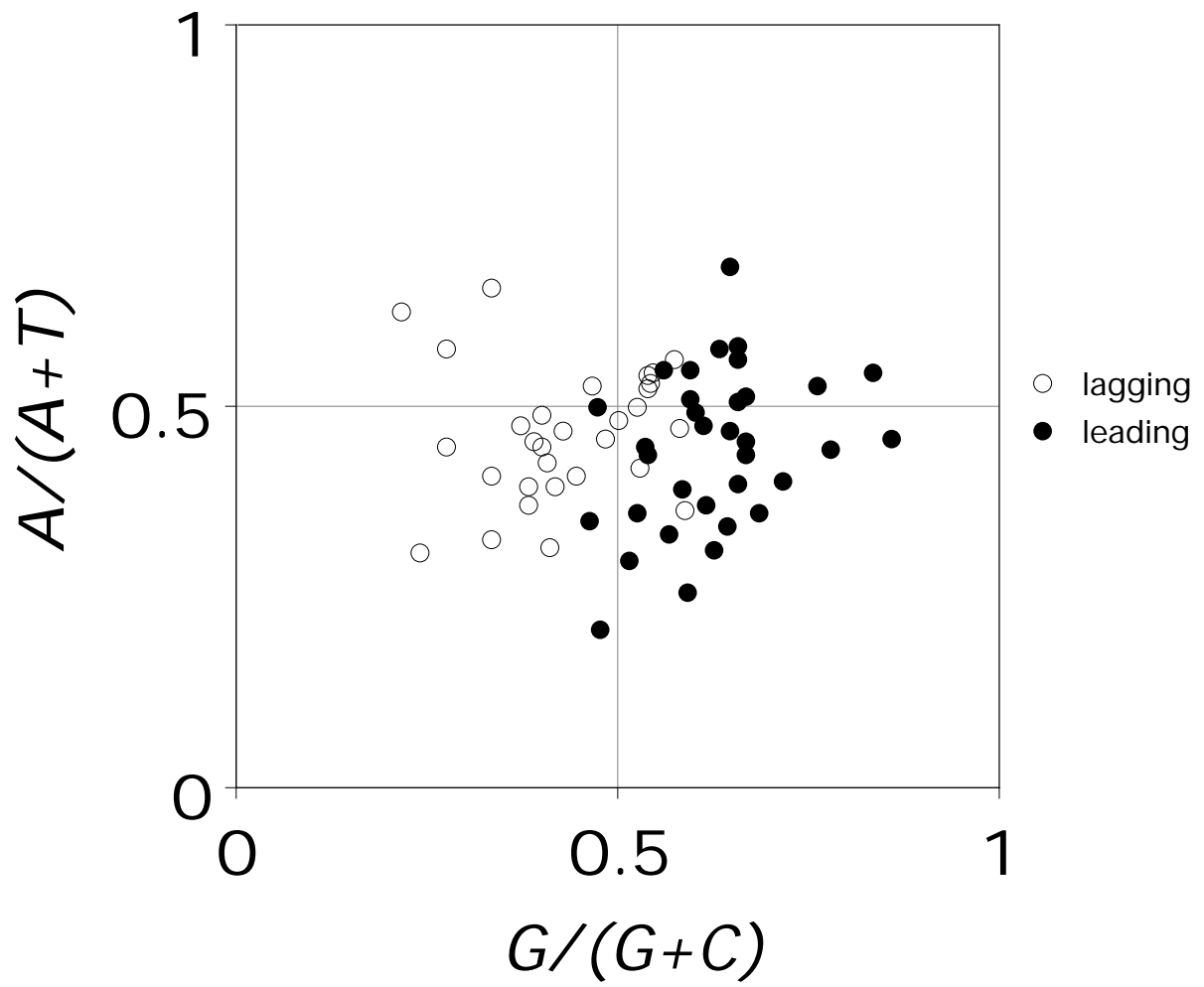




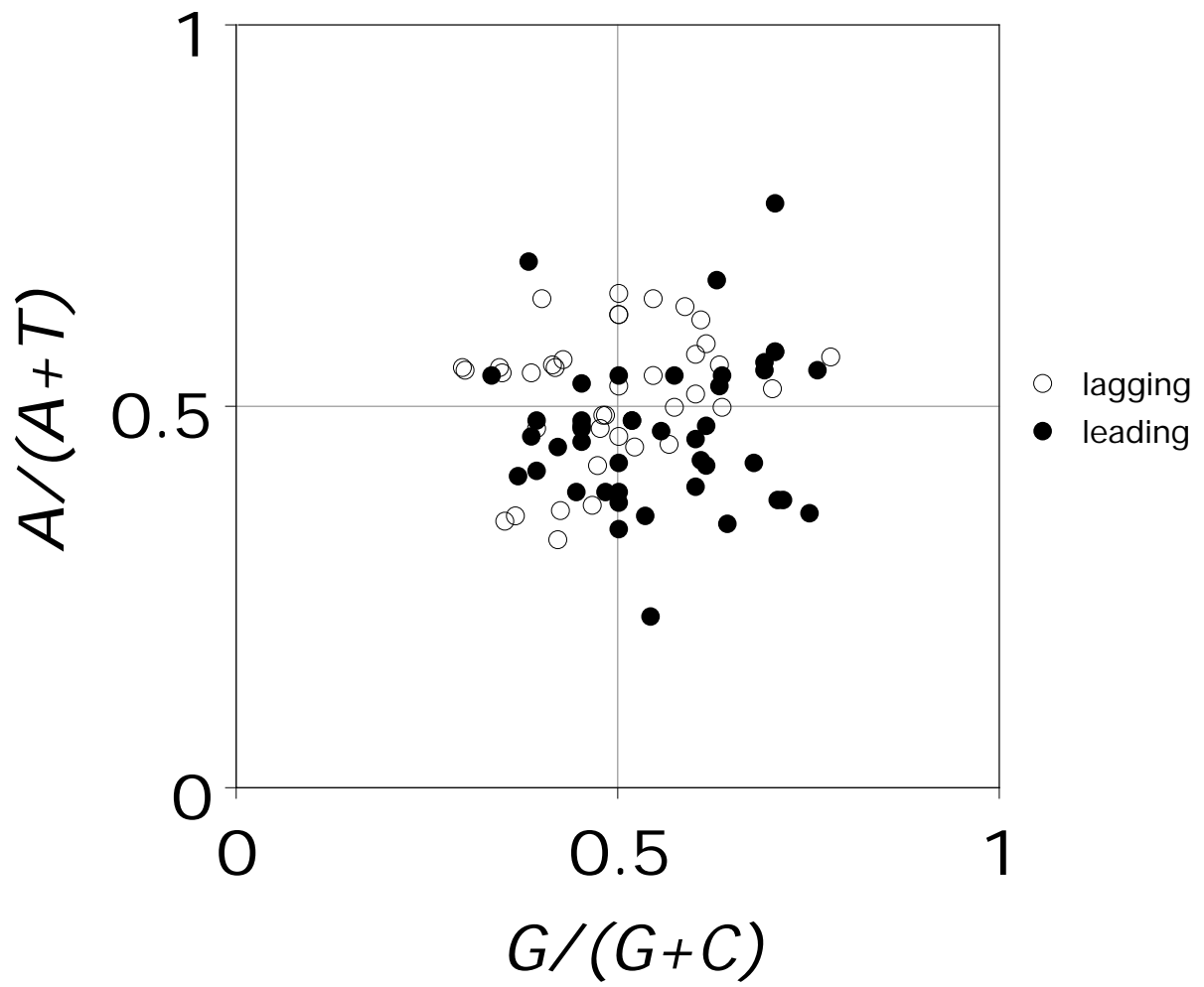
Caulobacter crescentus



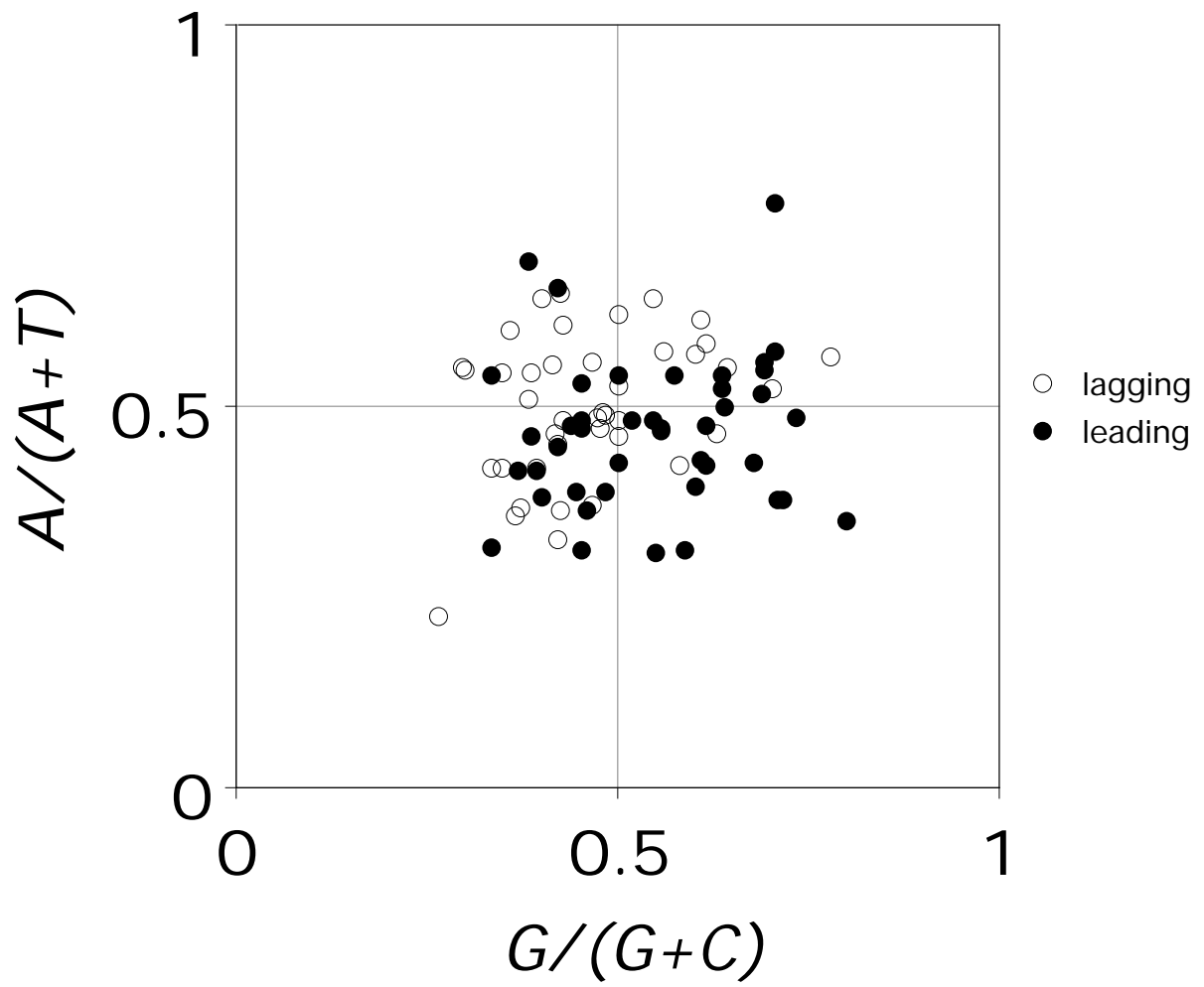
Campylobacter jejuni



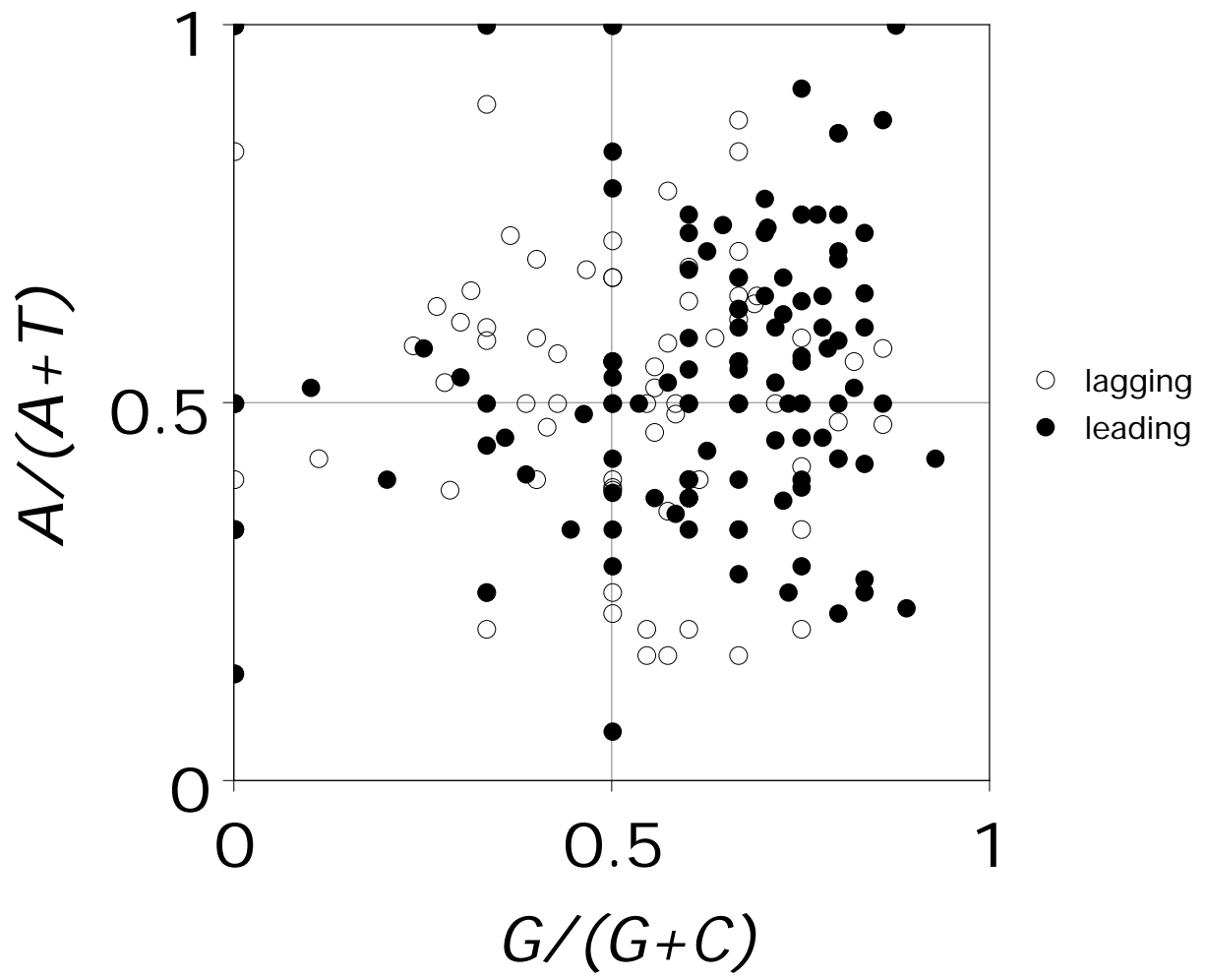
Chlamydia muridarum



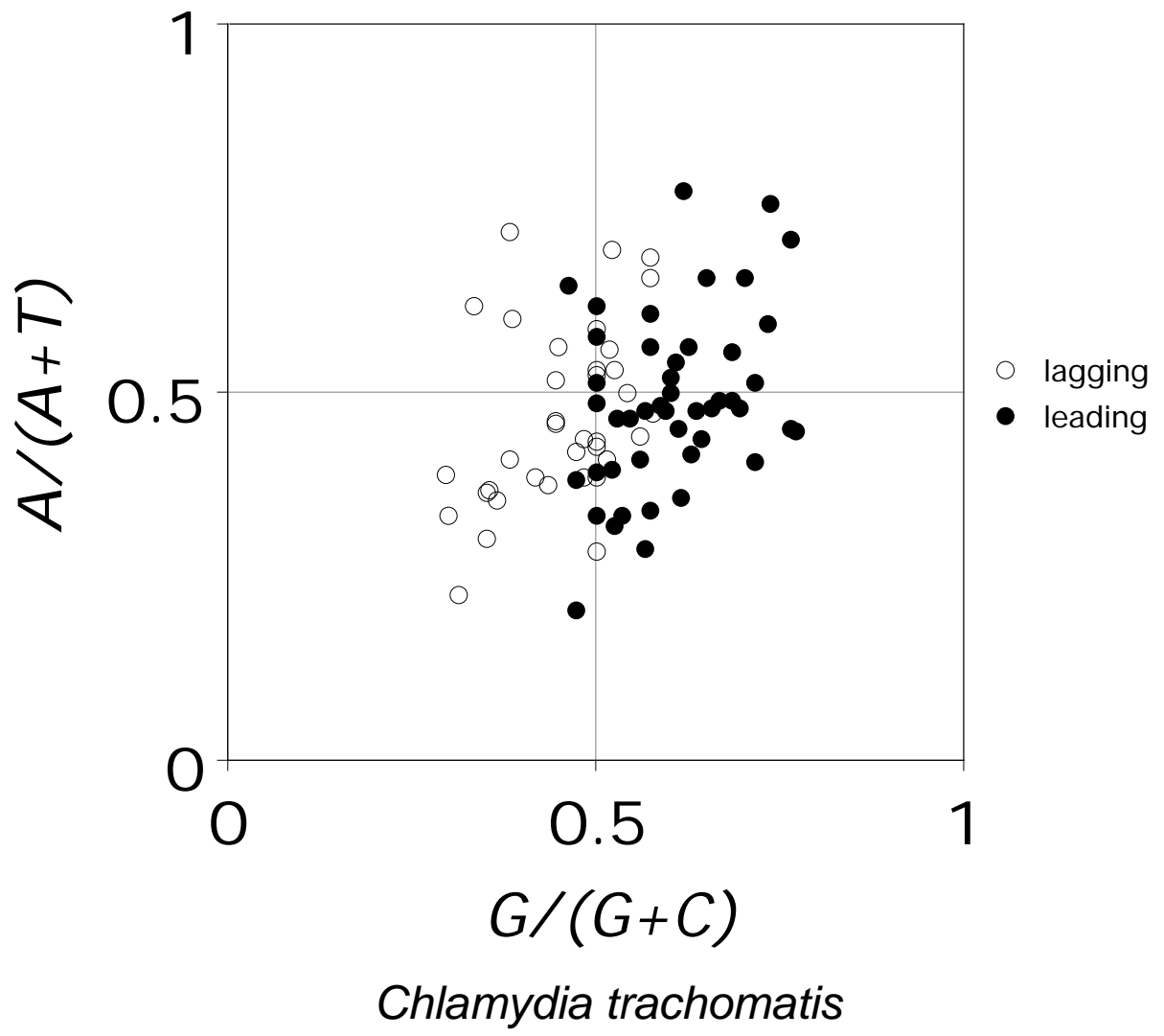
Chlamydophila pneumoniae CWL029

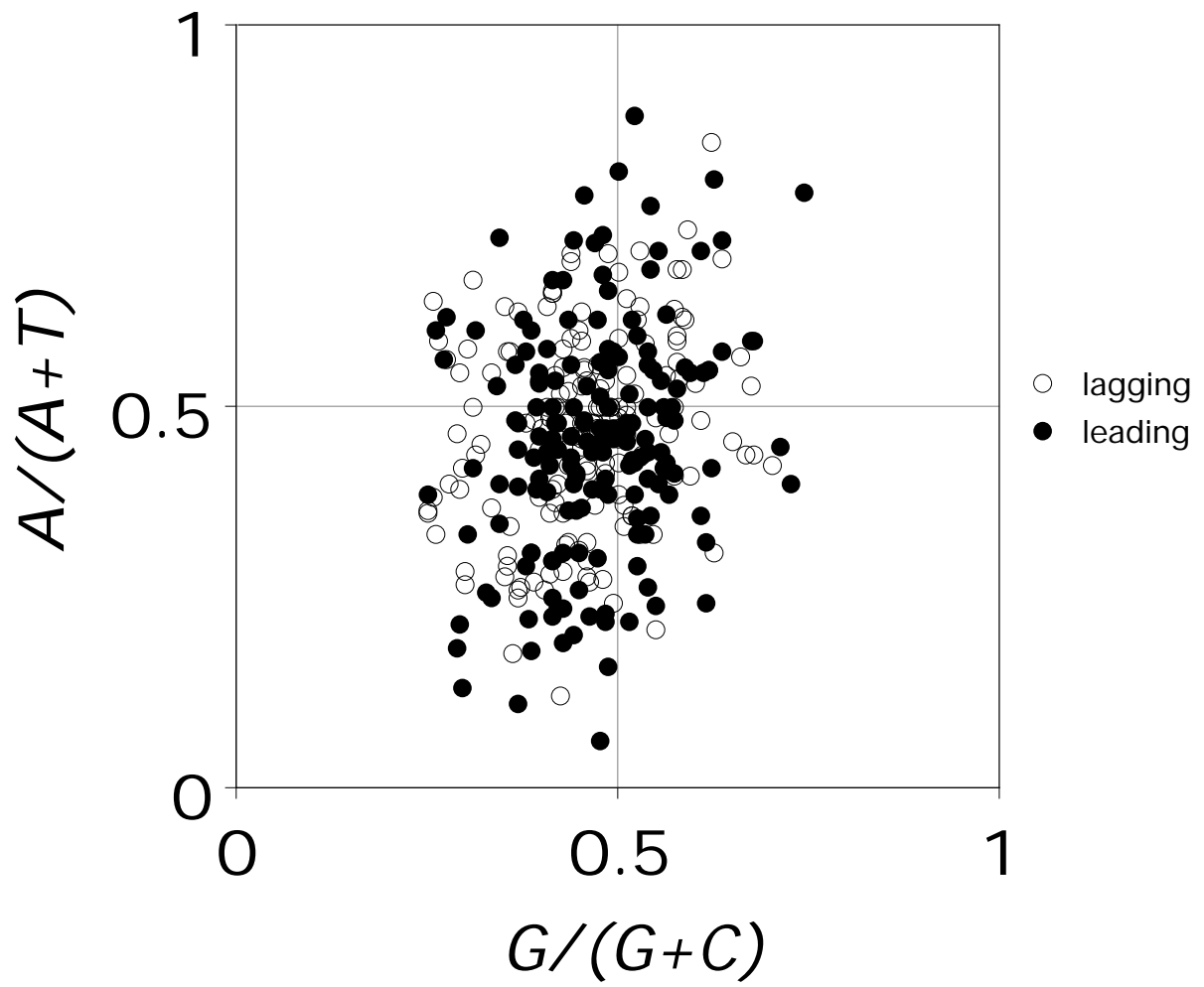


Chlamydomophila pneumoniae AR39

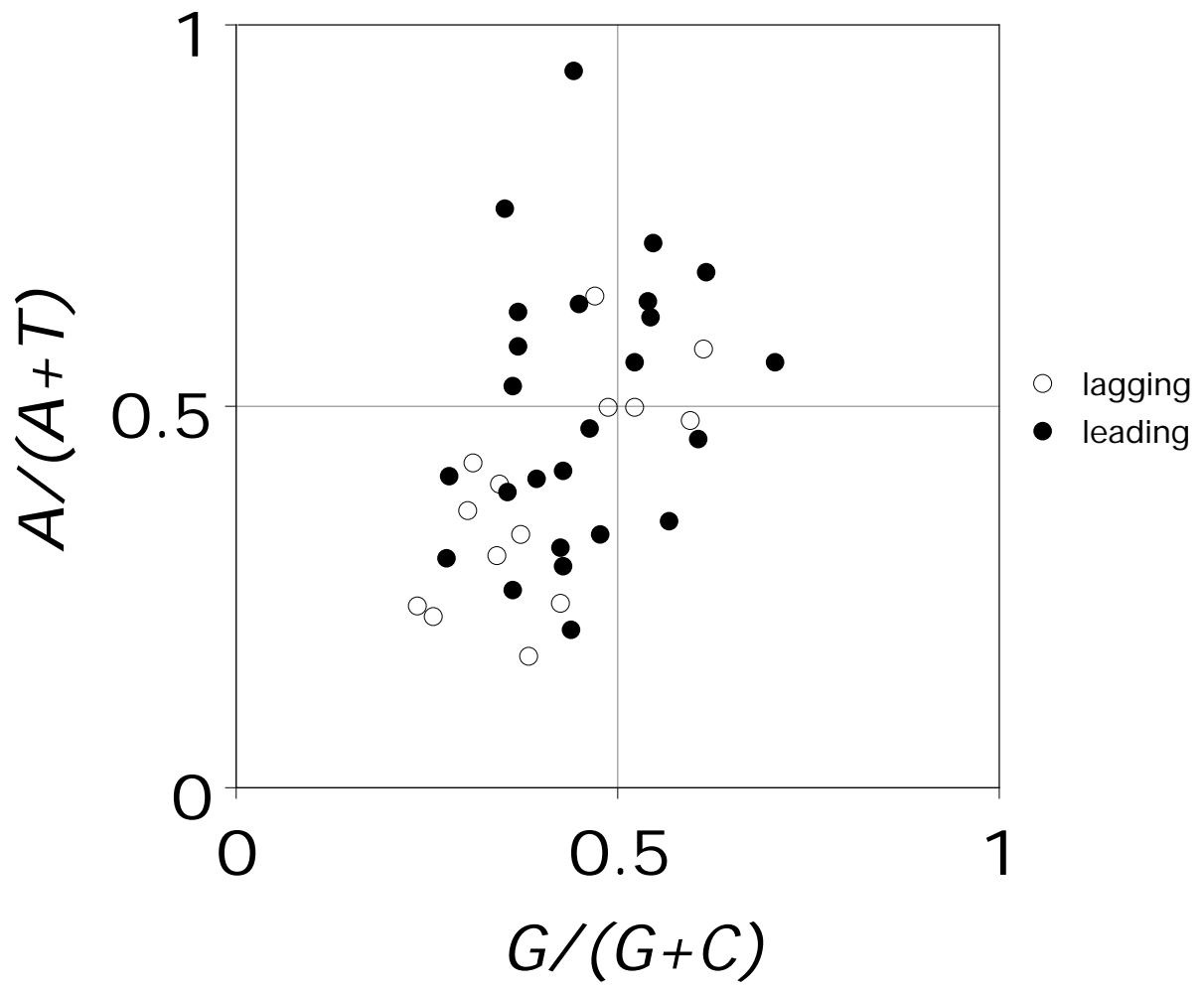


Chlamydomonas reinhardtii J138

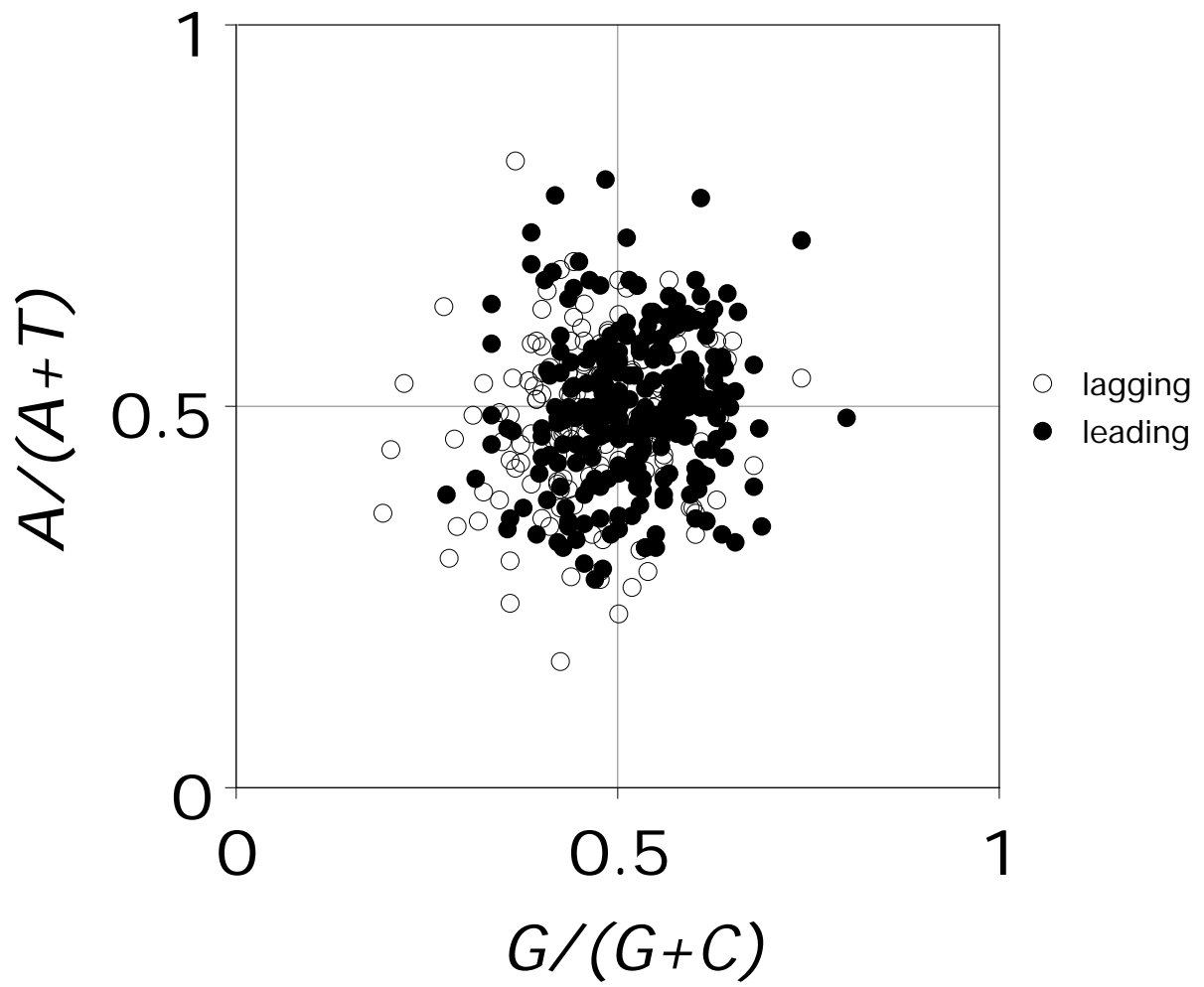




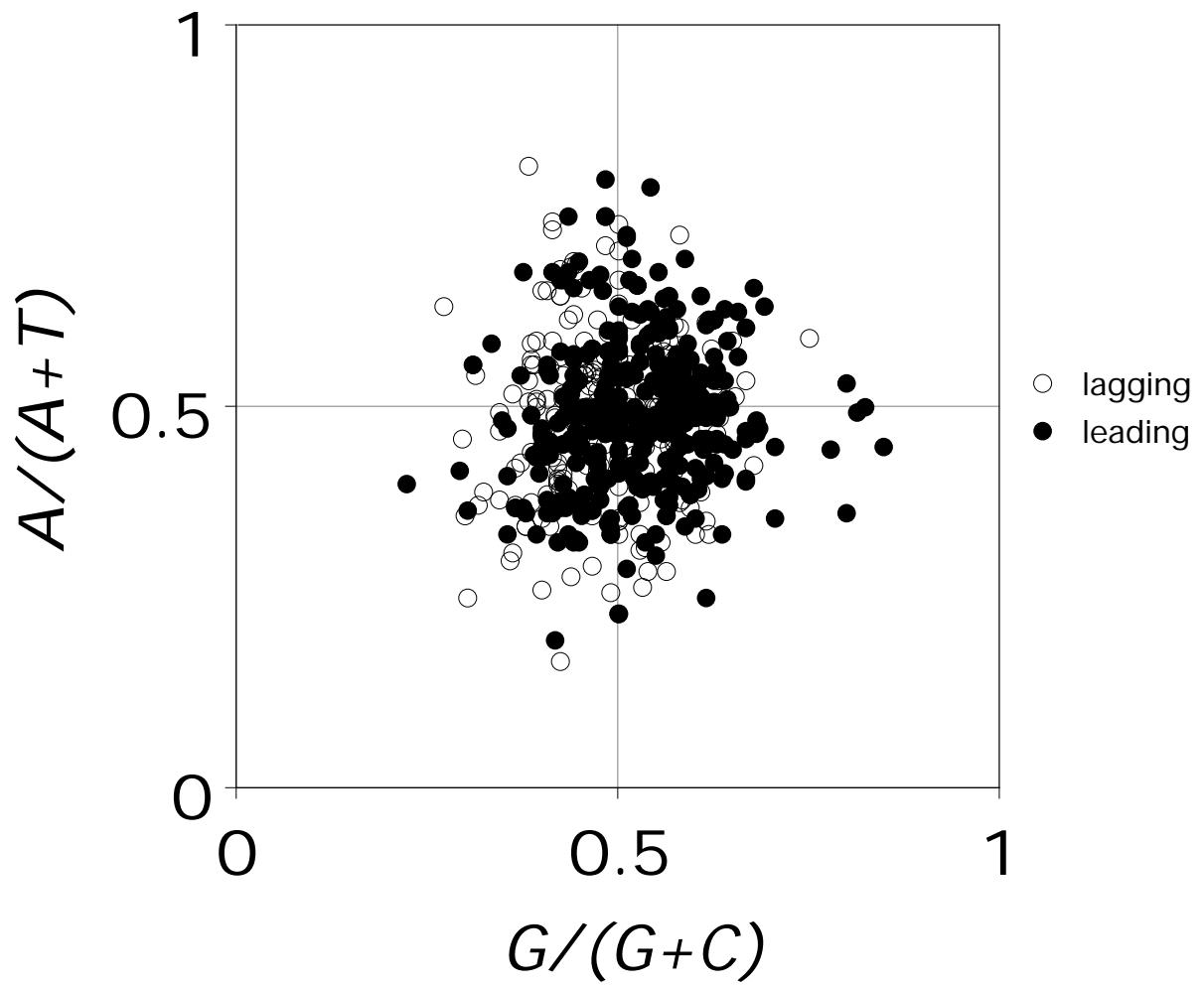
Deinococcus radiodurans chromosome 1



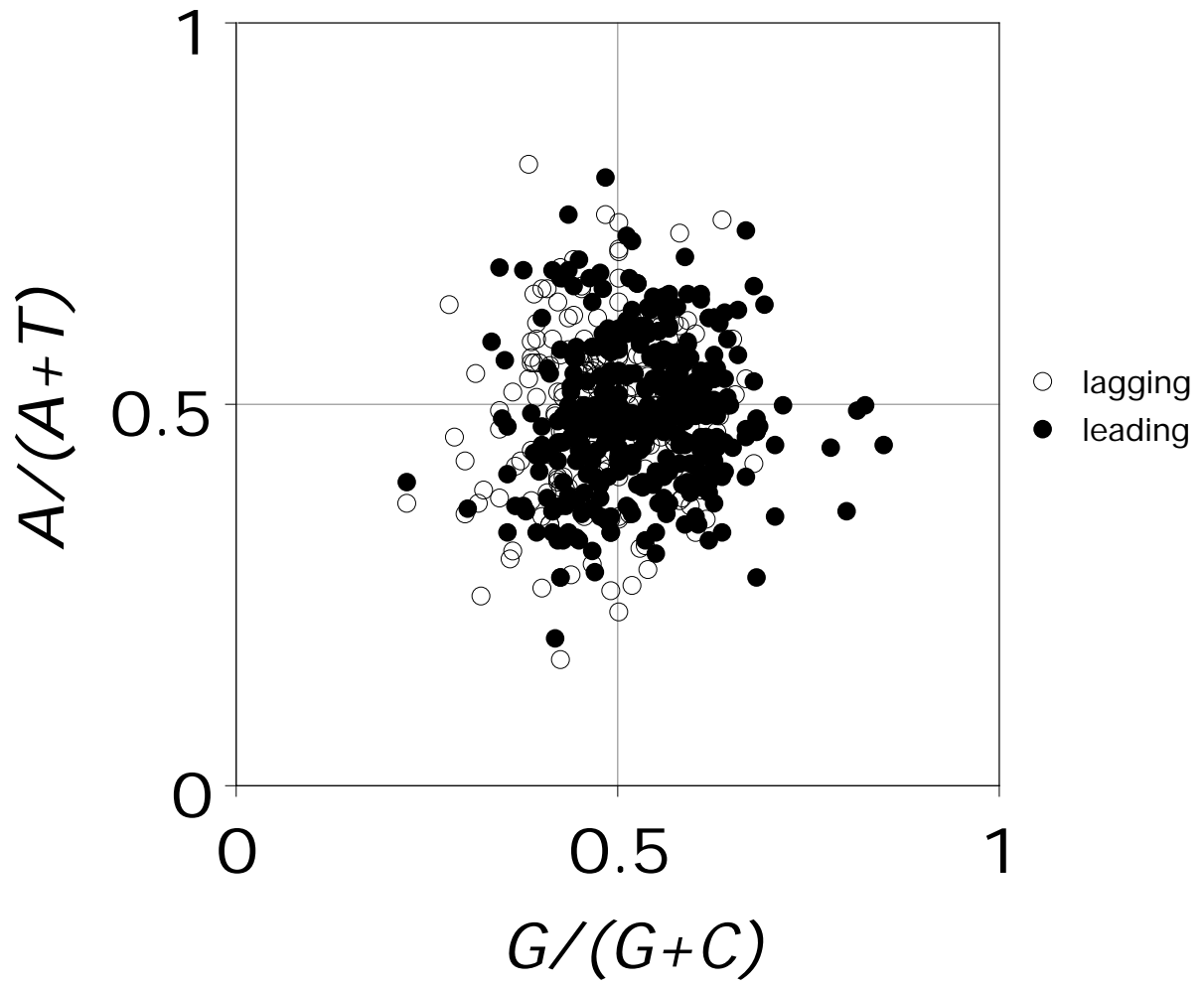
Deinococcus radiodurans chromosome 2



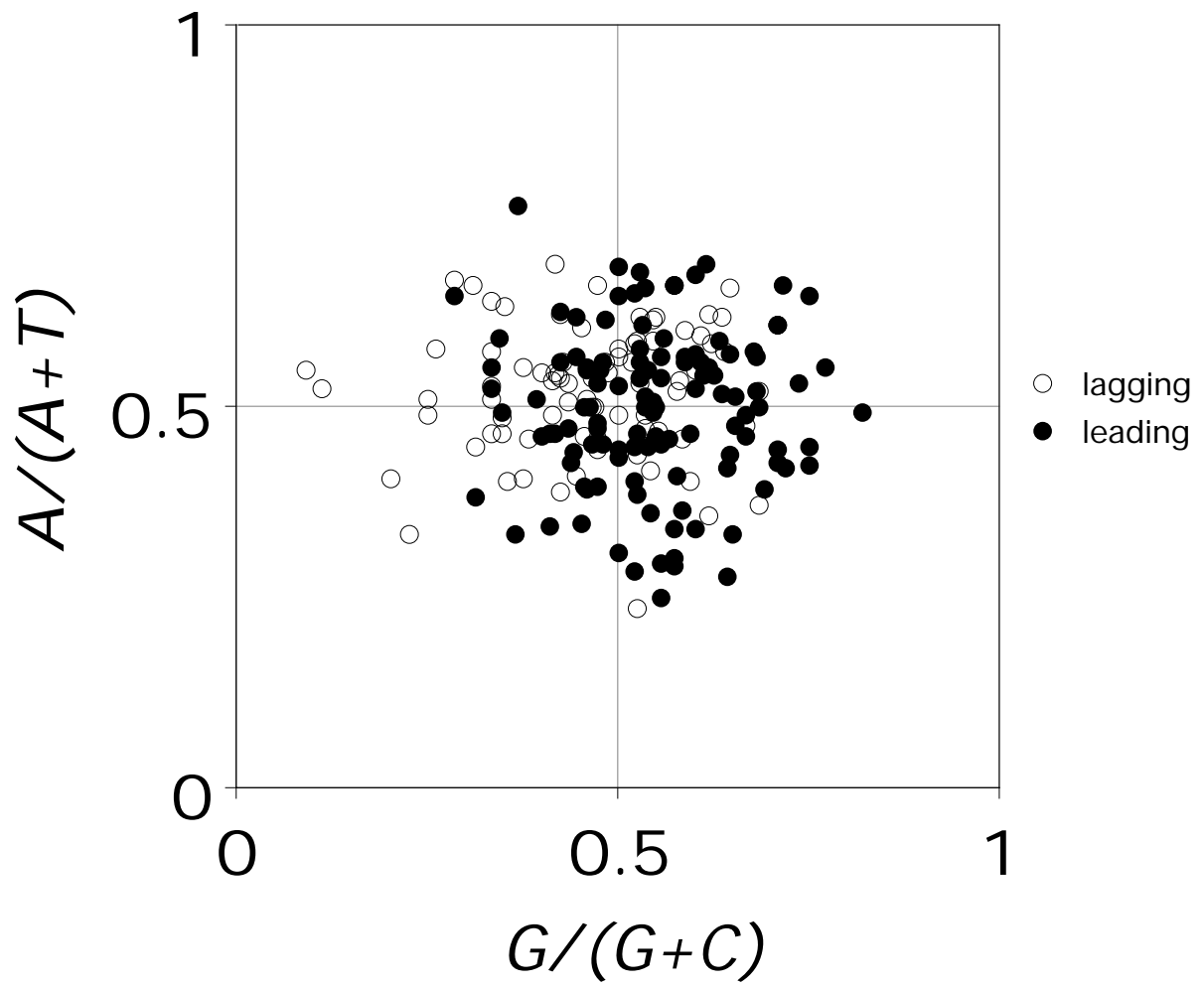
Escherichia coli K-12



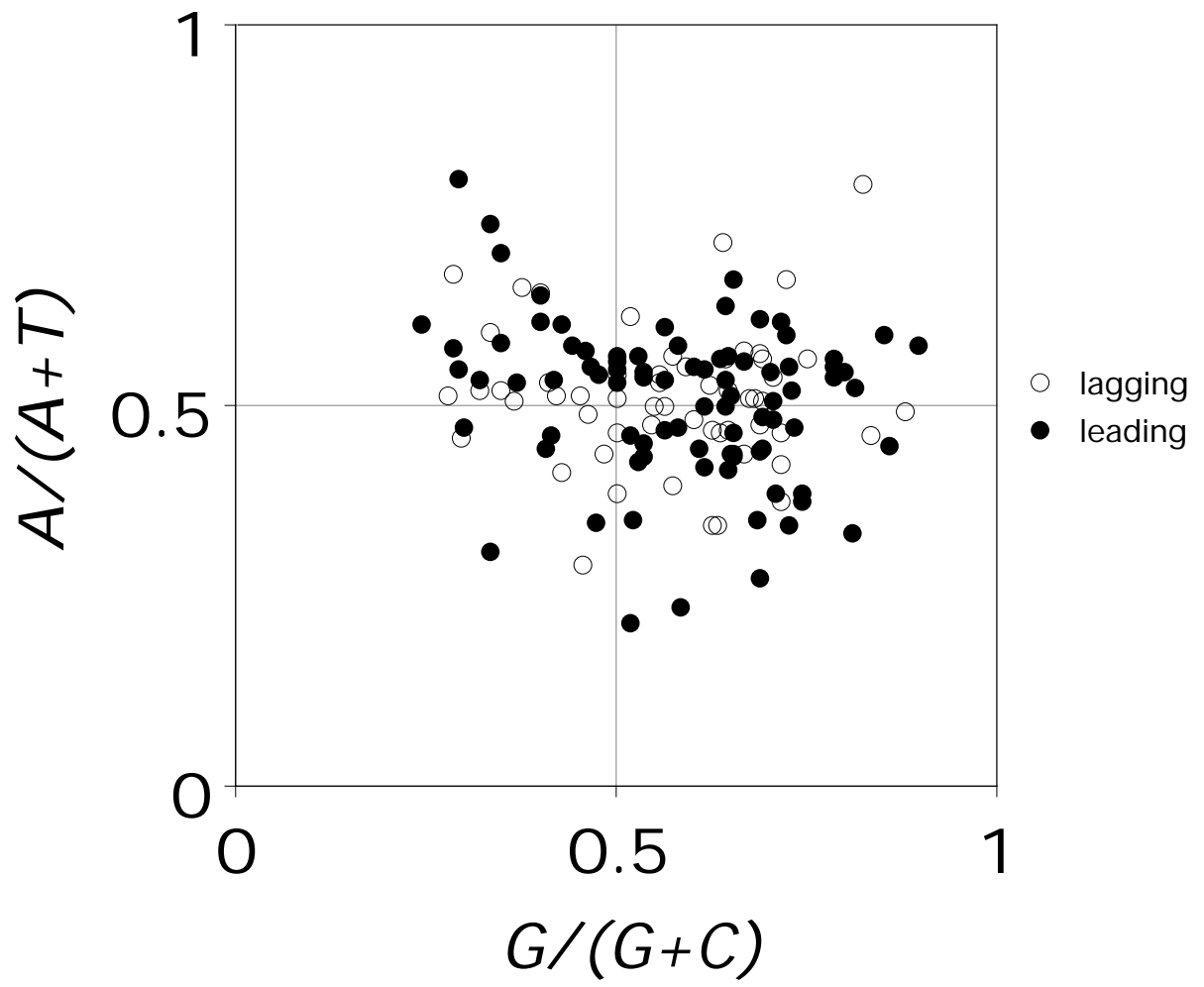
Escherichia coli EDL933



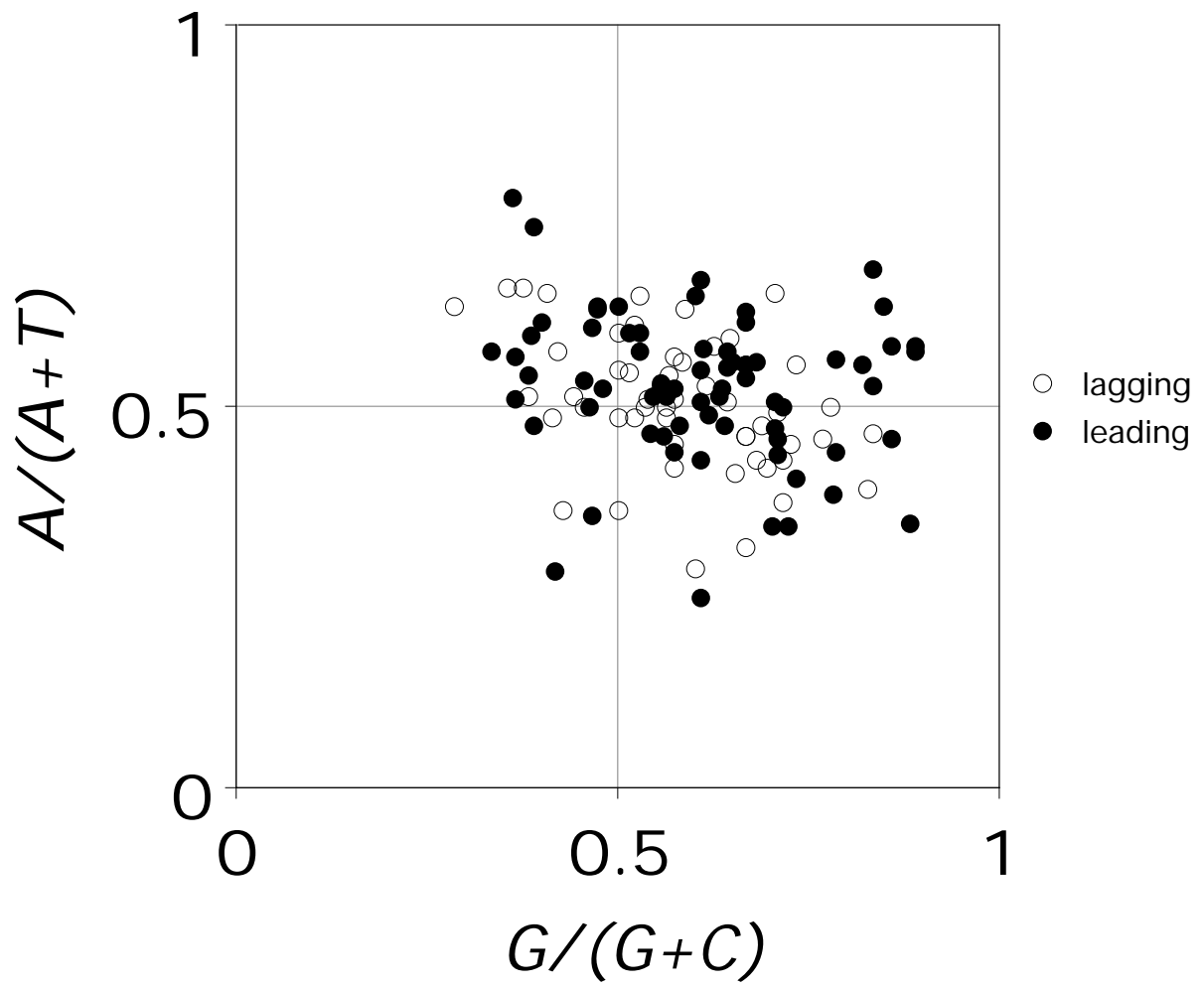
Escherichia coli RIMD 0509952



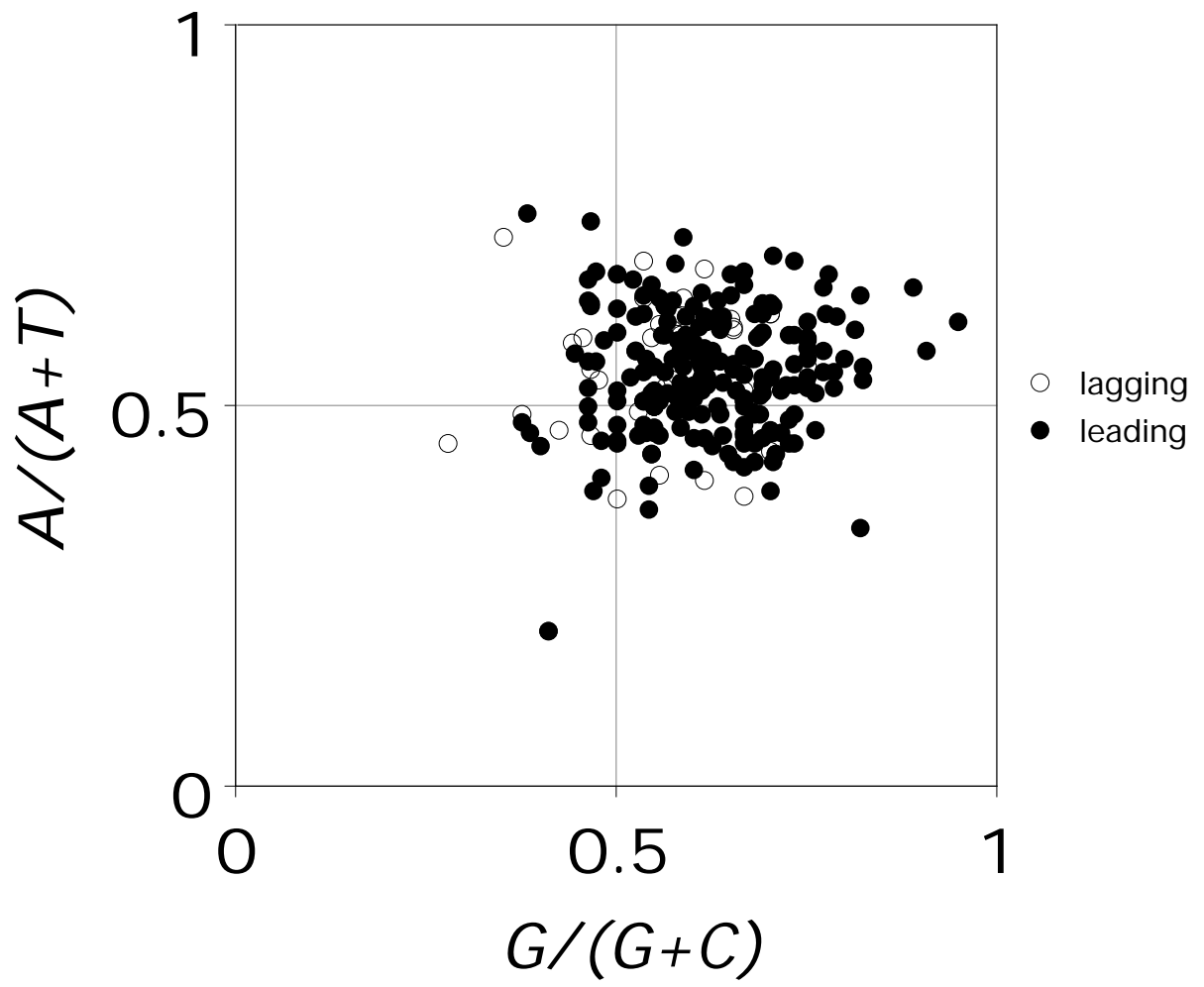
Haemophilus influenzae



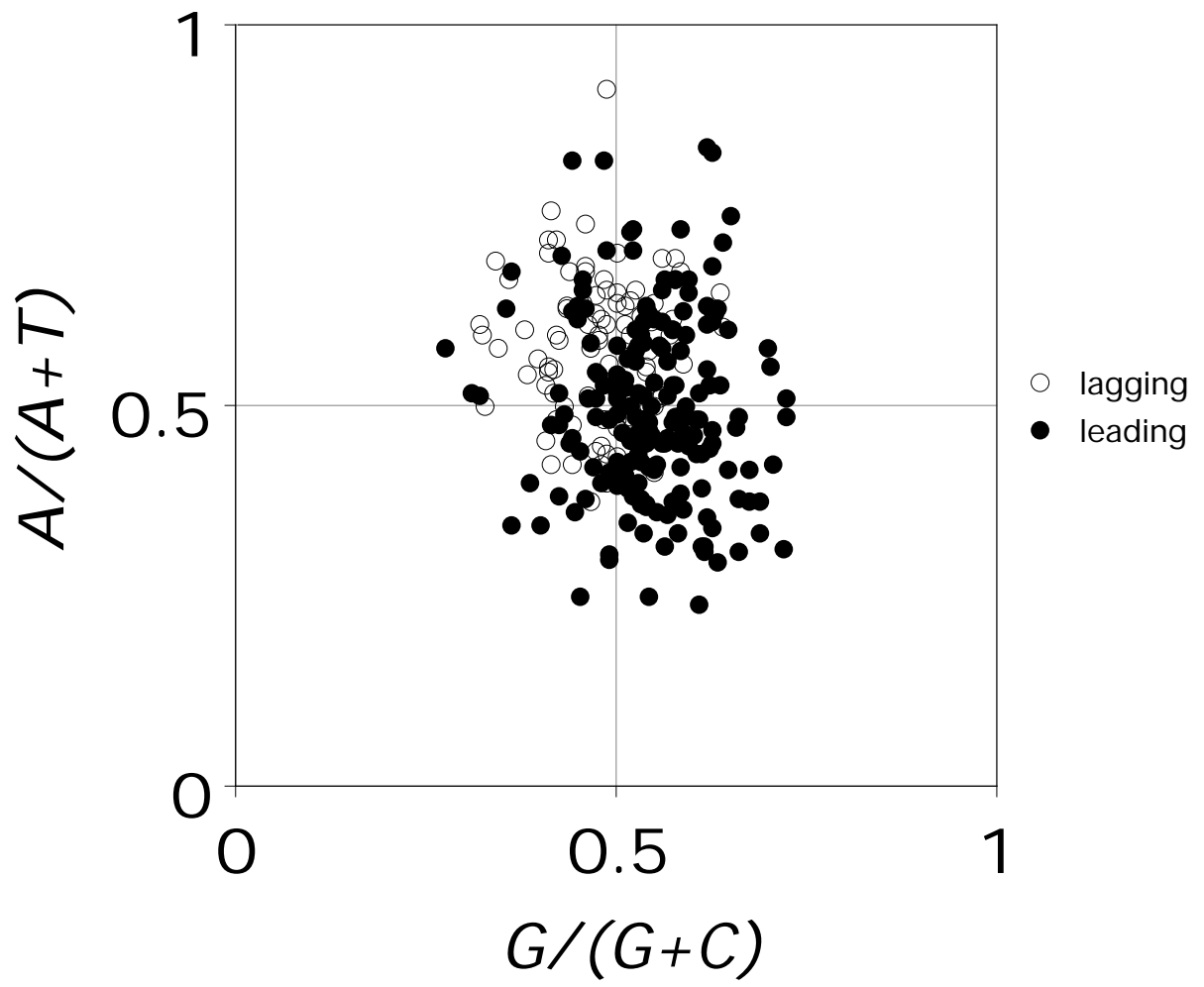
Helicobacter pylori 26695



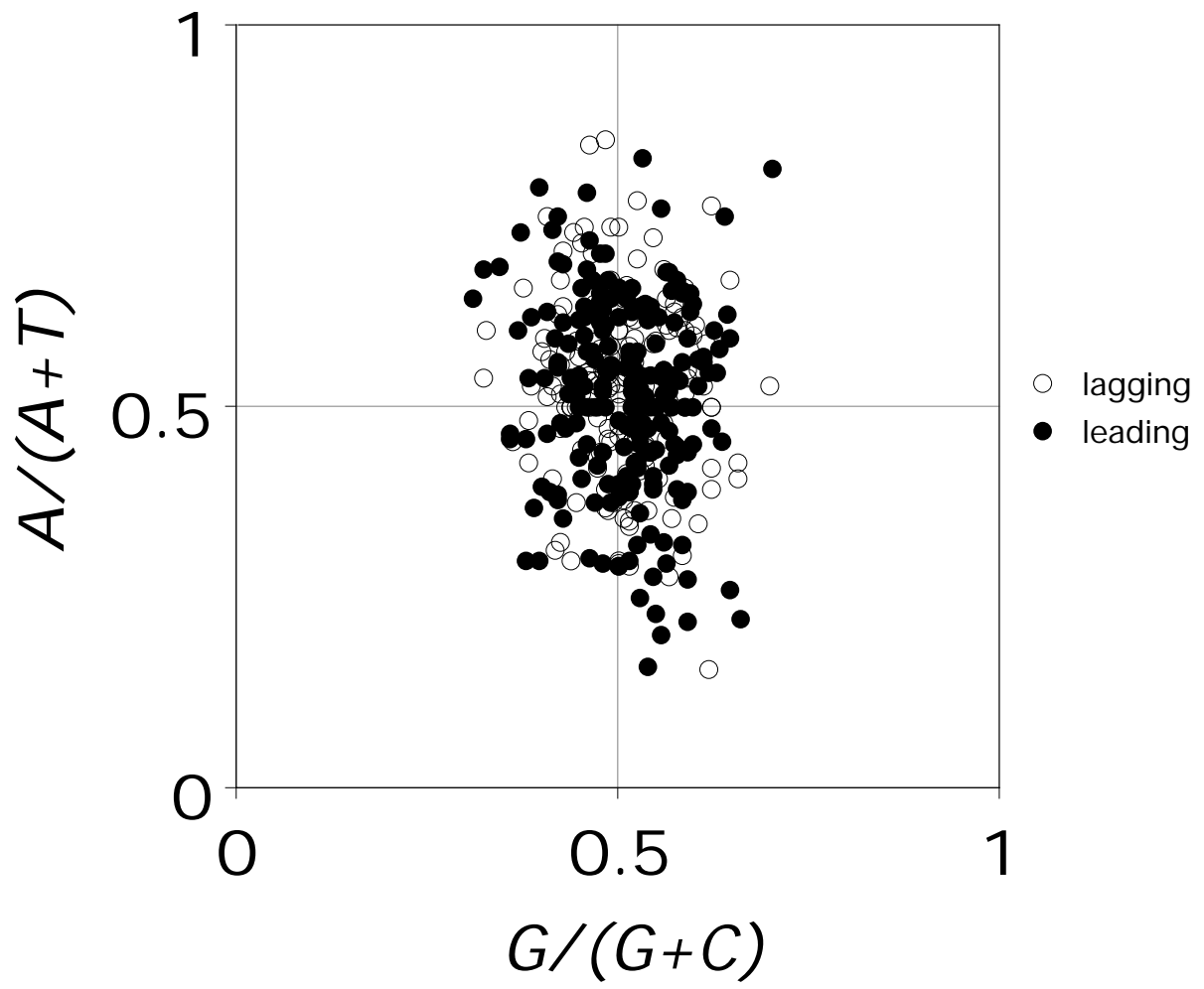
Helicobacter pylori J99



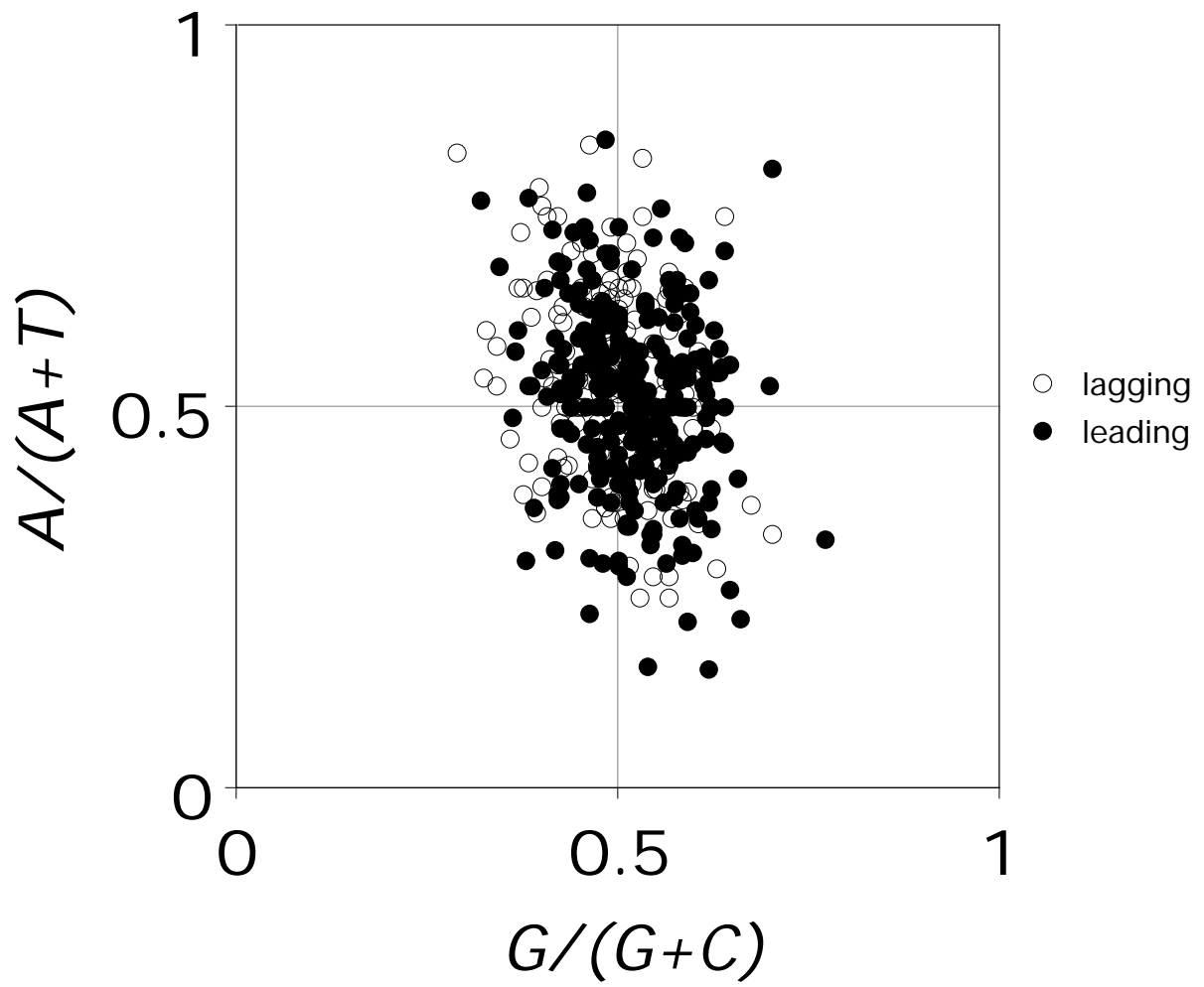
Lactococcus lactis



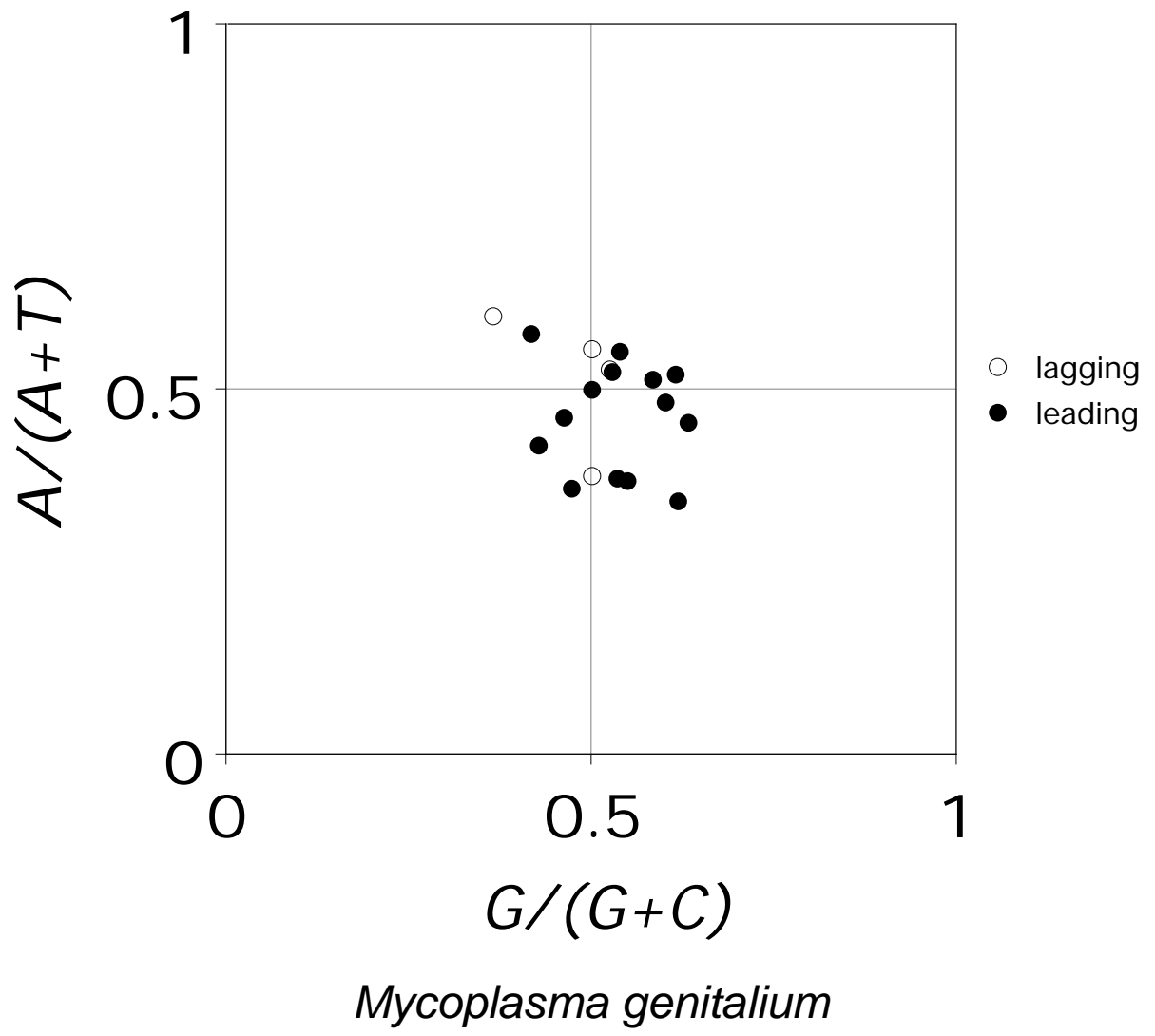
Mycobacterium leprae

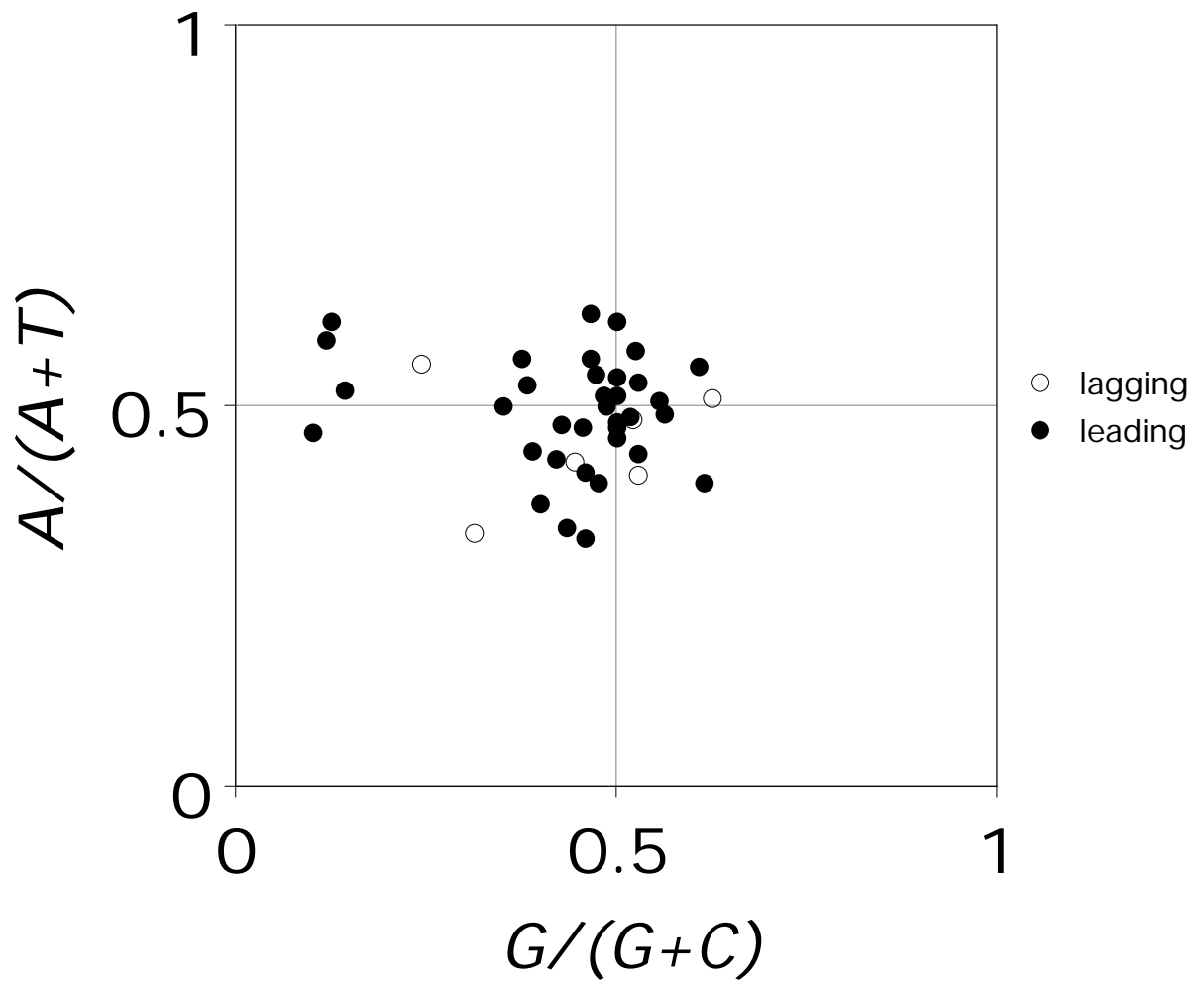


Mycobacterium tuberculosis H37Rv

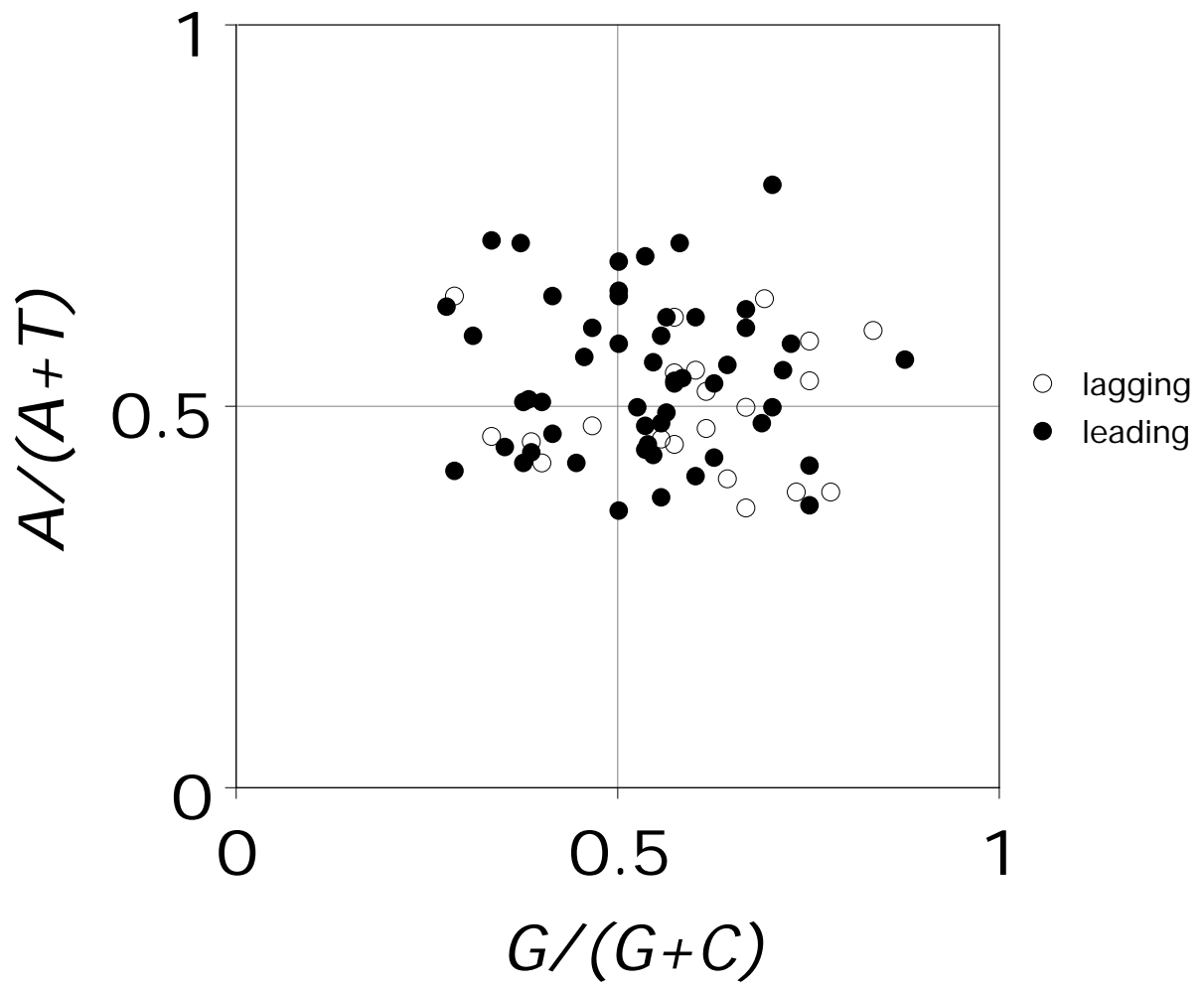


Mycobacterium tuberculosis CDC1551

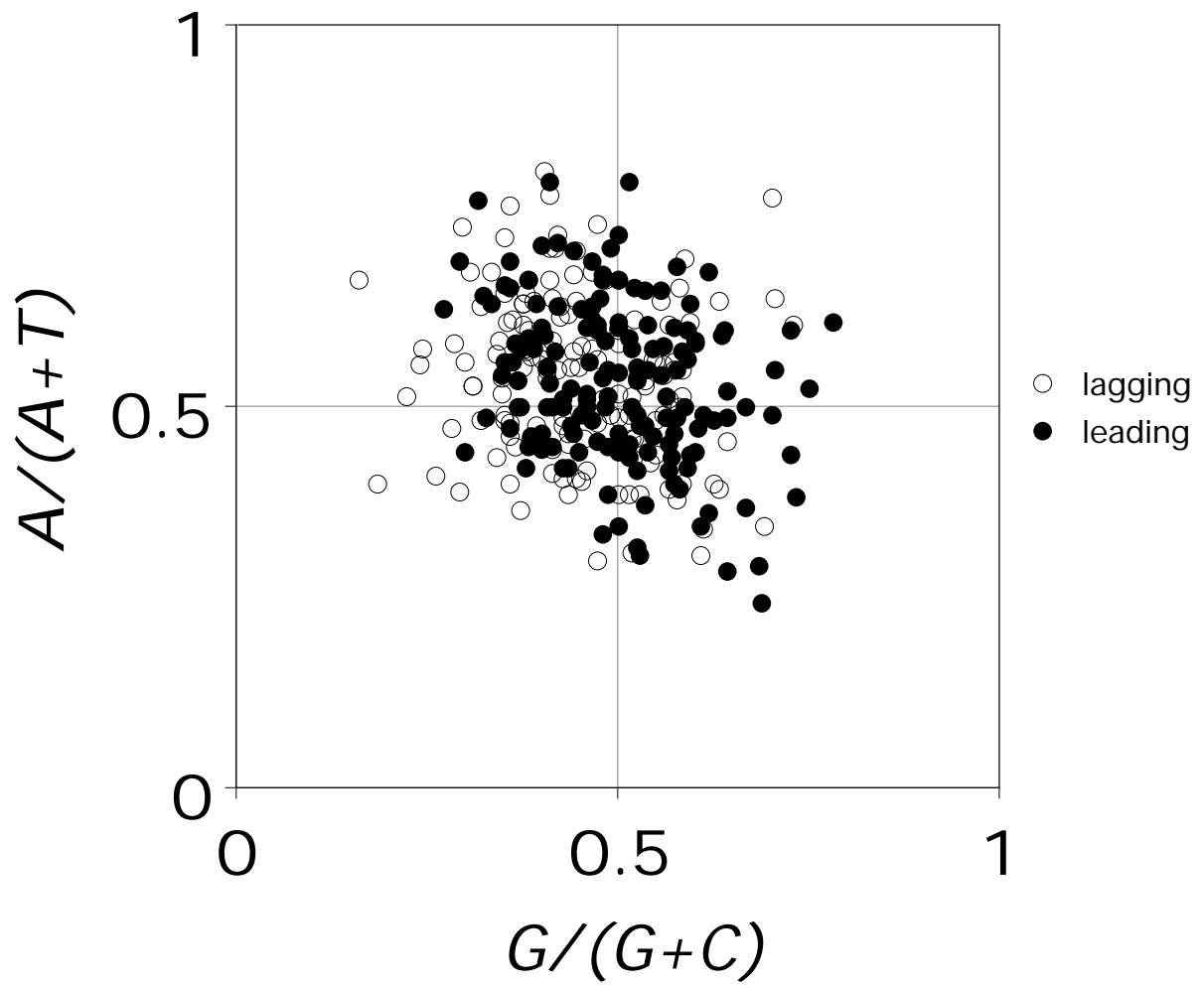




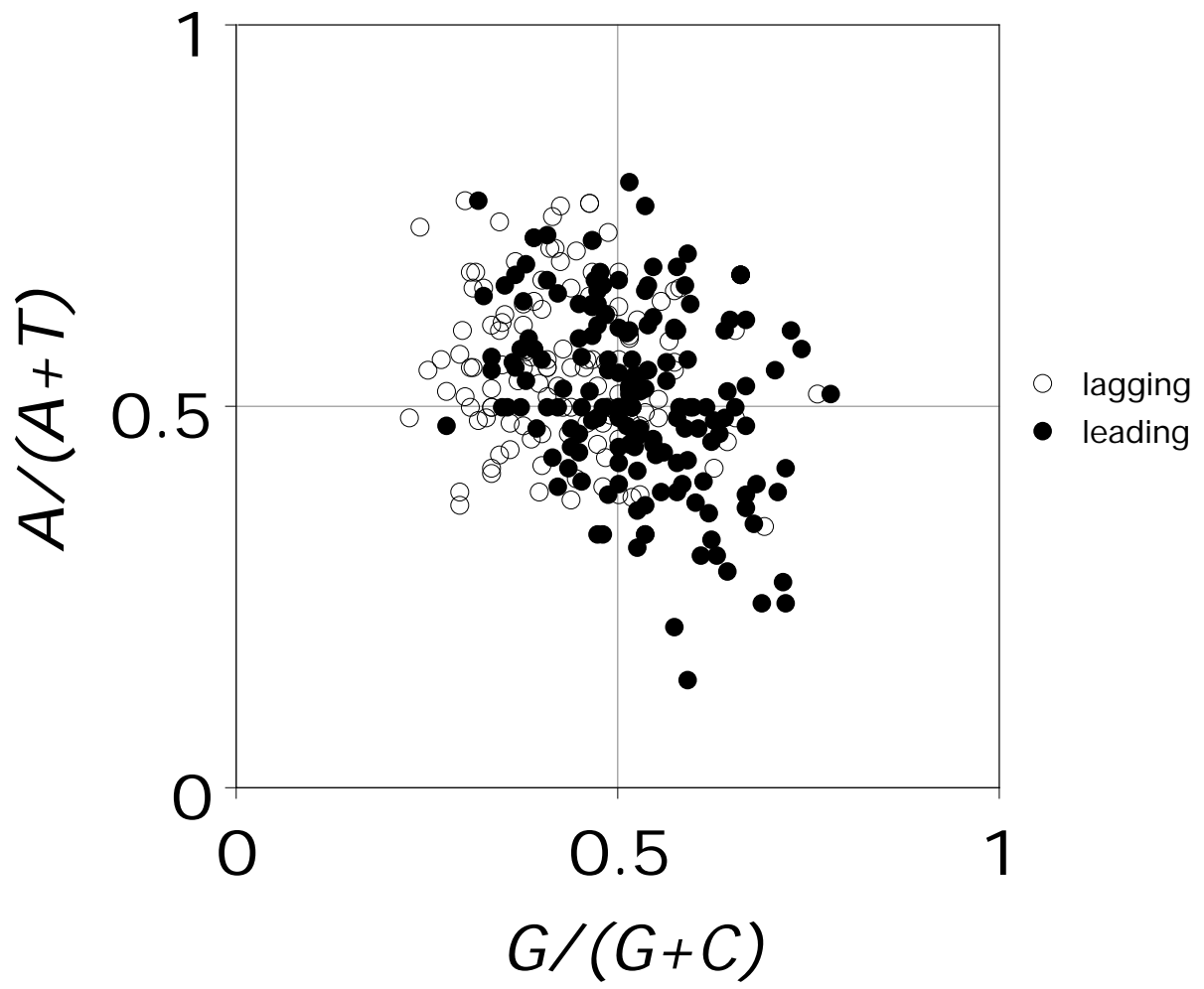
Mycoplasma pneumoniae



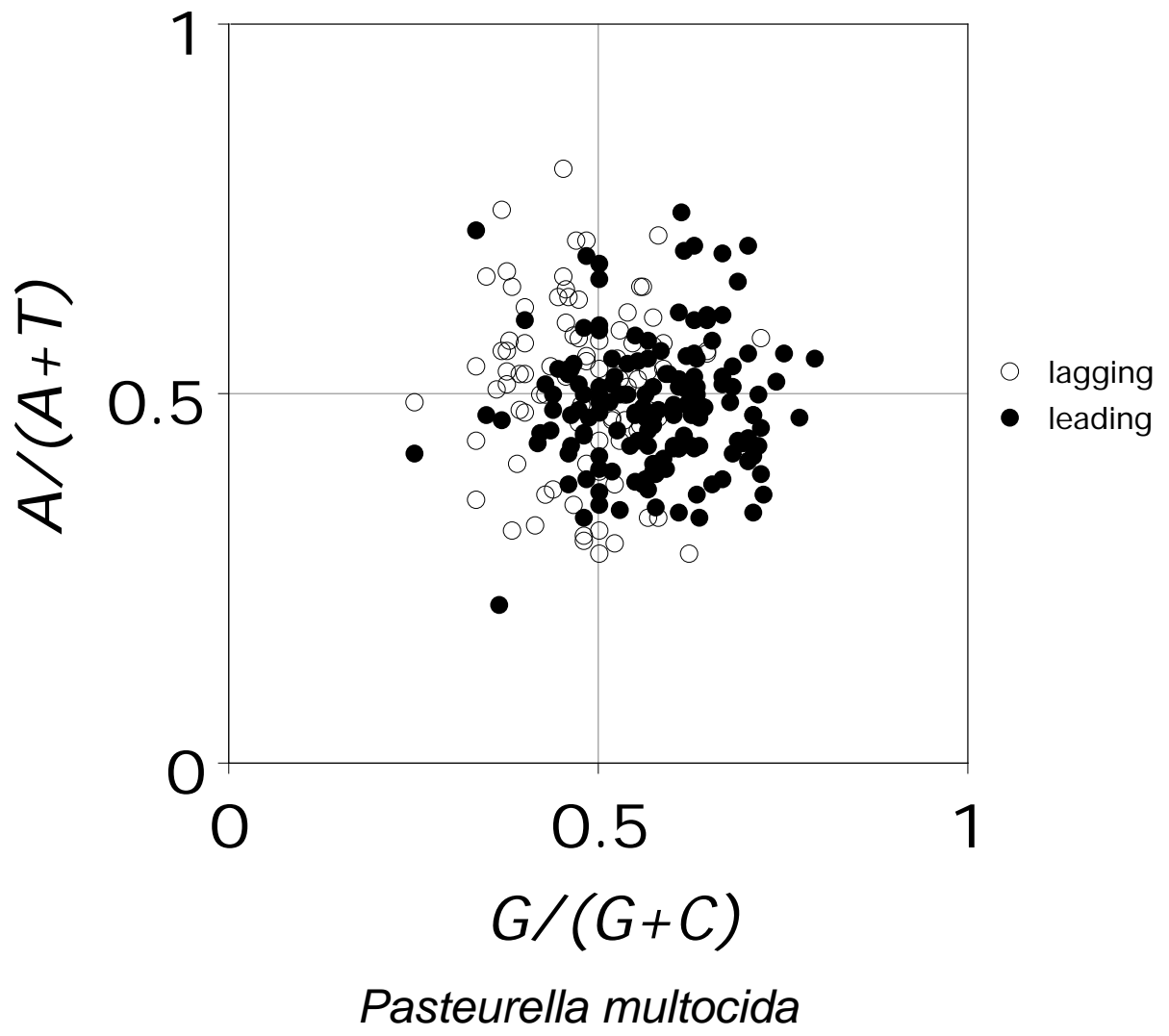
Mycoplasma pulmonis

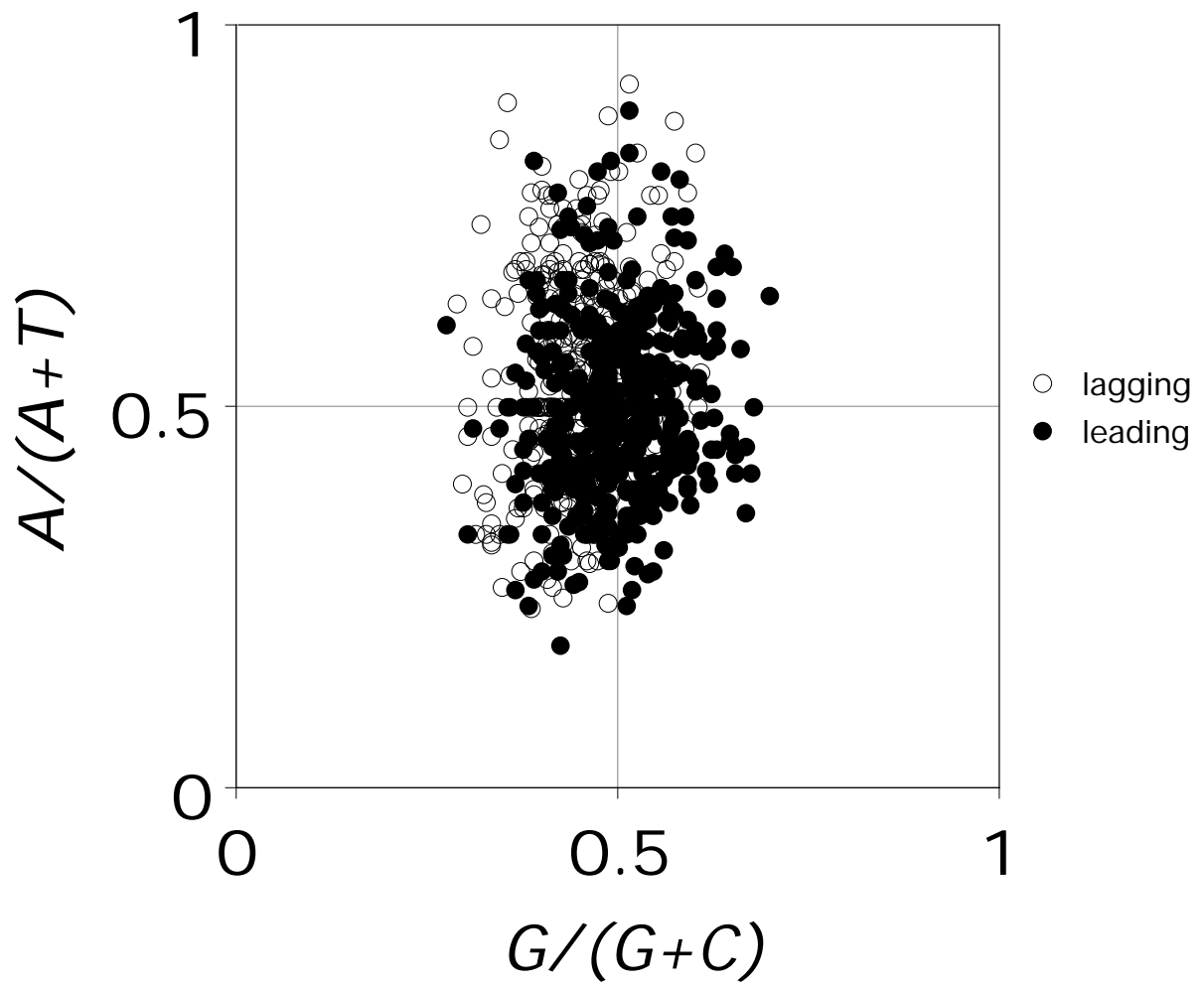


Neisseria meningitidis Z2491 (A)

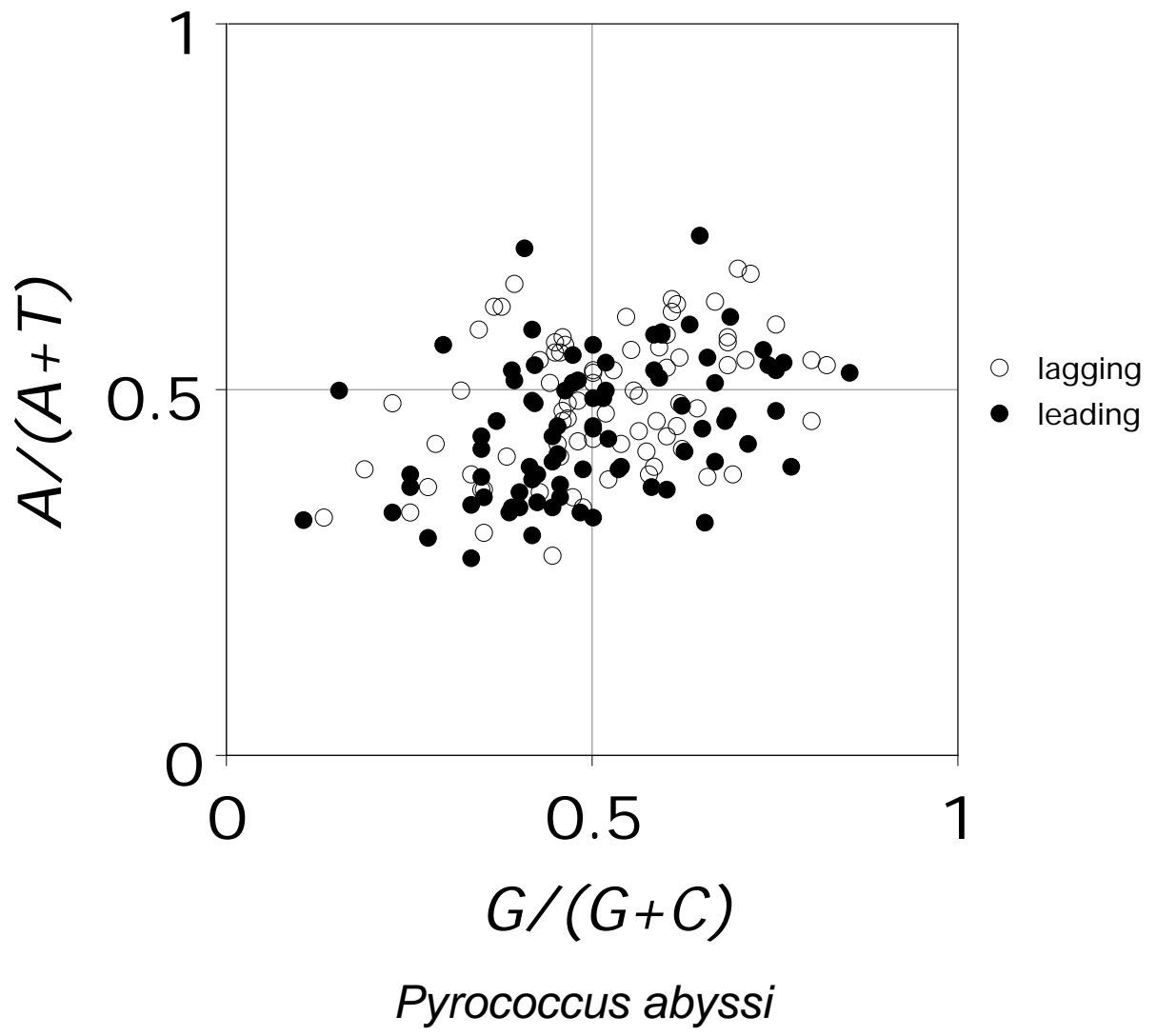


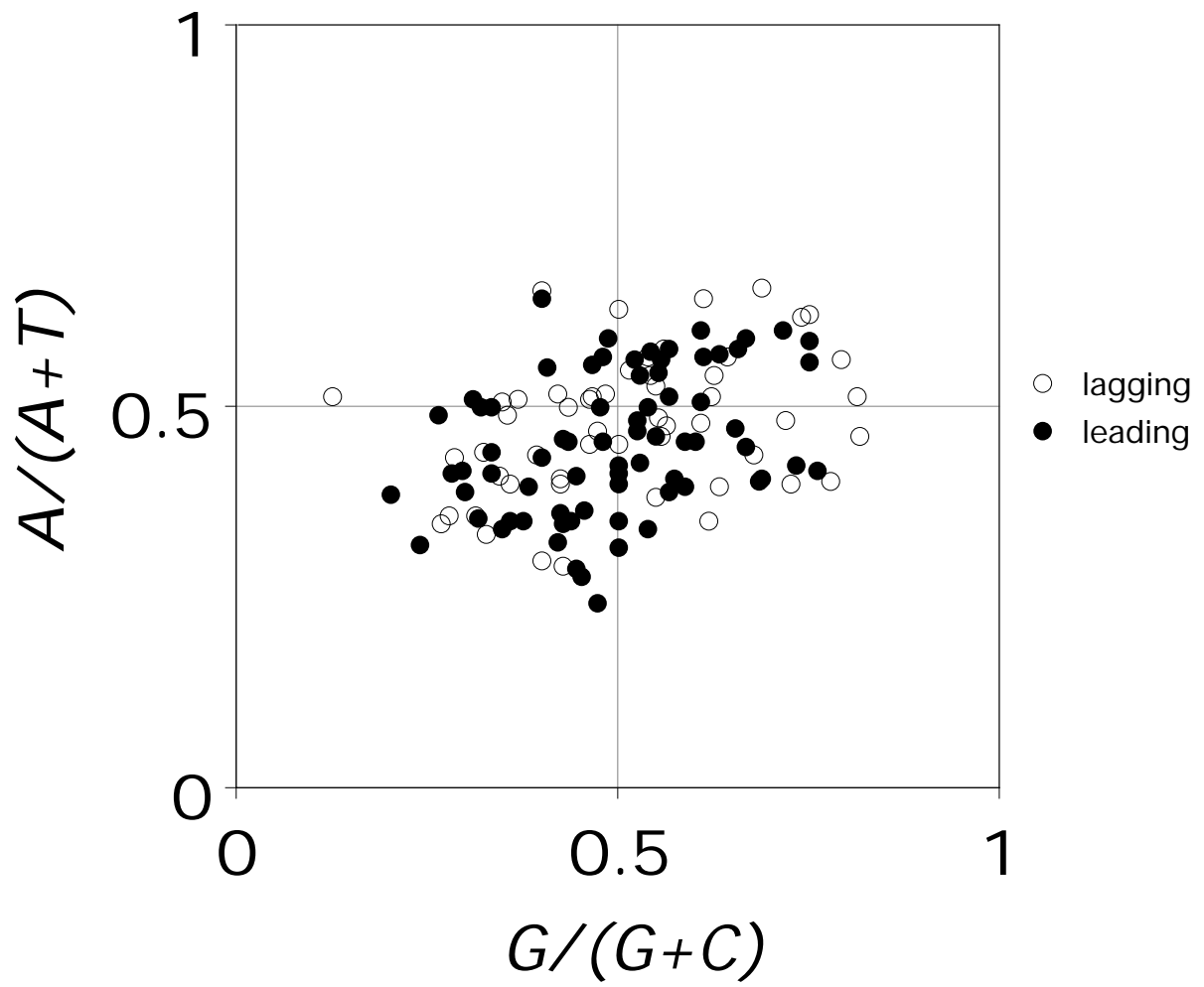
Neisseria meningitidis MC58 (B)



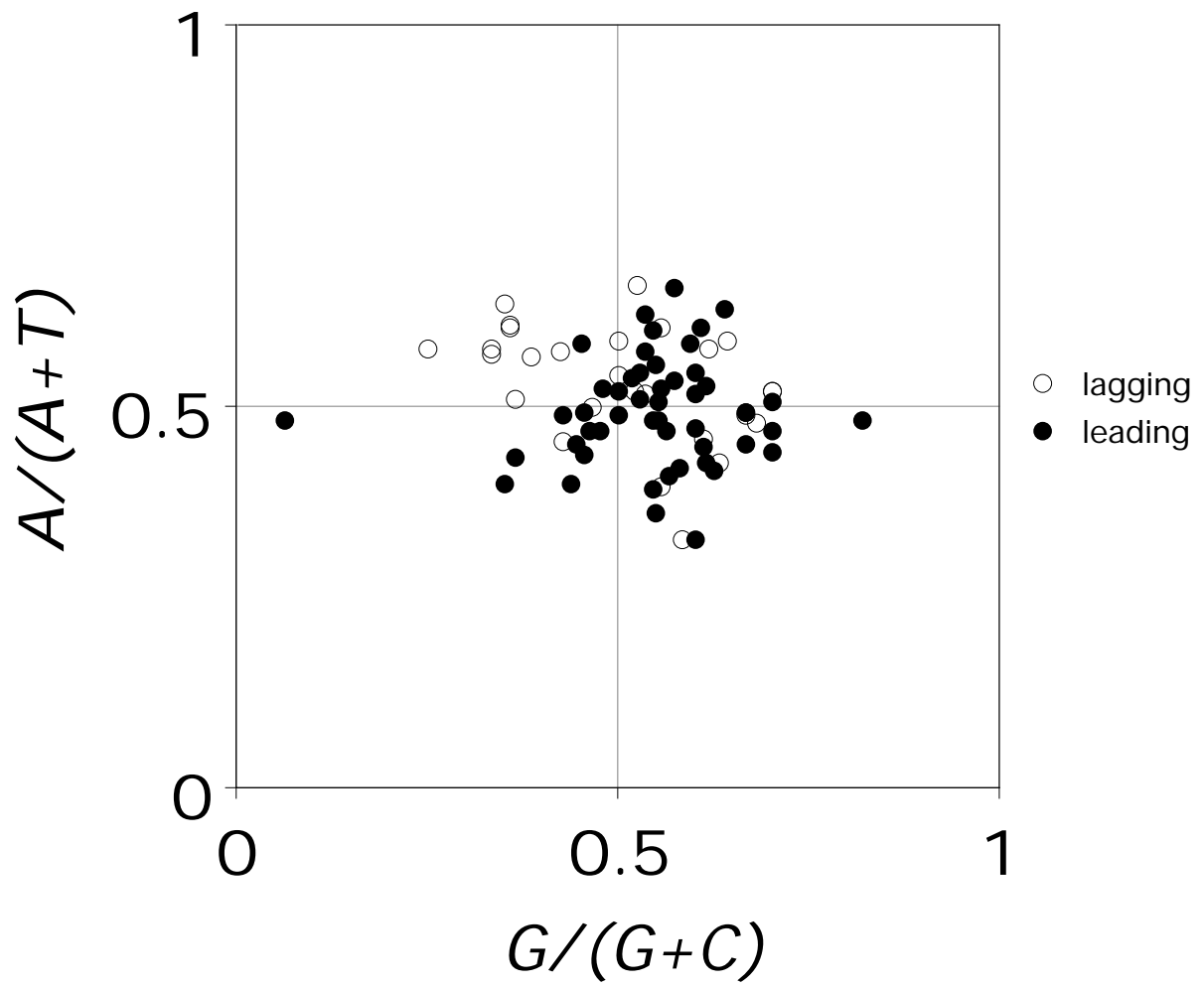


Pseudomonas aeruginosa

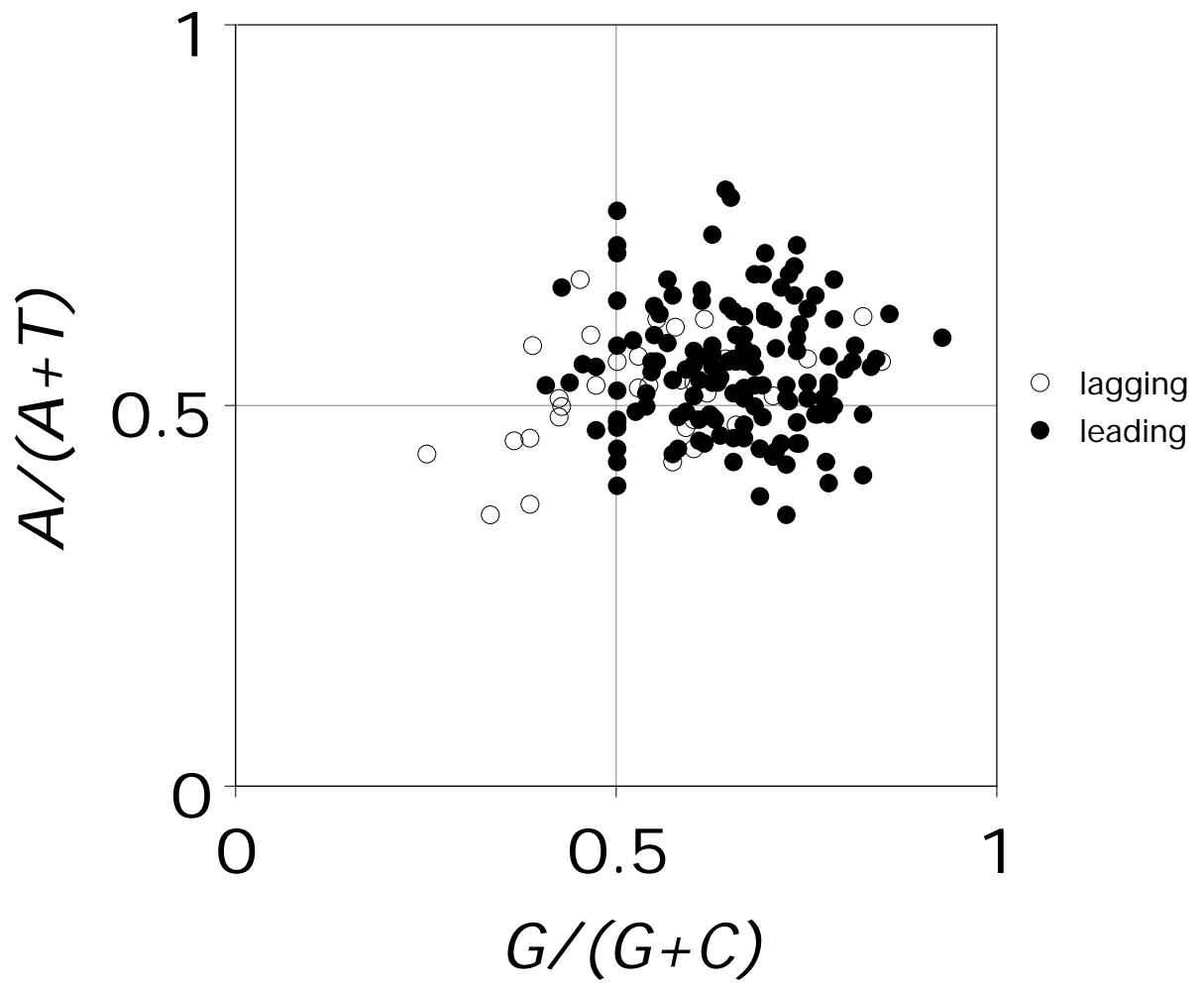




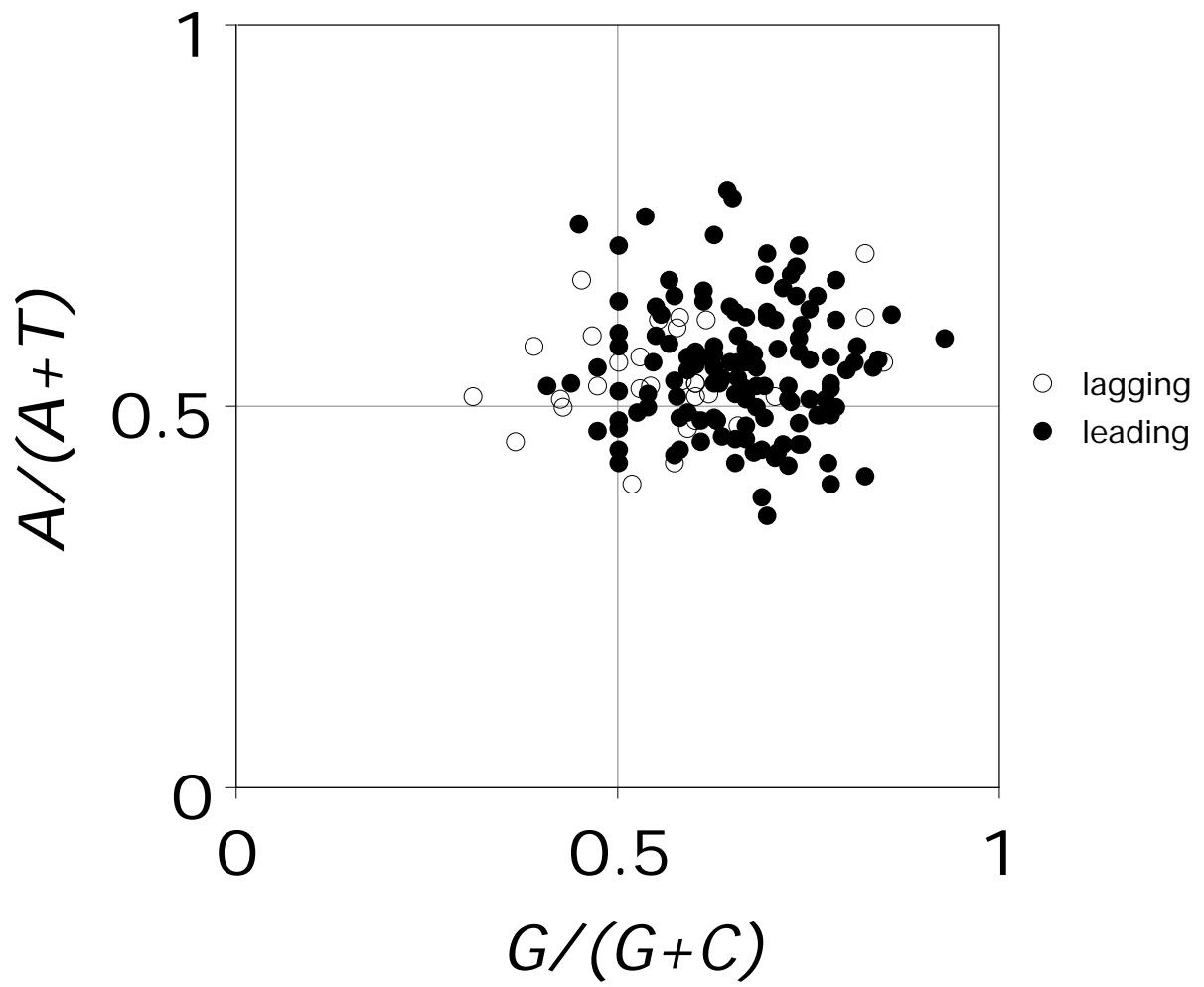
Pyrococcus horikoshii



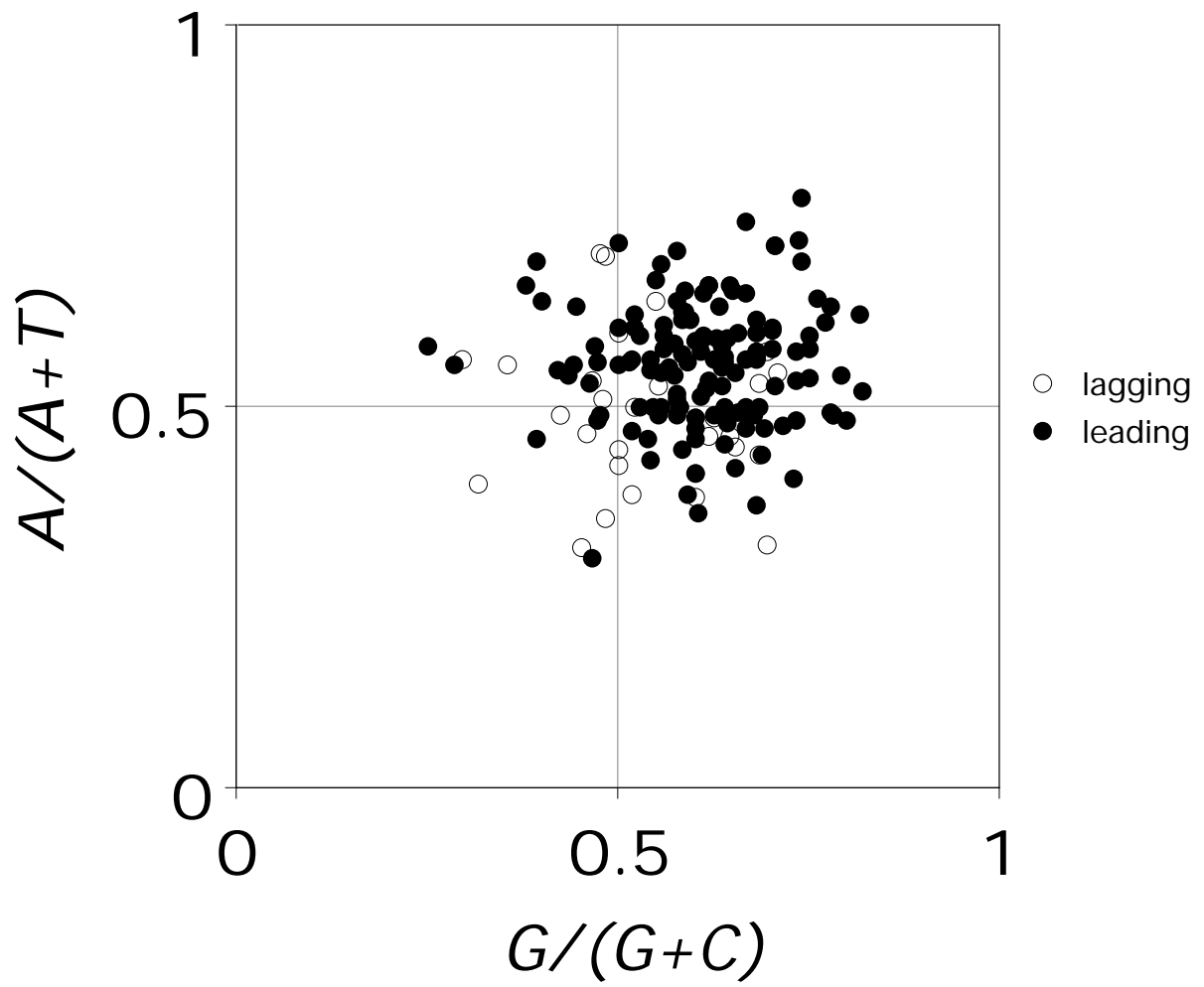
Rickettsia prowazekii



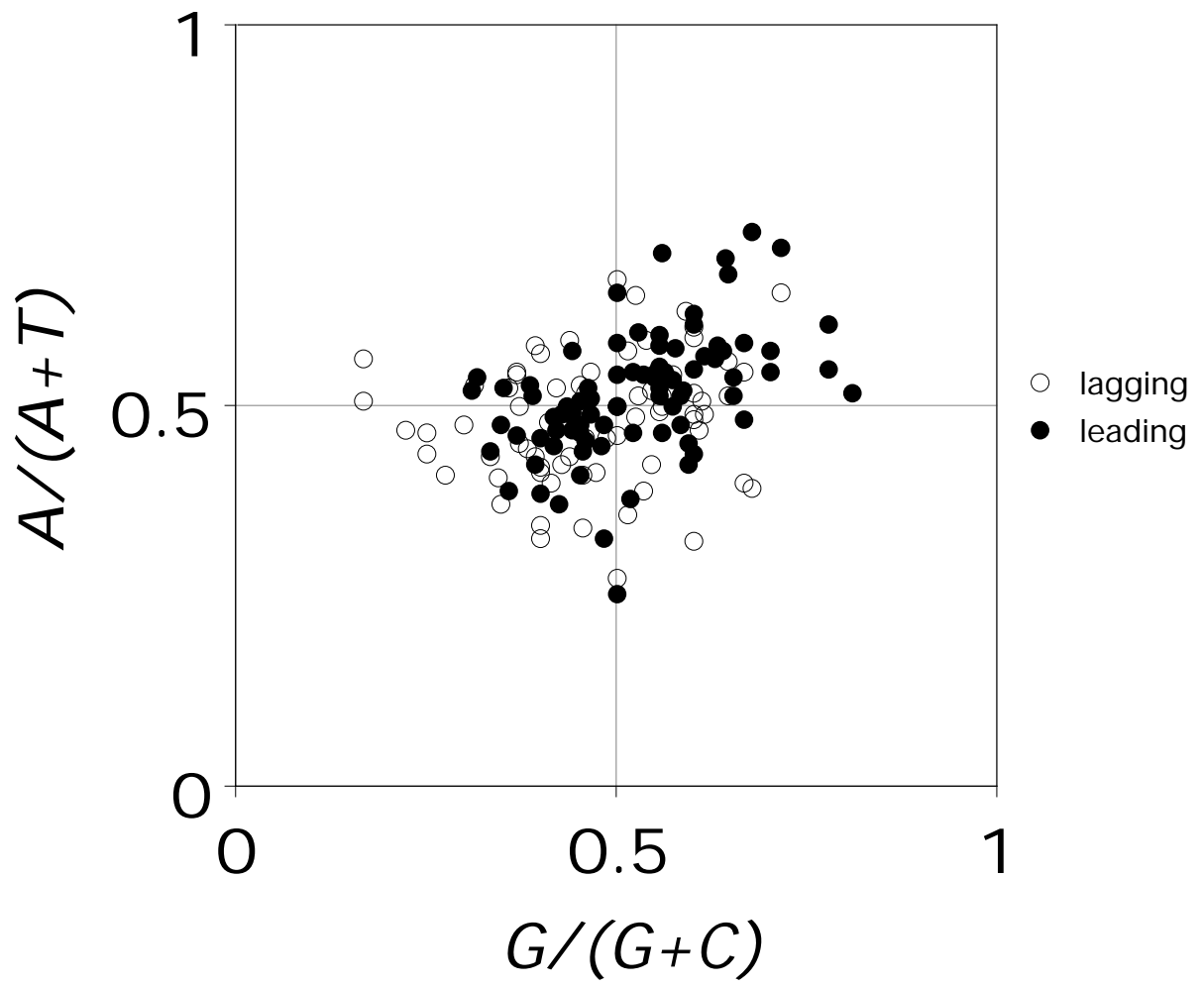
Staphylococcus aureus Mu50



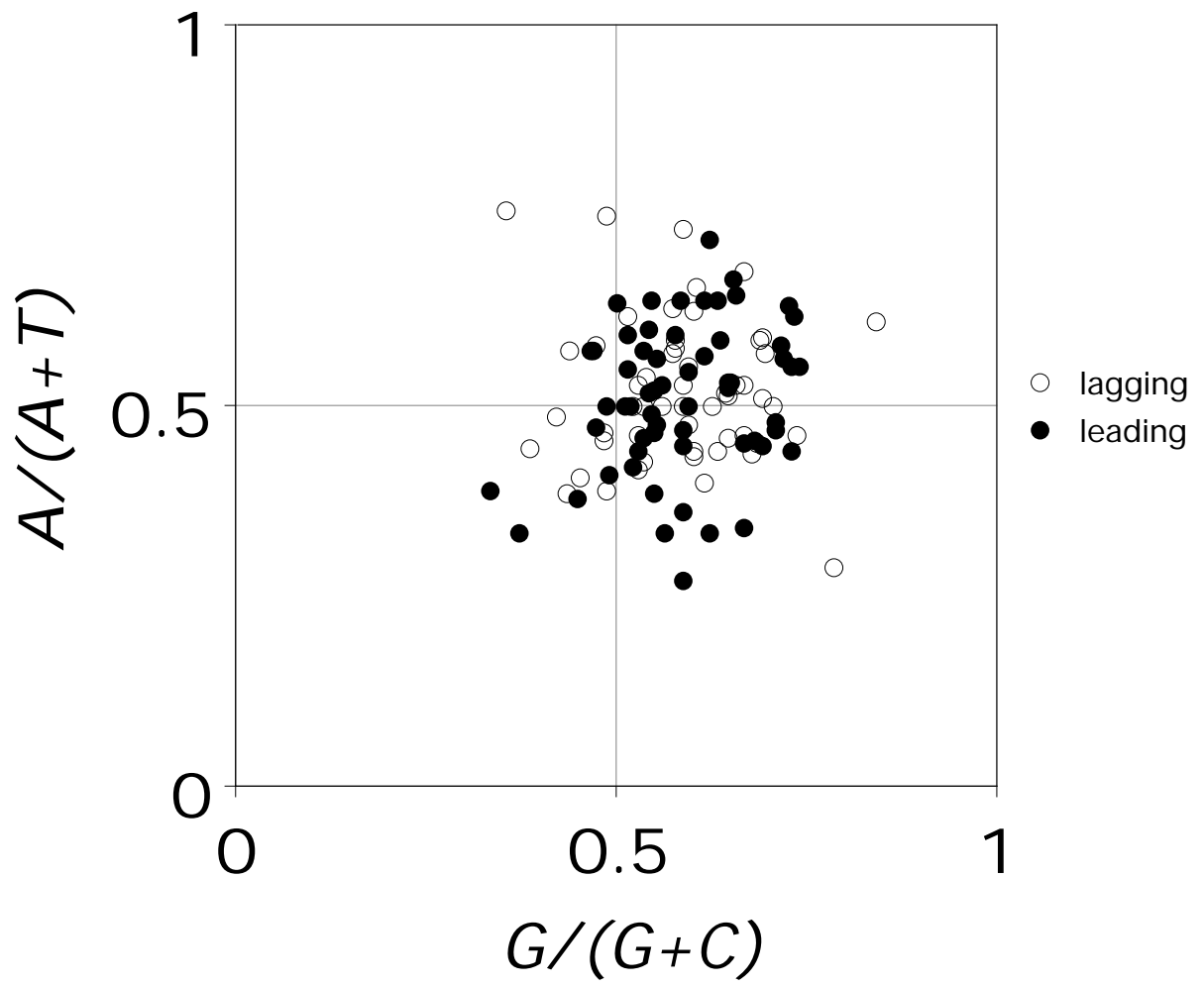
Staphylococcus aureus N315



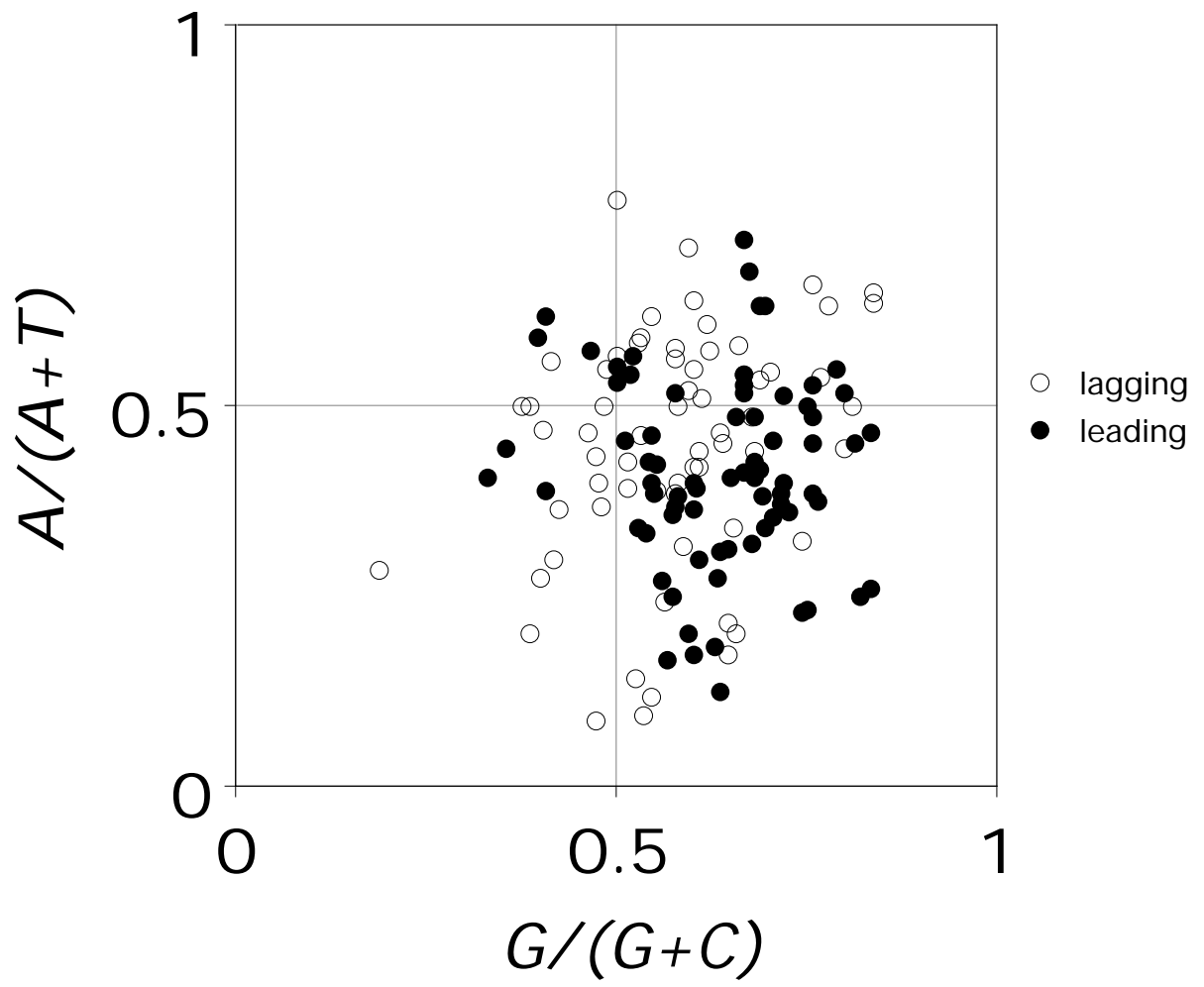
Streptococcus pyogenes



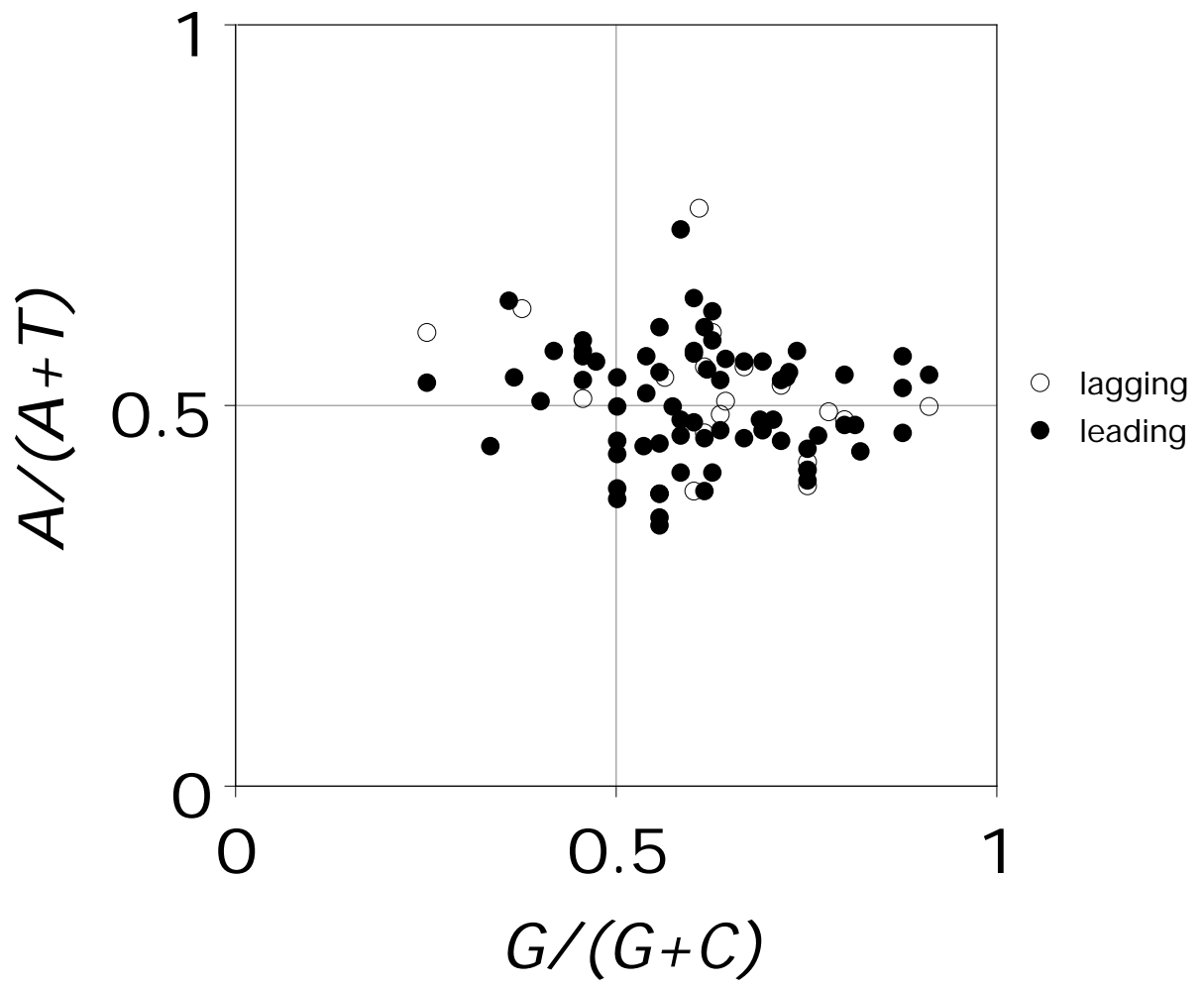
Thermoplasma acidophilum



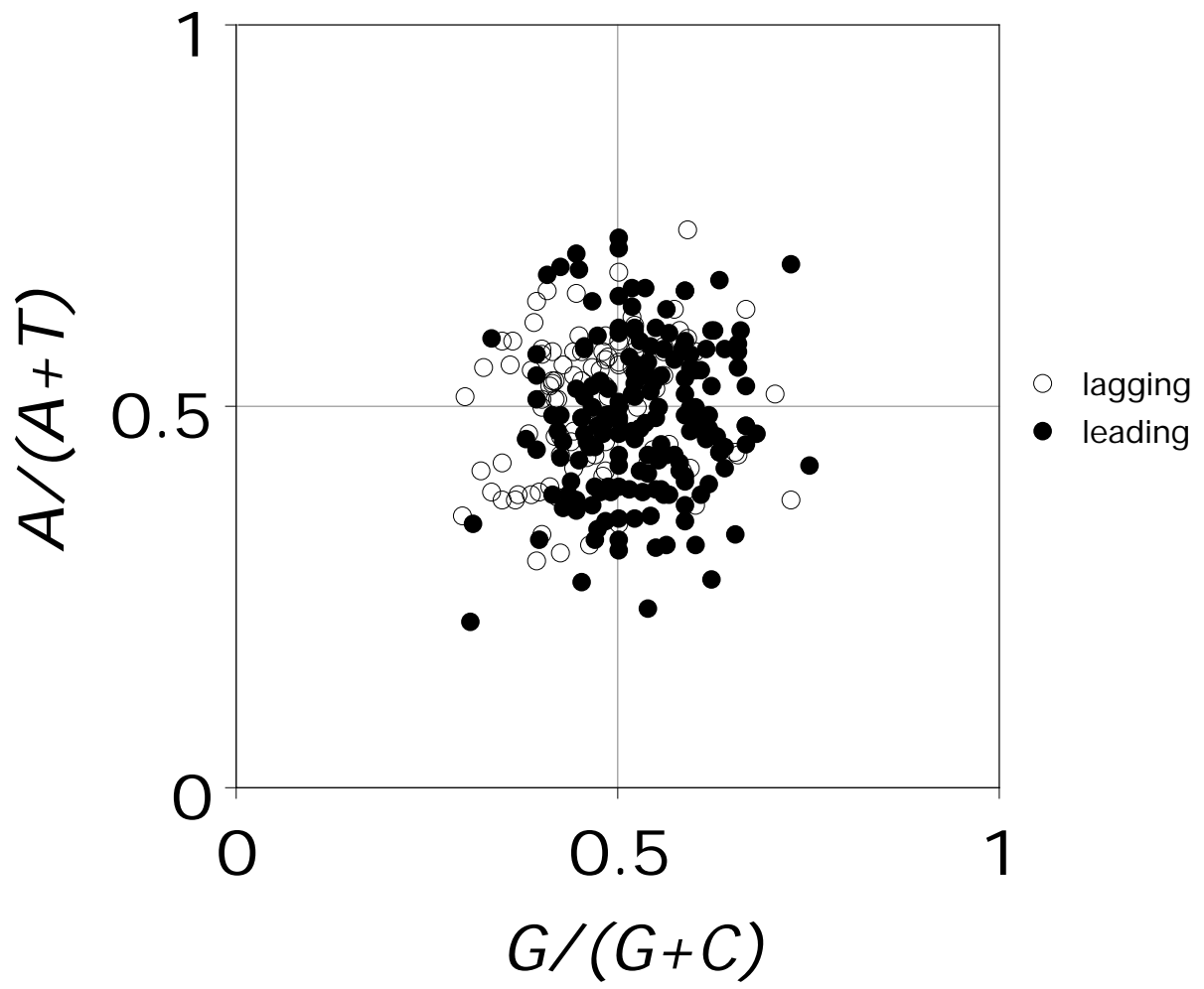
Thermotoga maritima



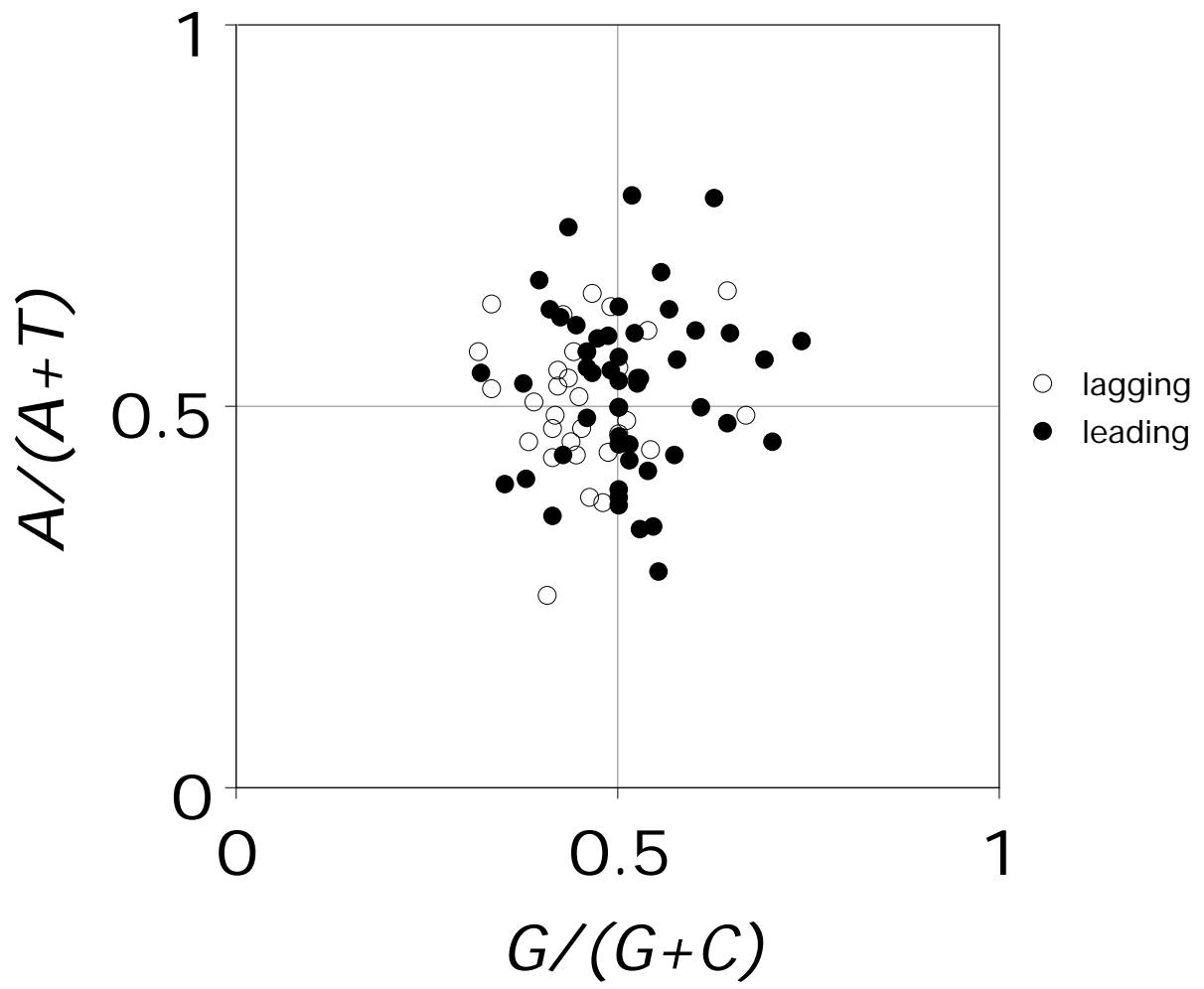
Treponema pallidum



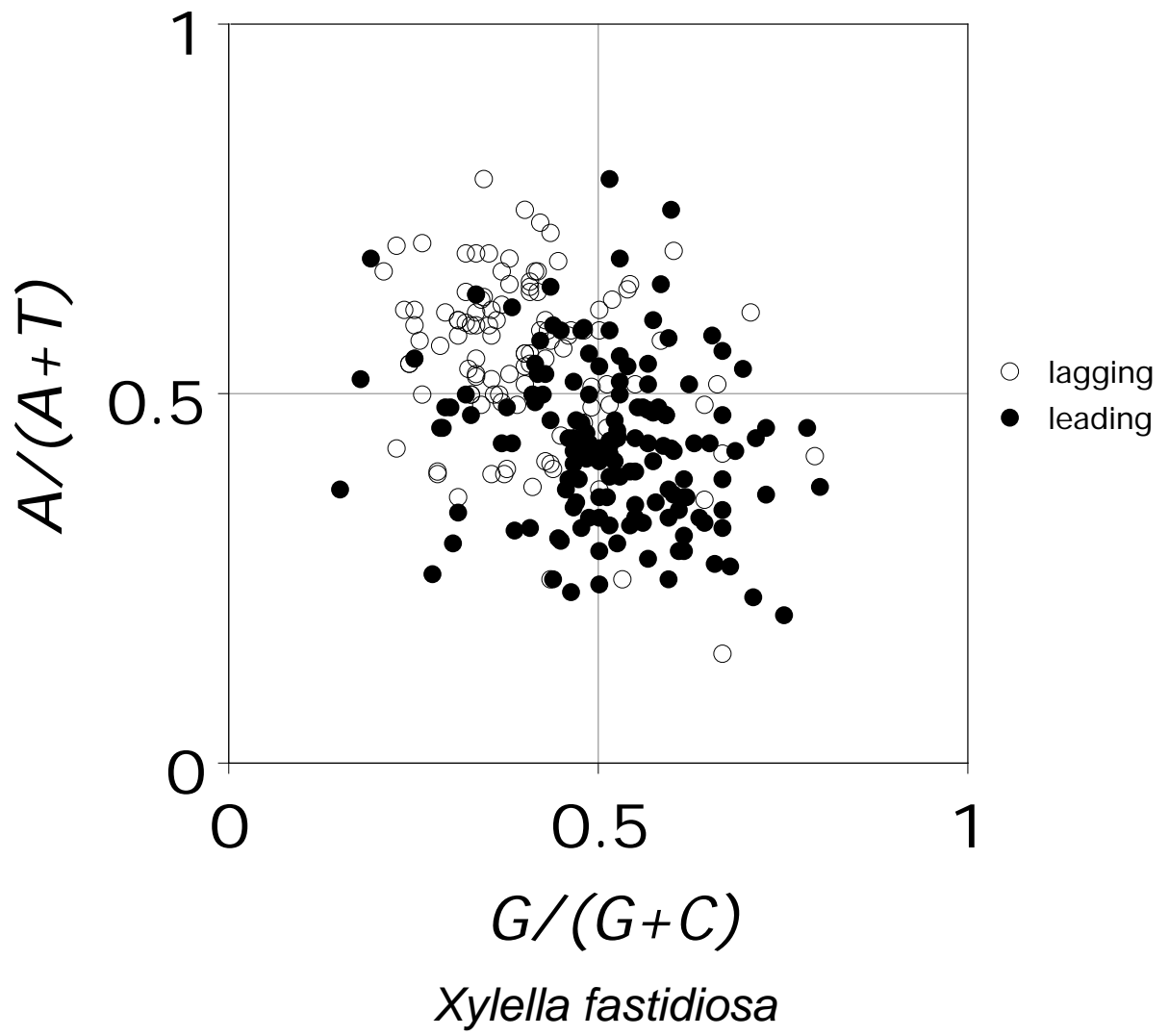
Ureaplasma urealyticum



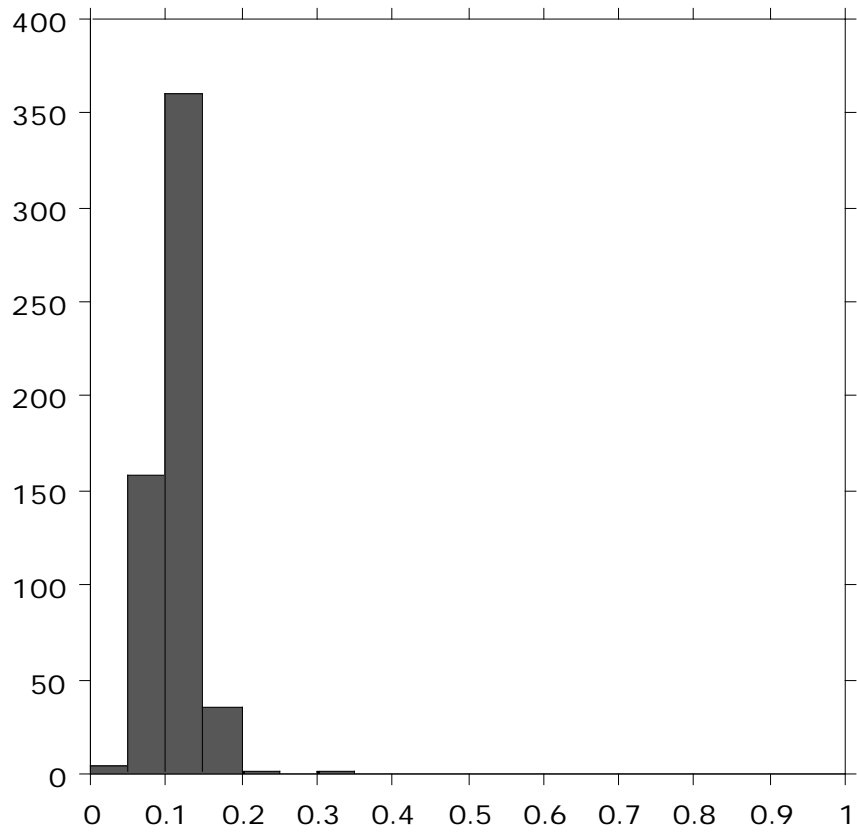
Vibrio cholerae chromosome 1



Vibrio cholerae chromosome 2



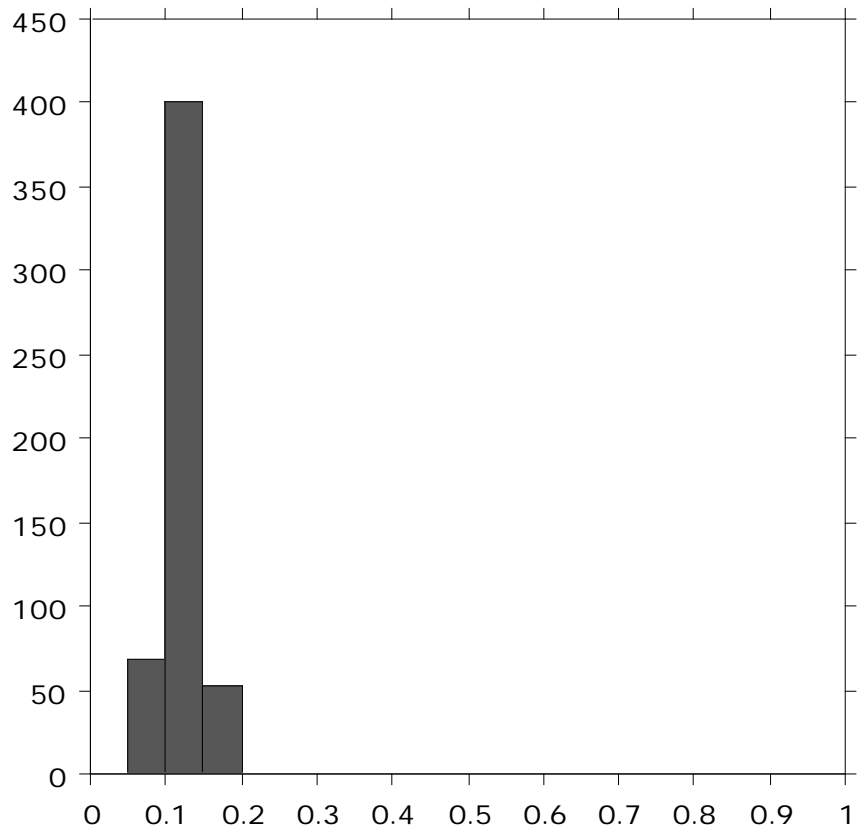
CDS count



P3

Ureaplasma urealyticum

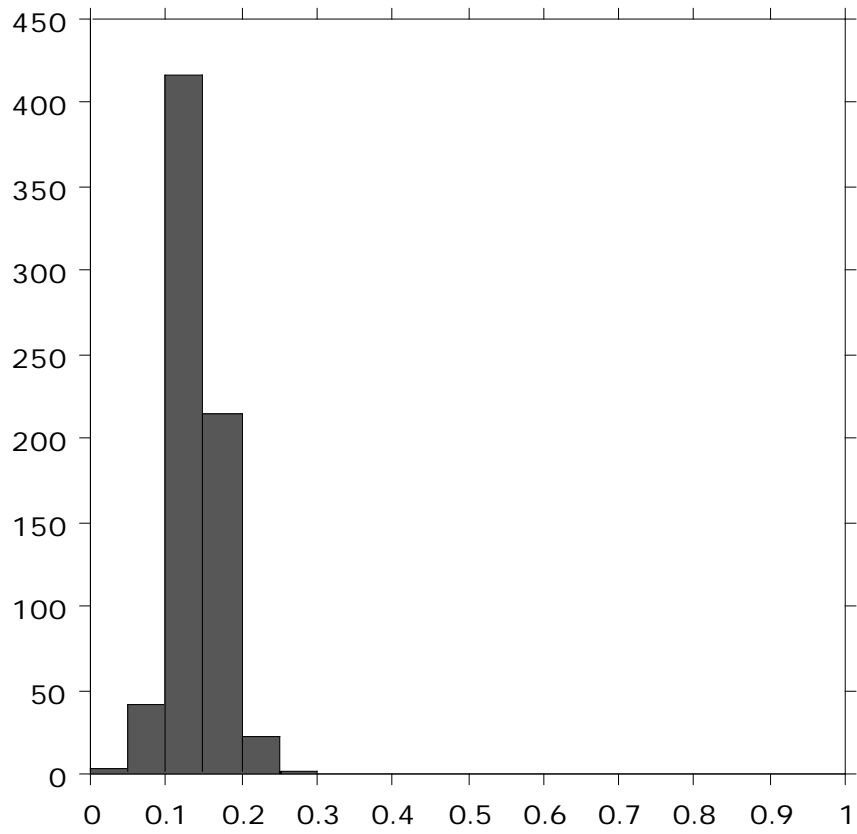
CDS count



P3

Buchnera sp.

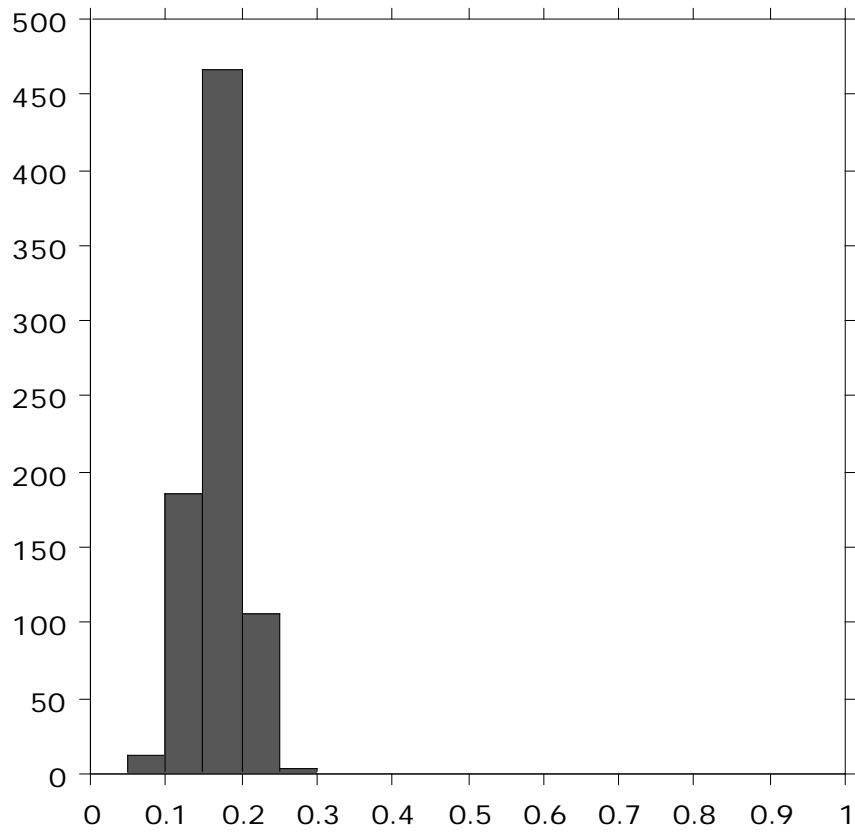
CDS count



P3

Mycoplasma pulmonis

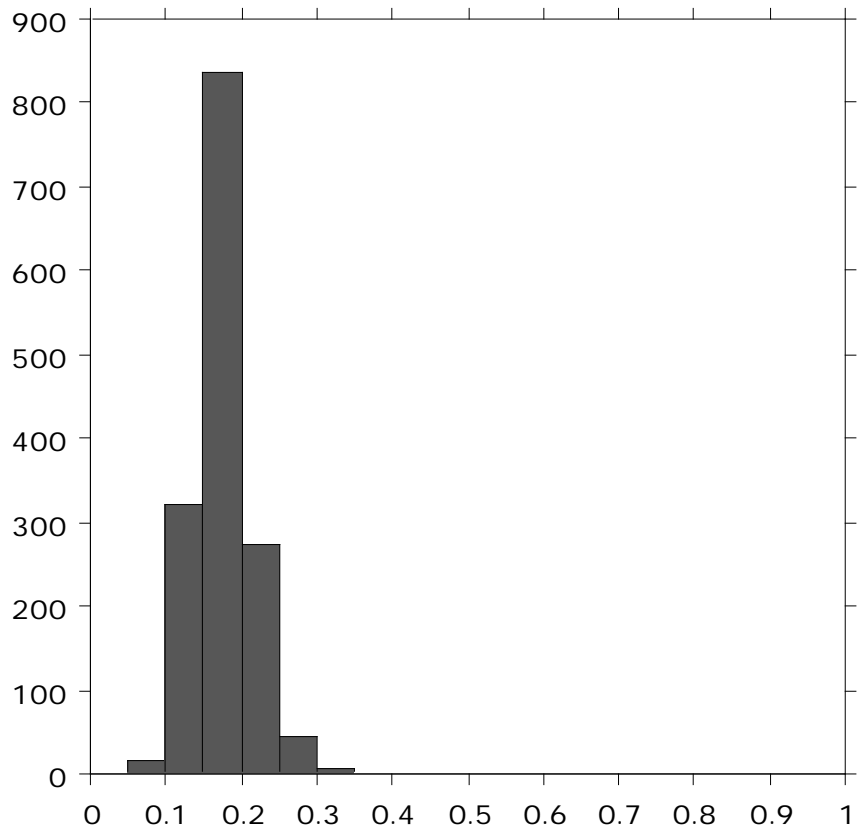
CDS count



P3

Rickettsia prowazekii

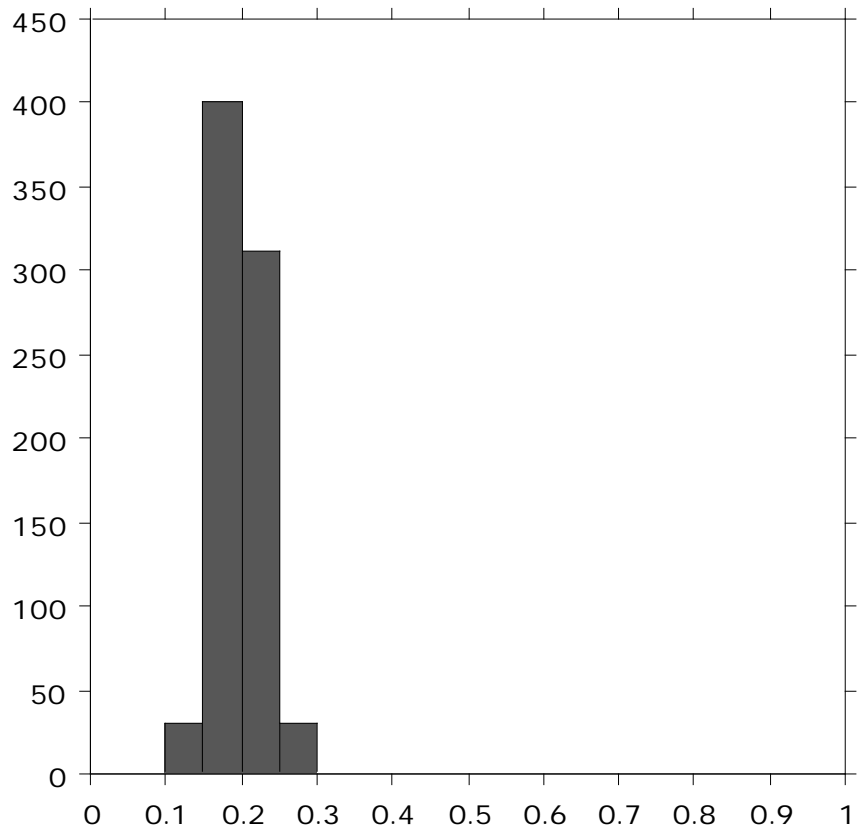
CDS count



P3

Campylobacter jejuni

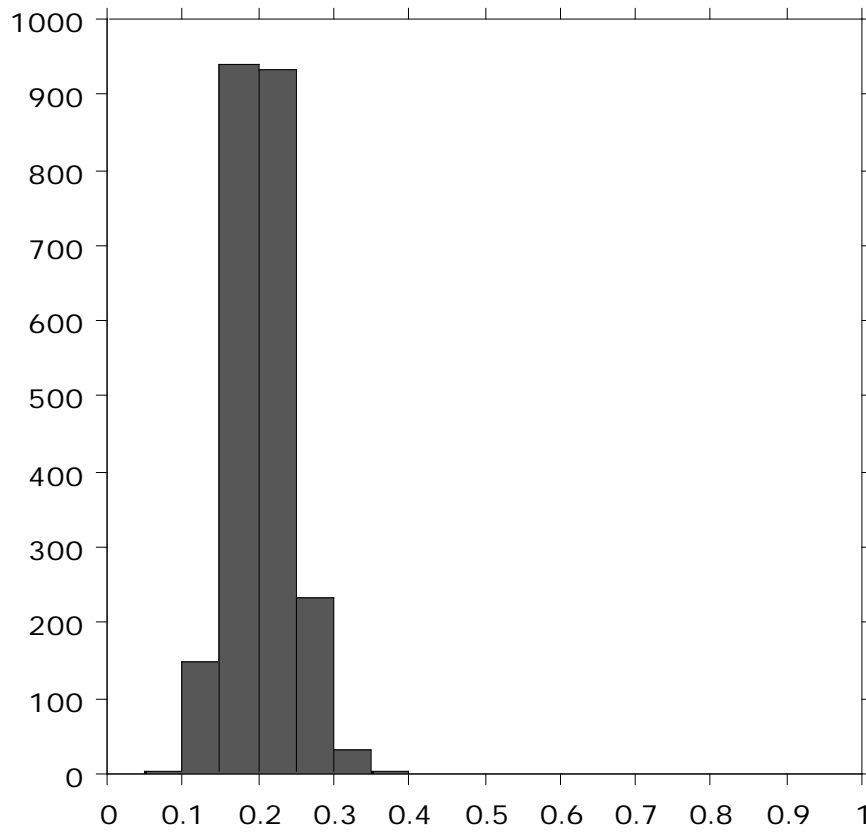
CDS count



P3

Borrelia burgdorferi

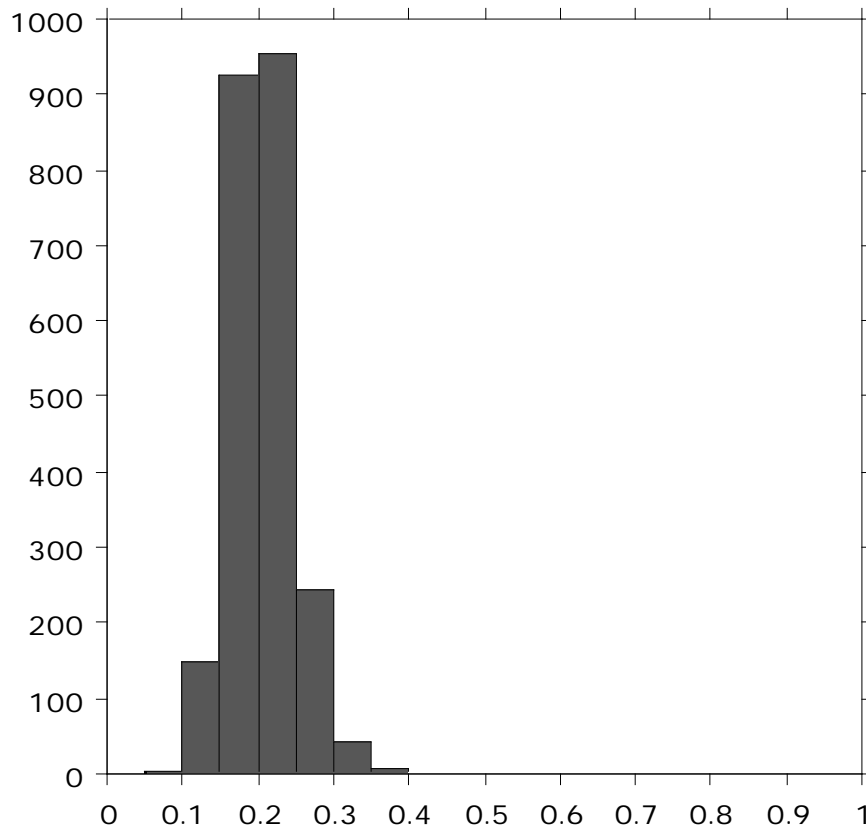
CDS count



P3

Staphylococcus aureus N315

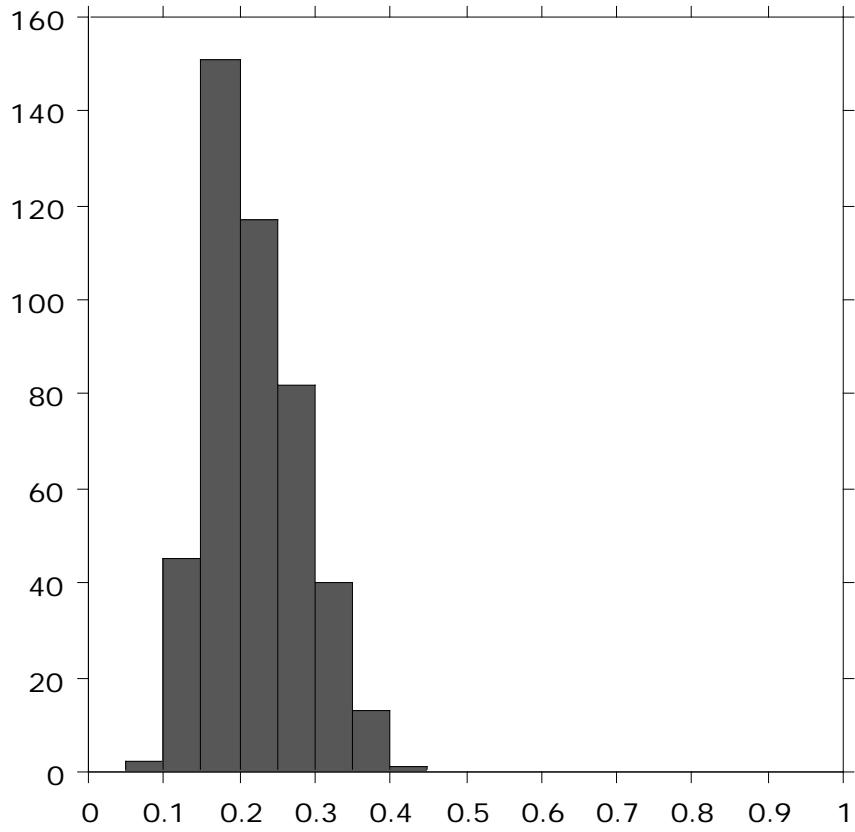
CDS count



P3

Staphylococcus aureus Mu50

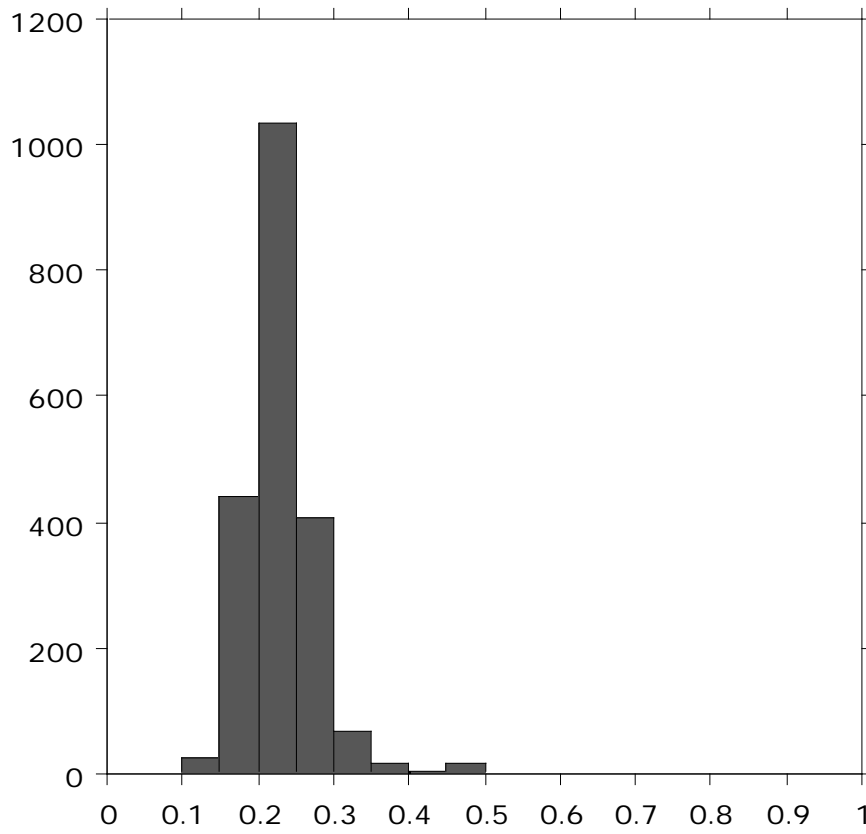
CDS count



P3

Mycoplasma genitalium

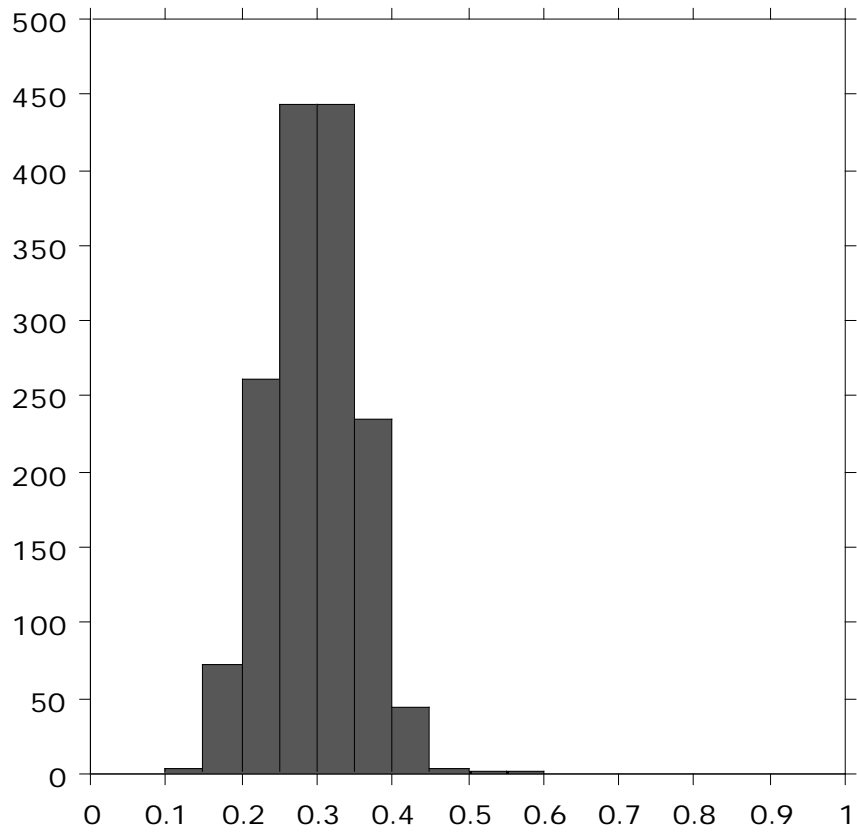
CDS count



P3

Lactococcus lactis

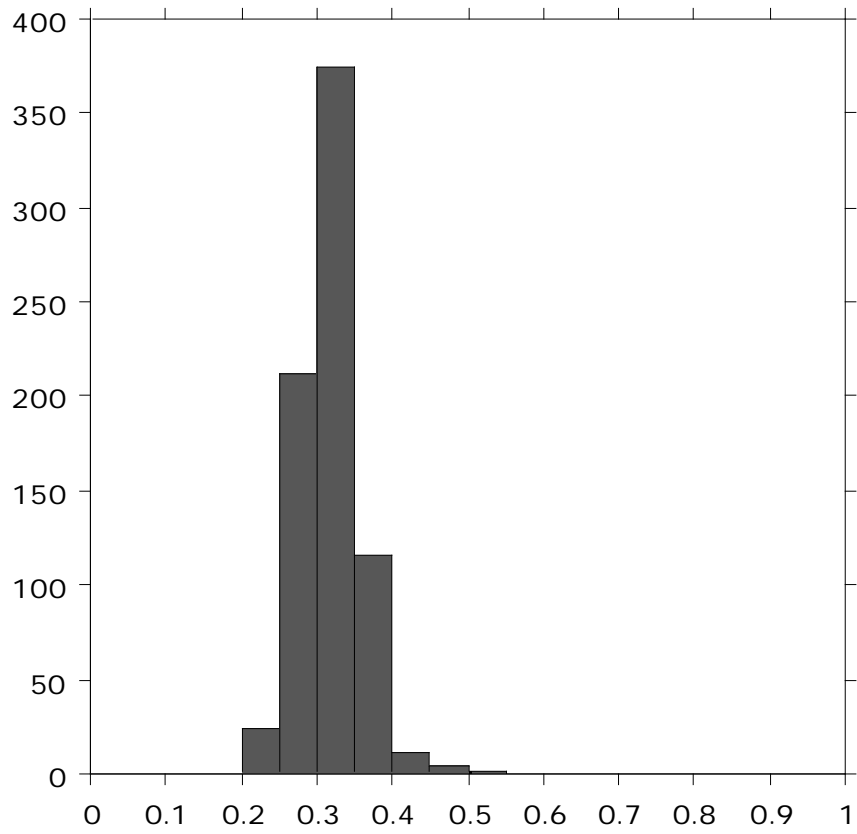
CDS count



P3

Streptococcus pyogenes

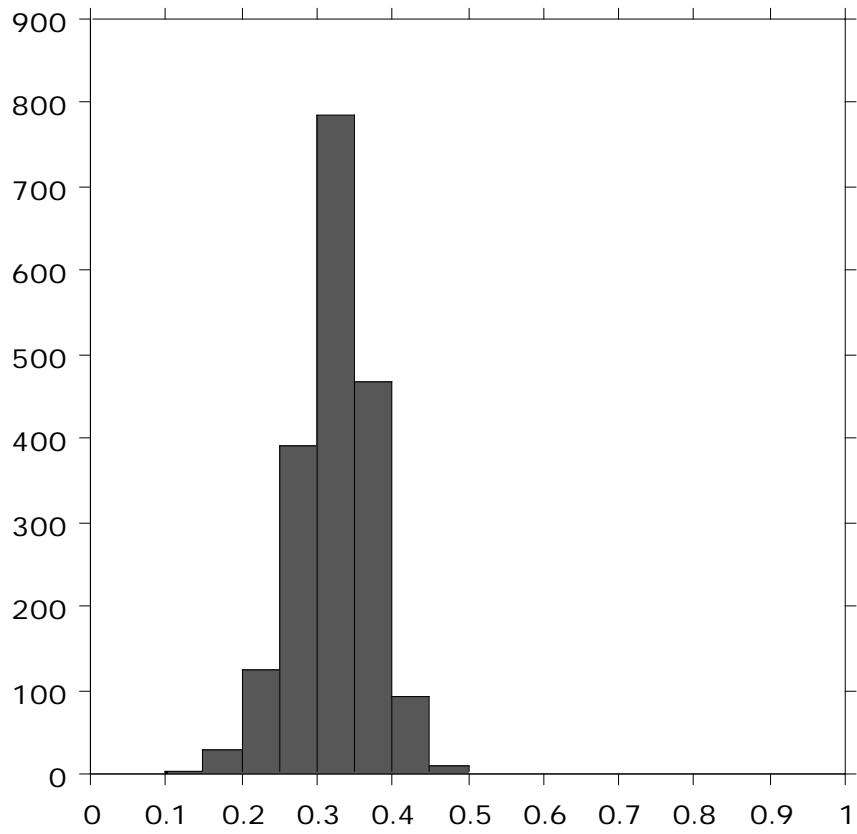
CDS count



P3

Chlamydia muridarum

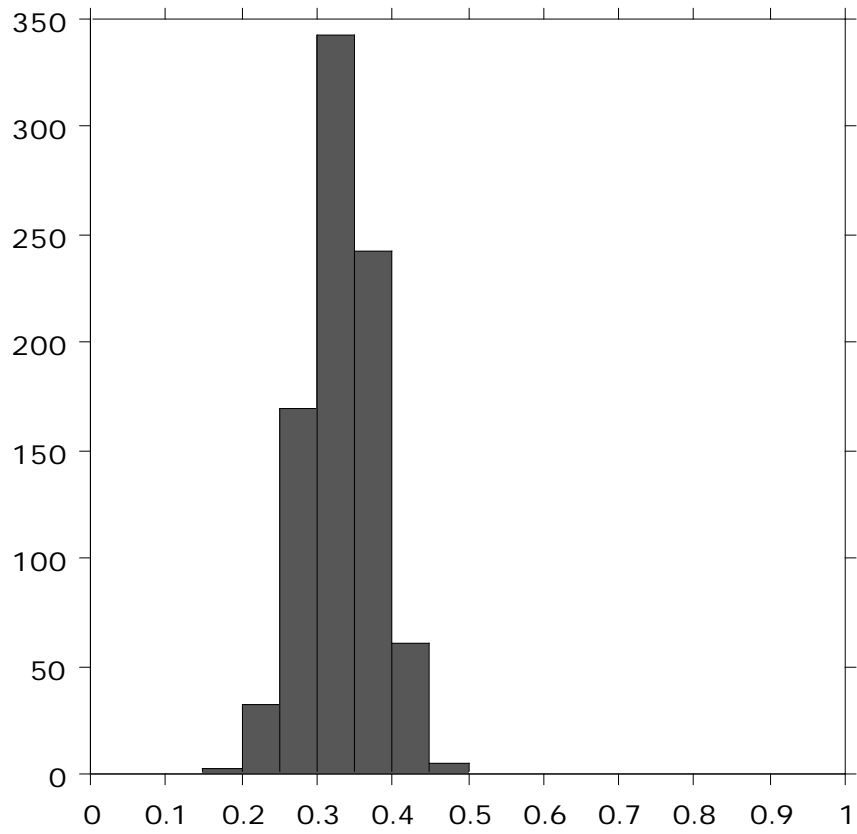
CDS count



P3

Pasteurella multocida

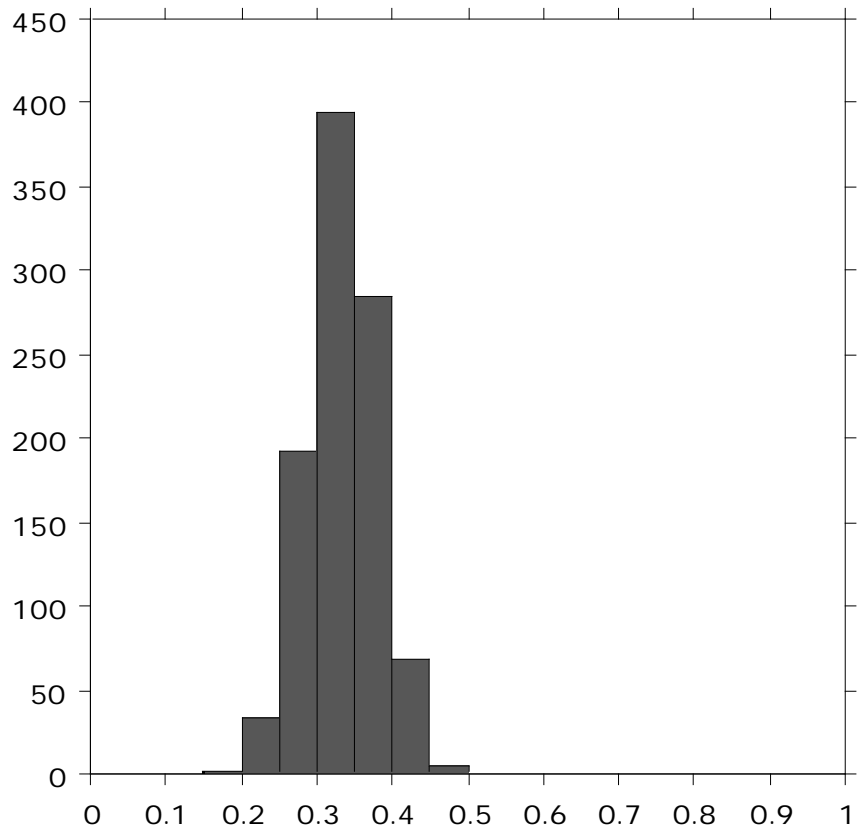
CDS count



Chlamydomophila pneumoniae AR39

P3

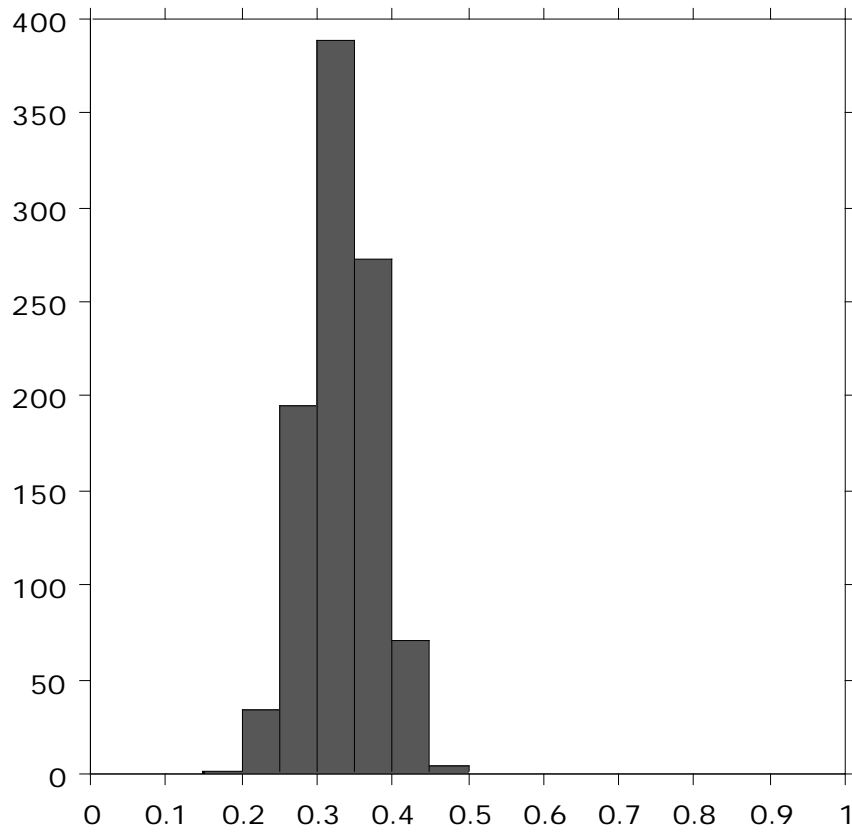
CDS count



Chlamydophila pneumoniae J138

P3

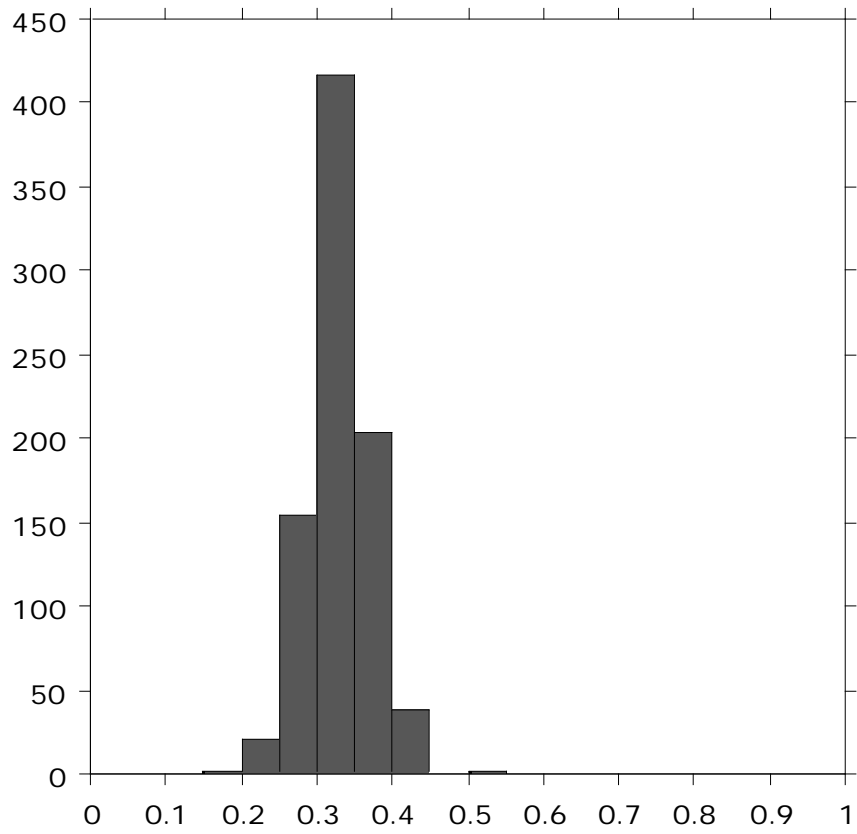
CDS count



P3

Chlamydophila pneumoniae CWL029

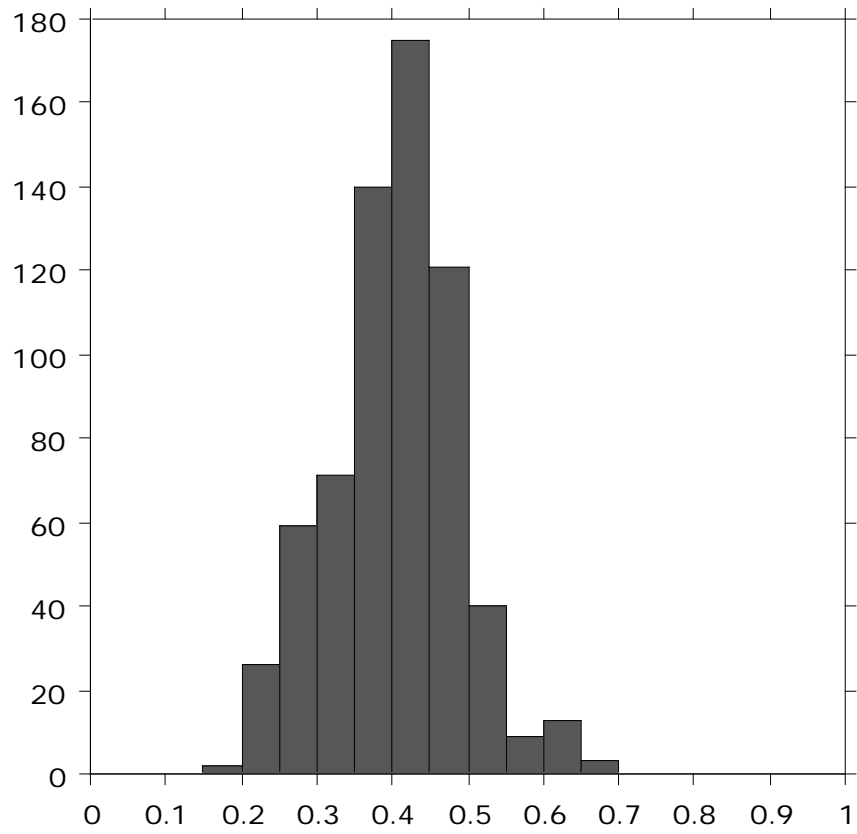
CDS count



P3

Chlamydia trachomatis

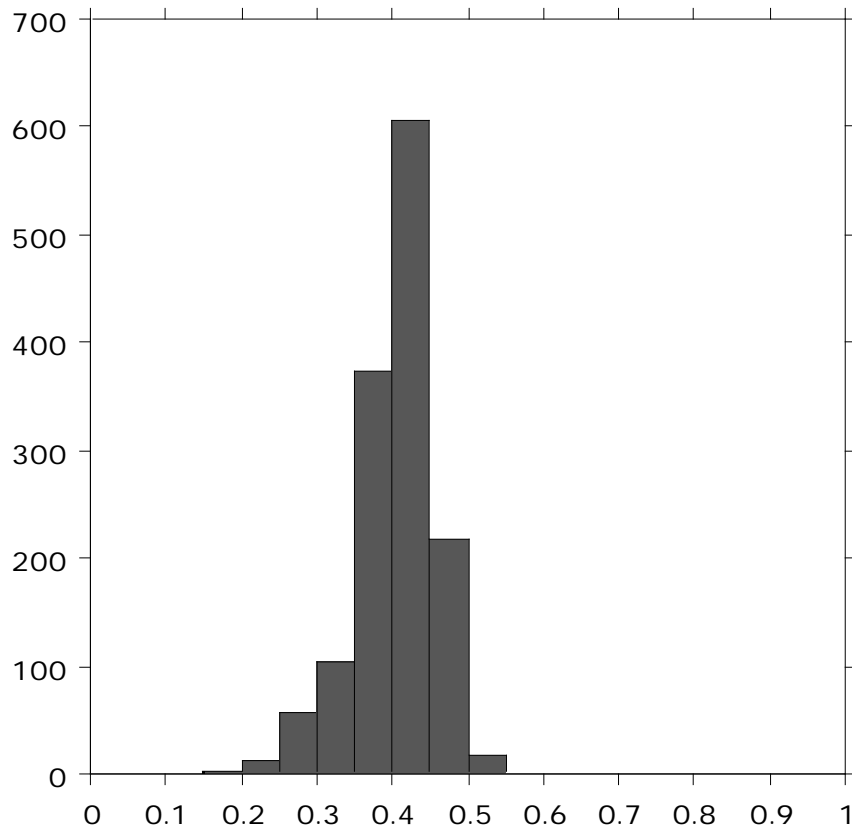
CDS count



P3

Mycoplasma pneumoniae

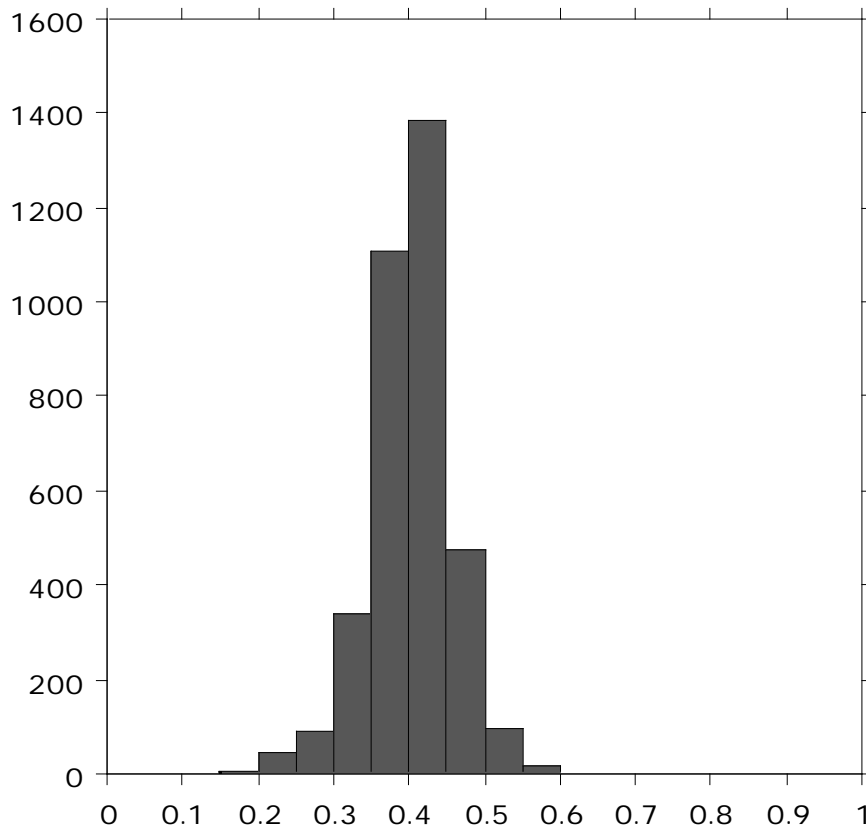
CDS count



Helicobacter pylori 26695

P3

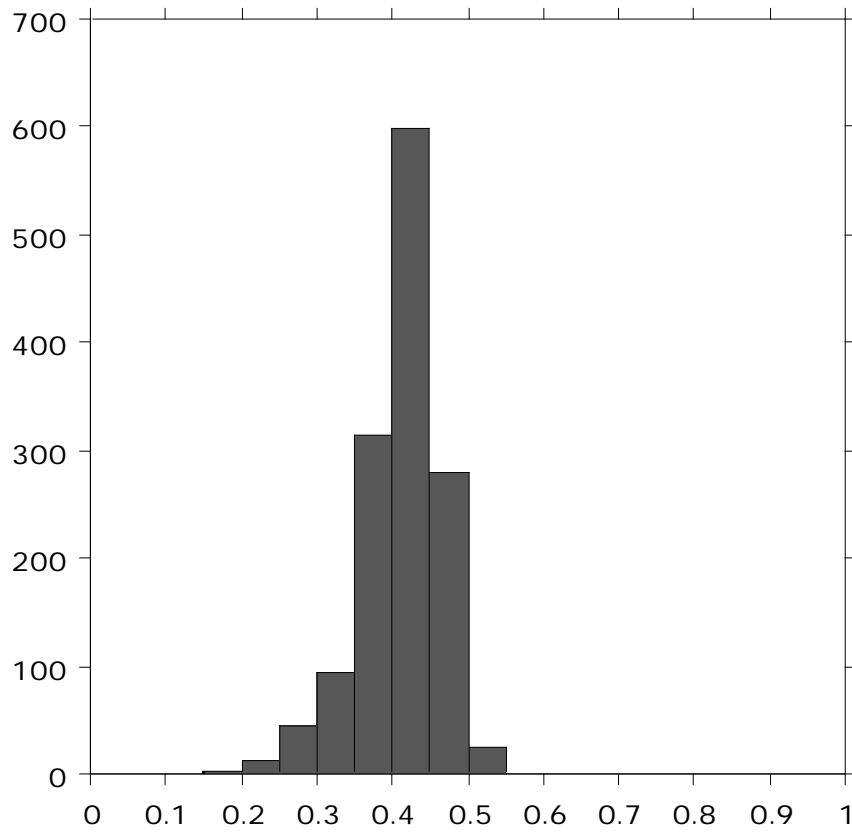
CDS count



P3

Bacillus halodurans

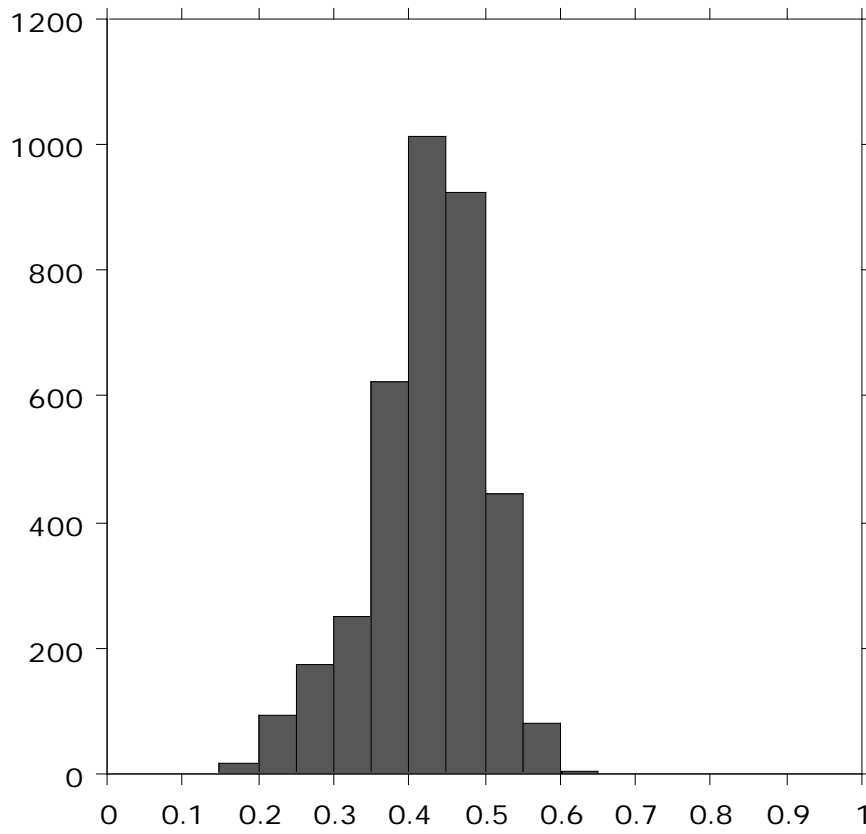
CDS count



Helicobacter pylori J99

P3

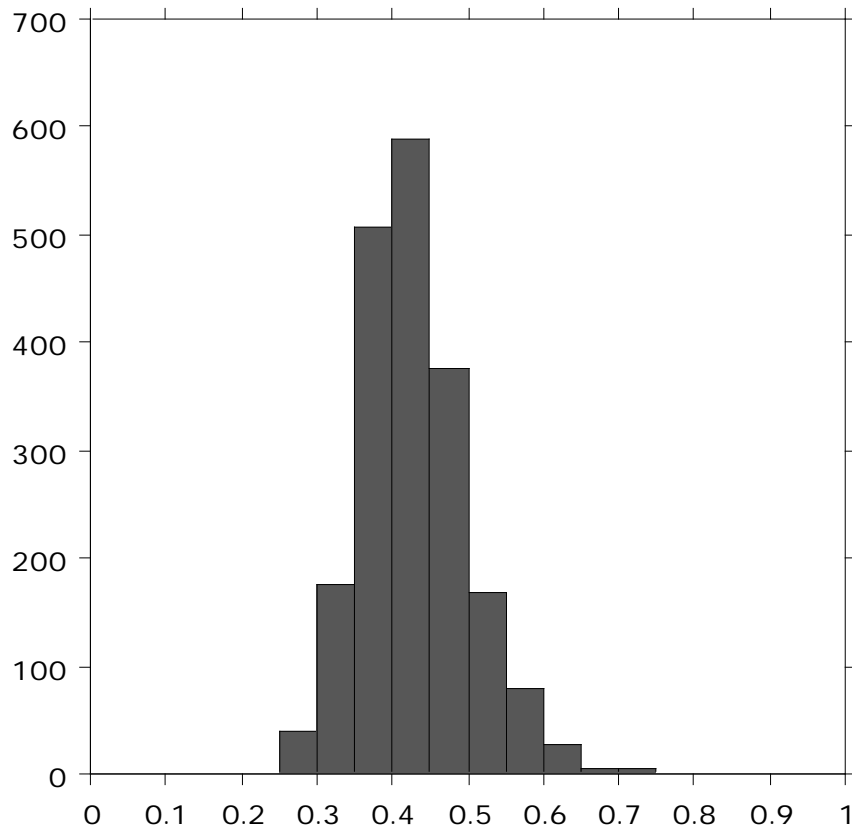
CDS count



P3

Bacillus subtilis

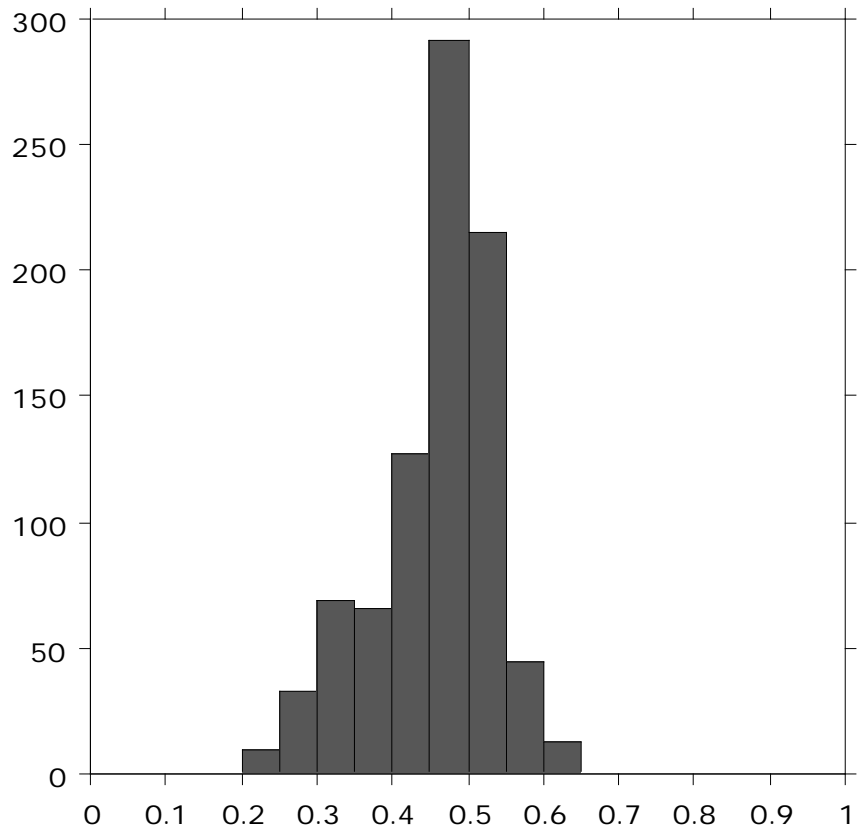
CDS count



Pyrococcus horikoshii

P3

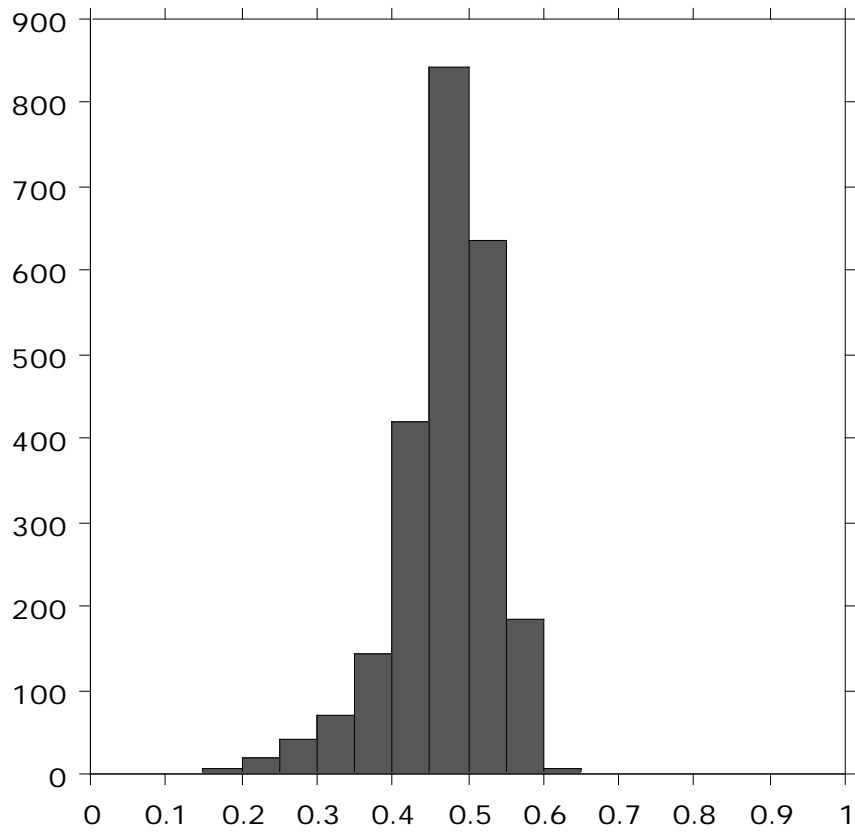
CDS count



Vibrio cholerae chromosome 2

P3

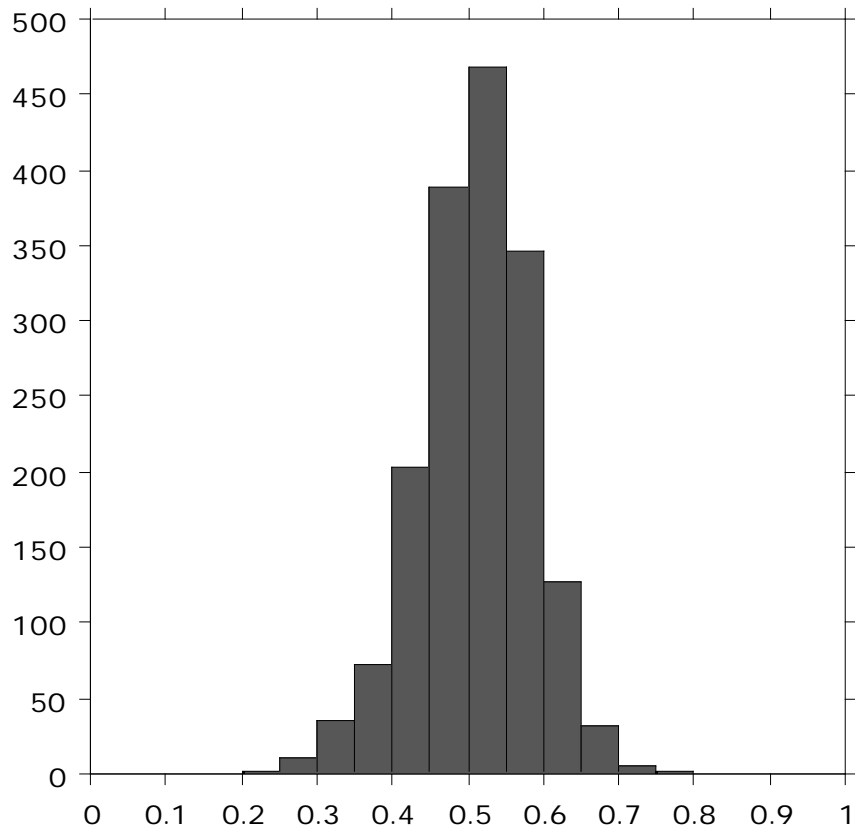
CDS count



P3

Vibrio cholerae chromosome 1

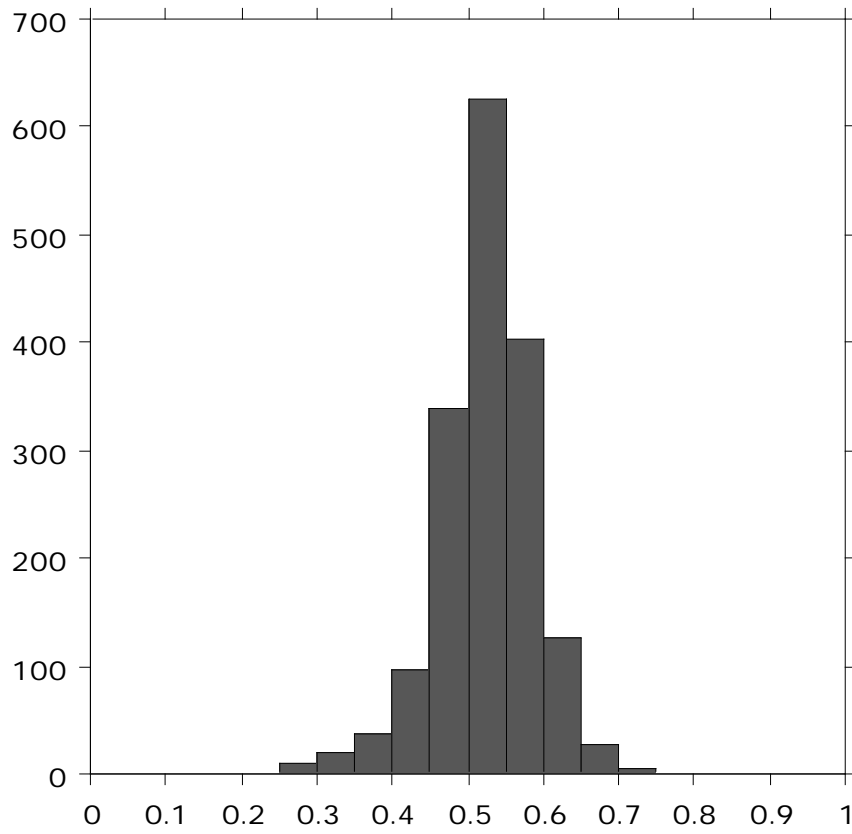
CDS count



P3

Pyrococcus abyssi

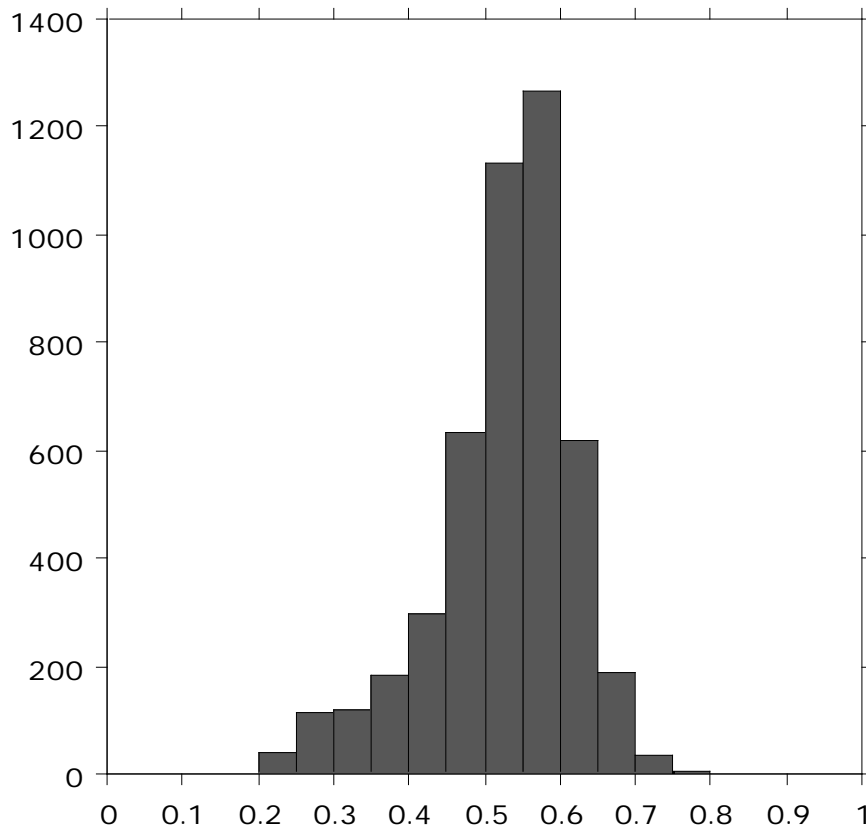
CDS count



Thermotoga maritima

P3

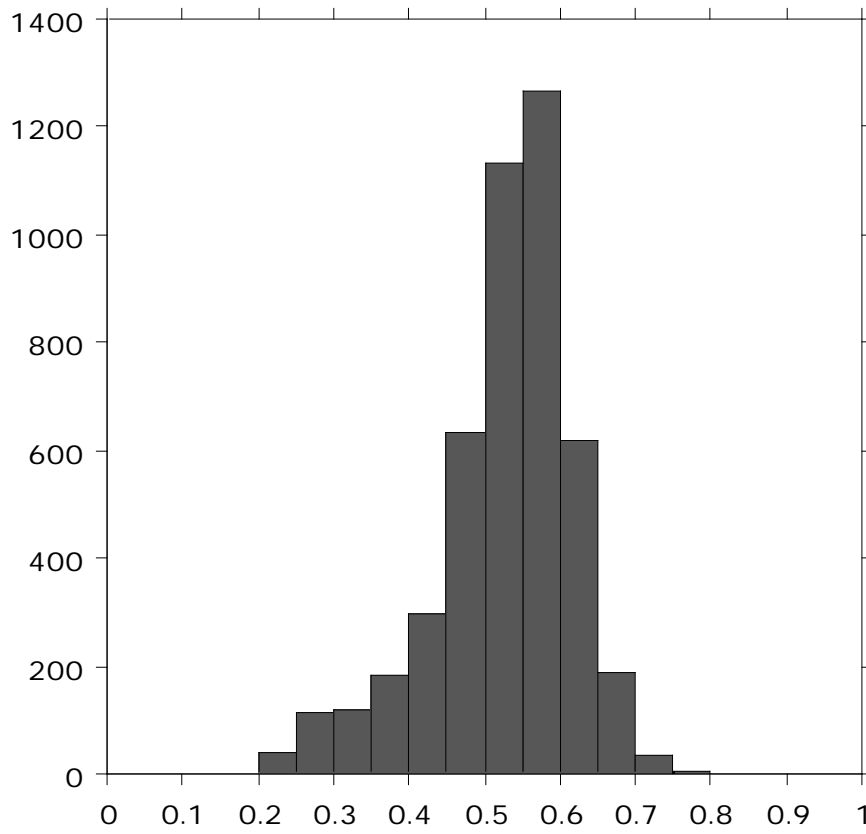
CDS count



P3

Escherichia coli EDL933

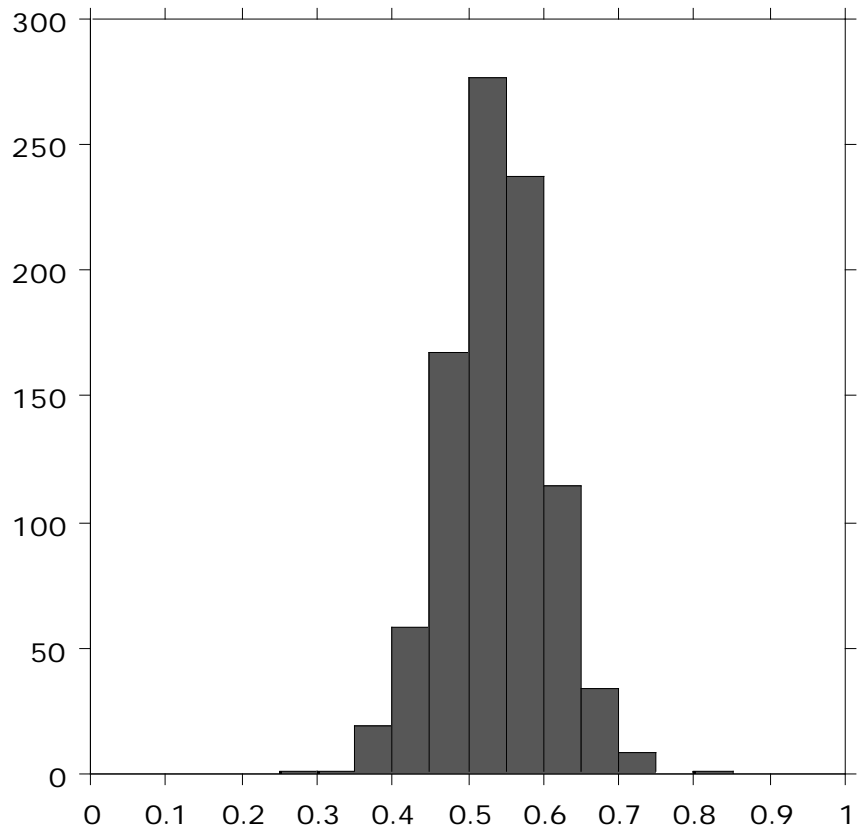
CDS count



P3

Escherichia coli RIMD 0509952

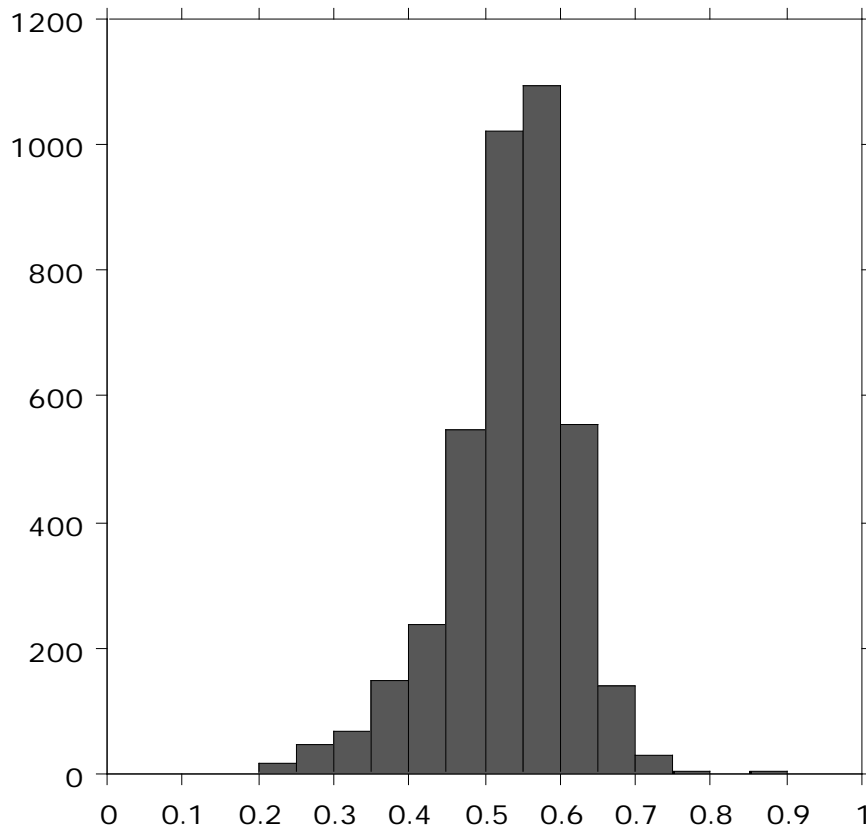
CDS count



P3

Treponema pallidum

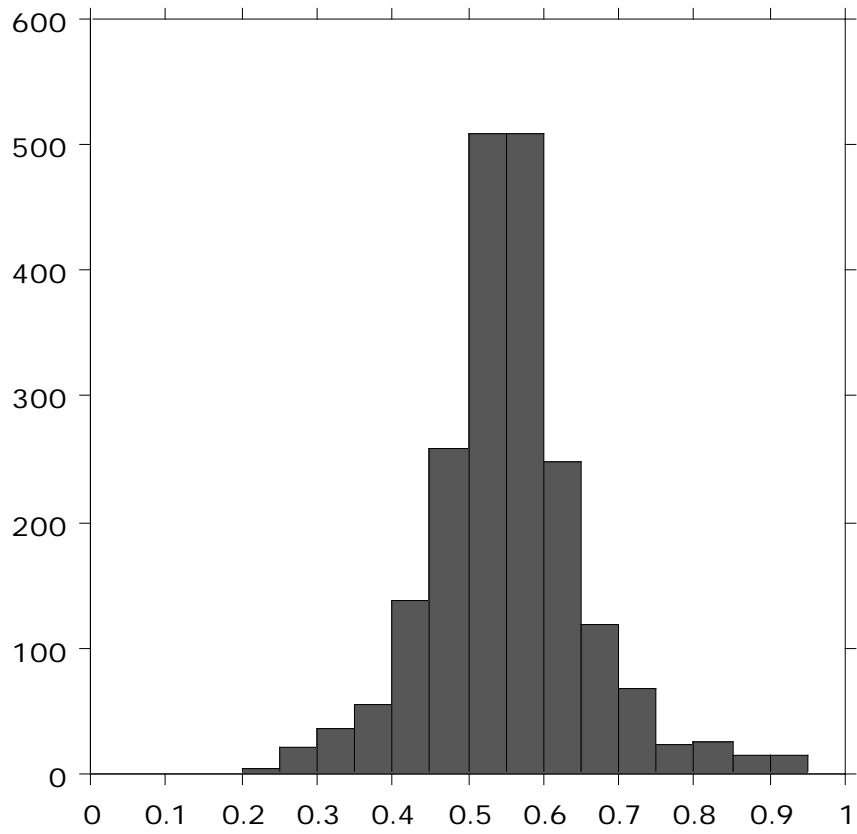
CDS count



P3

Escherichia coli K-12

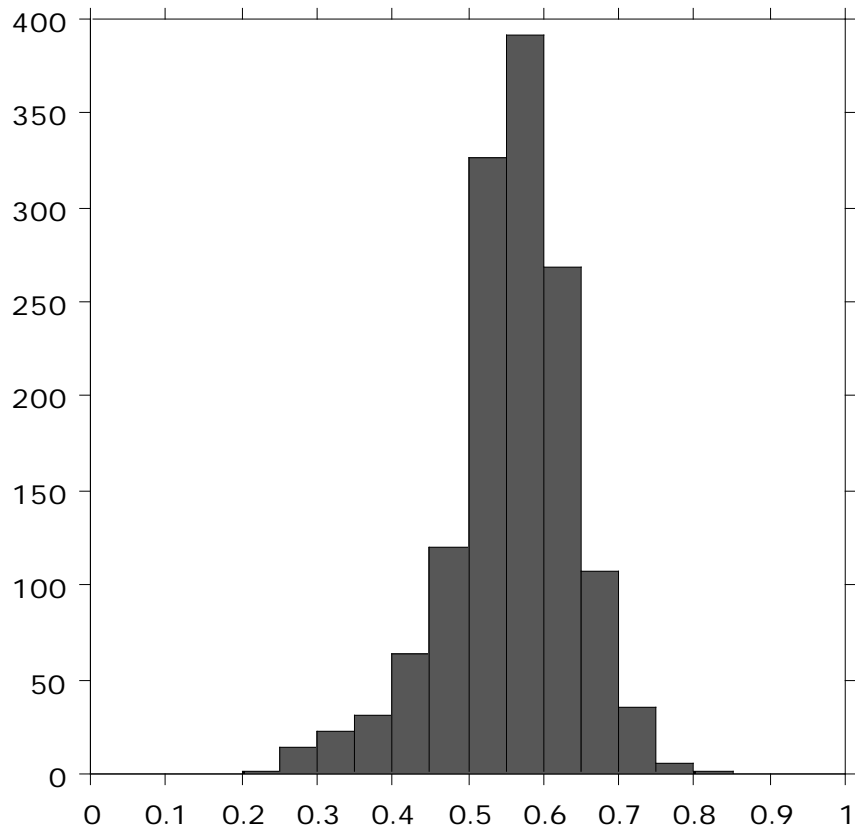
CDS count



P3

Xylella fastidiosa

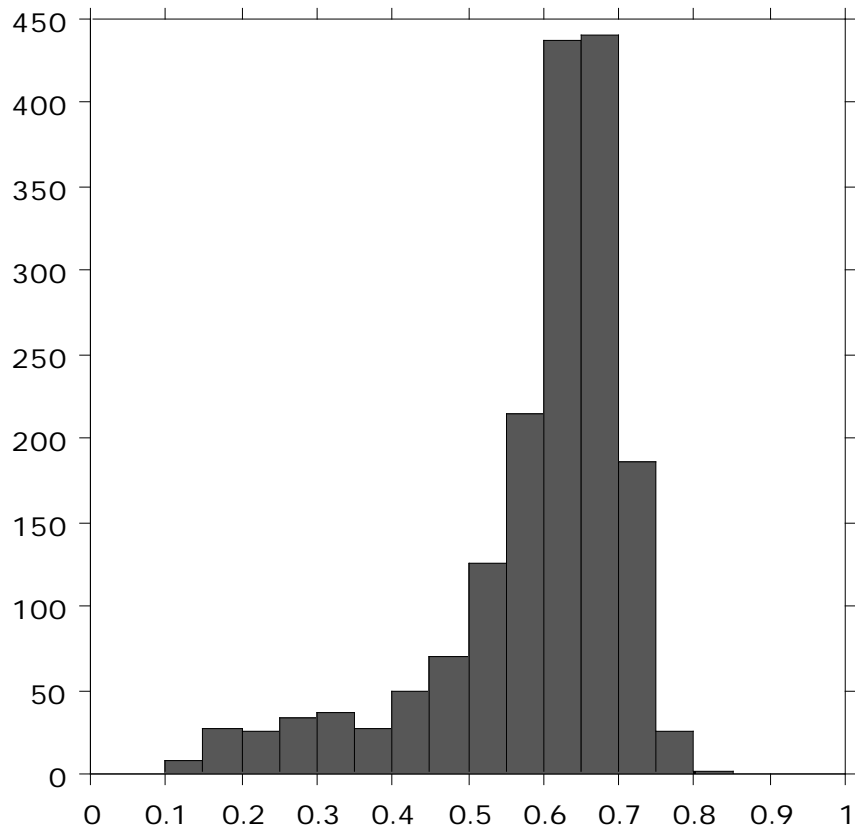
CDS count



*Thermoplasma
acidophilum*

P3

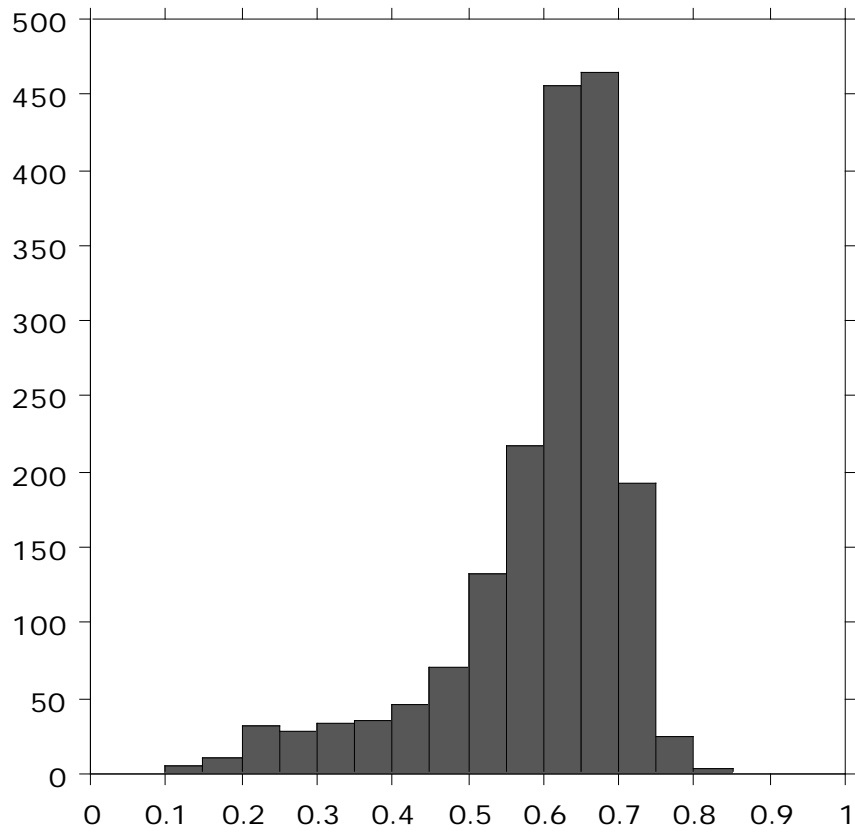
CDS count



Neisseria meningitidis MC58 (B)

P3

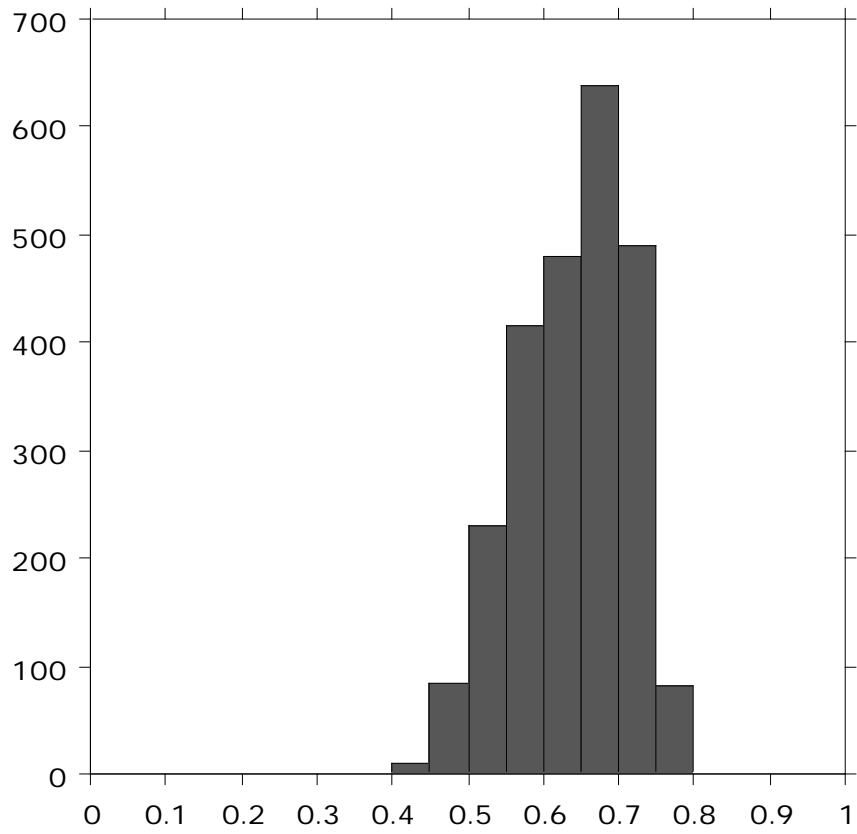
CDS count



Neisseria meningitidis Z2491 (A)

P3

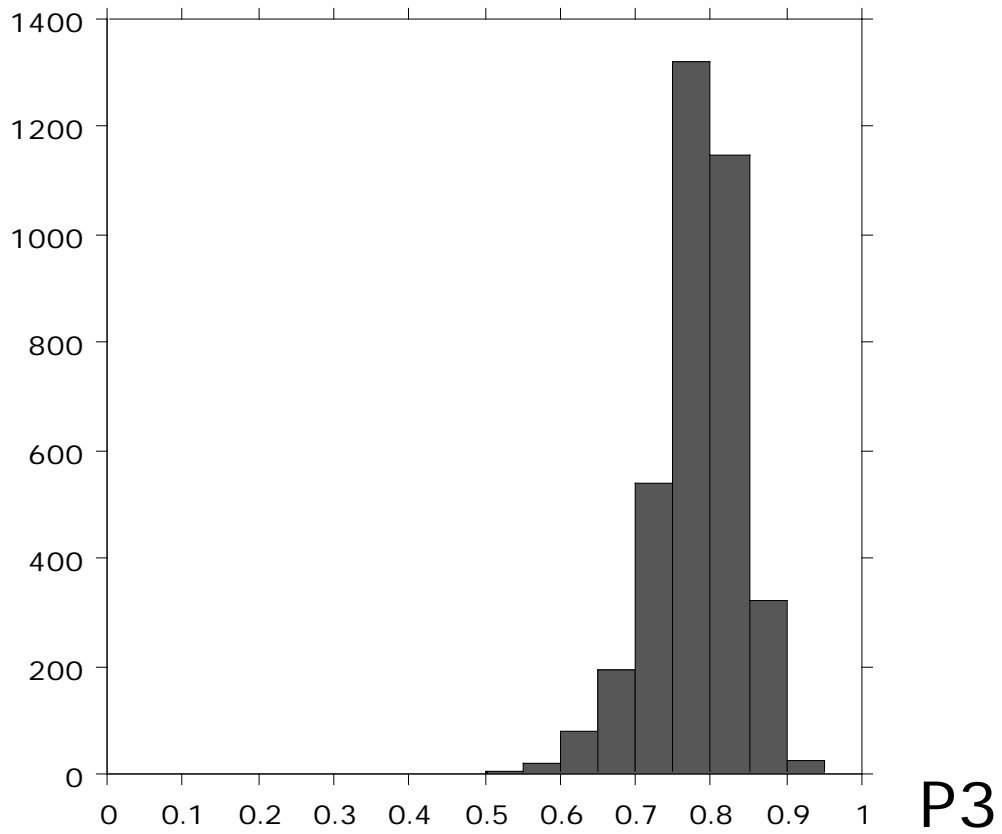
CDS count



P3

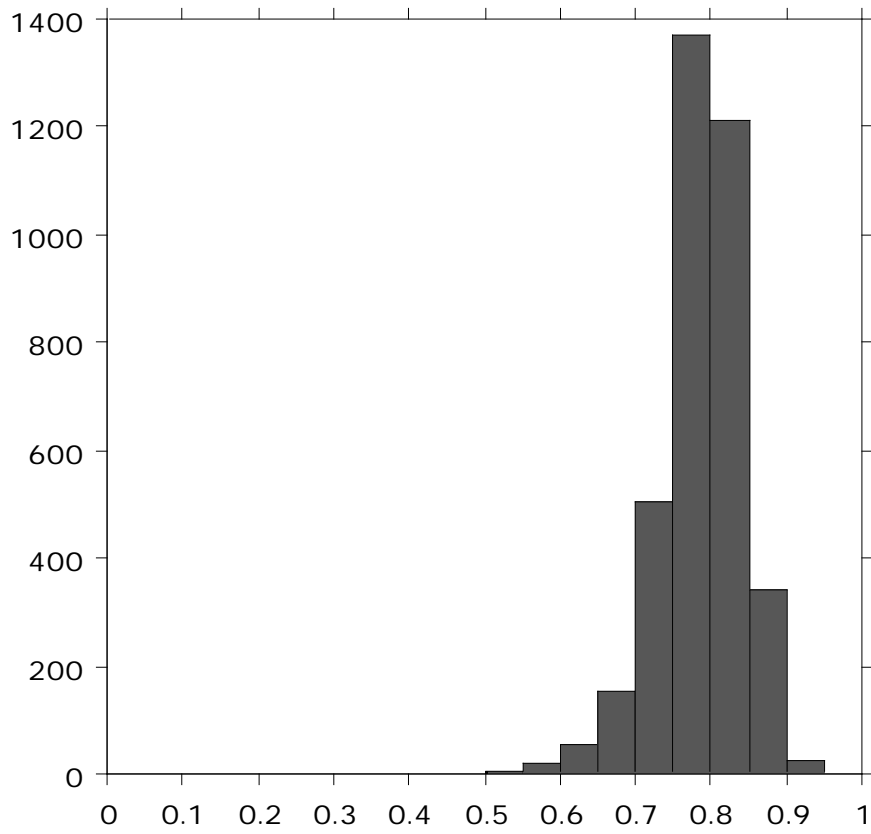
Mycobacterium leprae

CDS count



Mycobacterium tuberculosis CDC1551

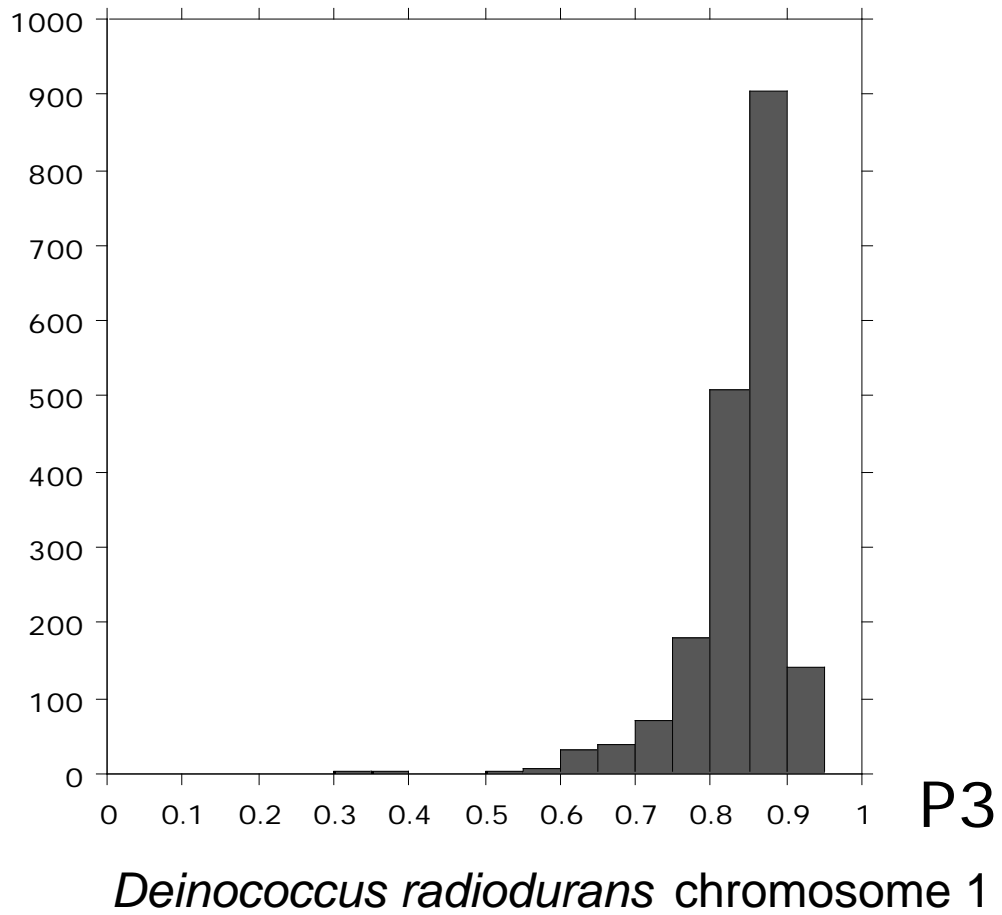
CDS count



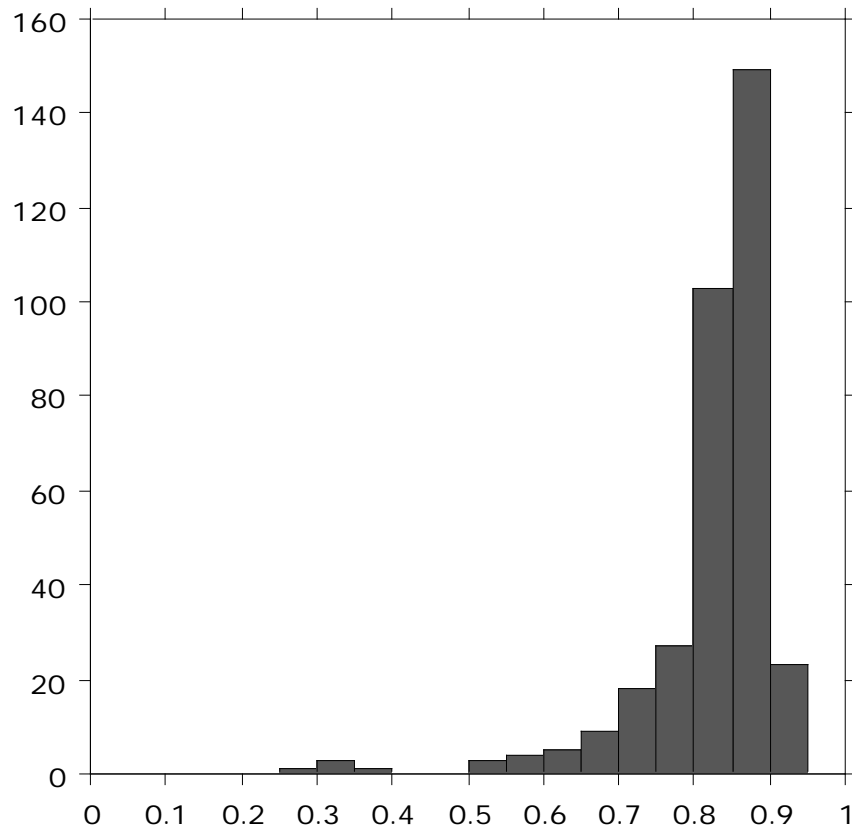
P3

Mycobacterium tuberculosis H37Rv

CDS count



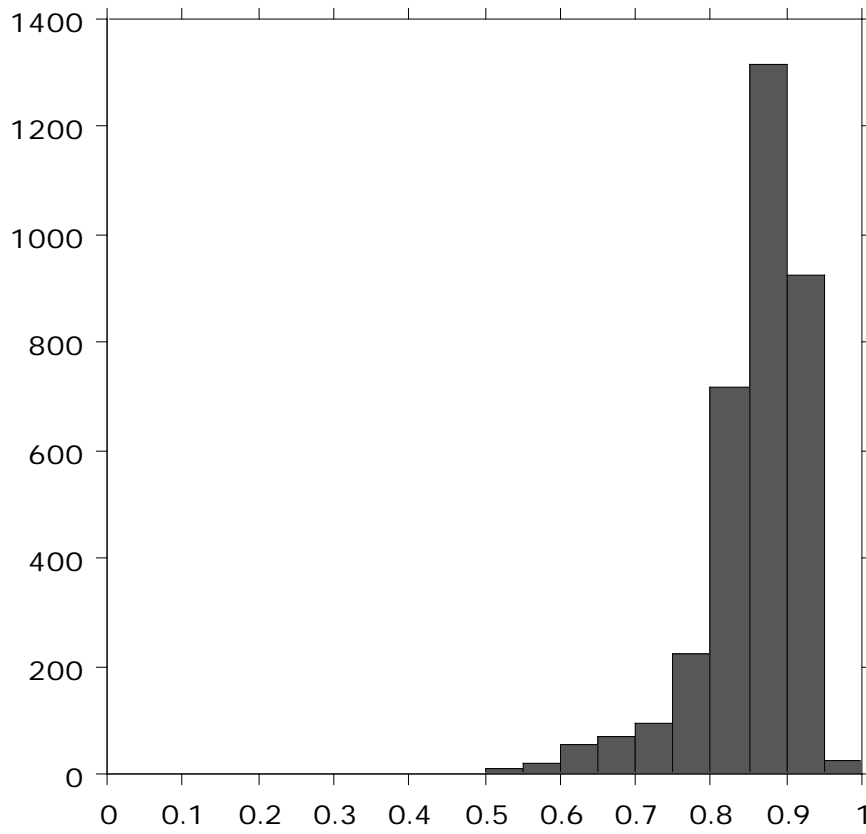
CDS count



P3

Deinococcus radiodurans chromosome 2

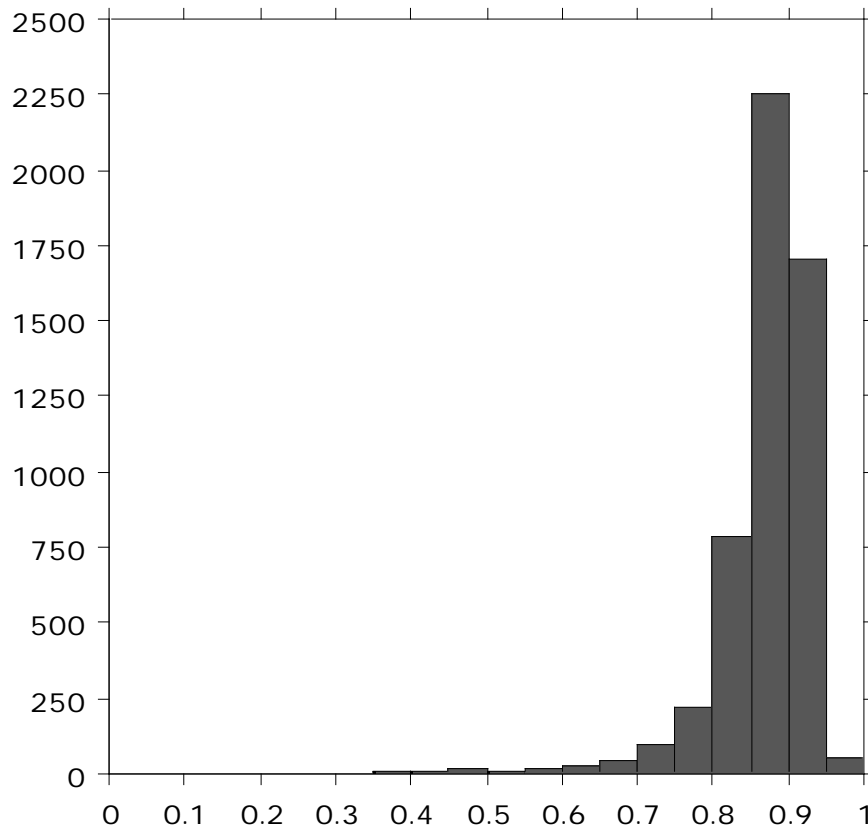
CDS count



P3

Caulobacter crescentus

CDS count



P3

Pseudomonas aeruginosa