Appendix from S. M. Fallon et al., "Host Specialization and Geographic Localization of Avian Malaria Parasites: A Regional Analysis in the Lesser Antilles"

(Am. Nat., vol. 165, no. 4, p. 466)

Total Sample Size and Prevalence of Infection by Host Species

Table A1

Total sample size and number of infections for each host species by island

Taxon, genus, and species	Bu	An	Mo	Gu	Do	Ma	Sl	Sv	Ba	Gr	Infected	Sampled	Sequenced
Accipitridae:													
Buteo platypterus		0/1									0	1	…
Ardeidae:													
Butorides virescens				0/1			0/1				0	2	…
Cardinalinae:													
Saltator albicollis				0/9	0/14	1/8	0/22				1	53	1
Coccyzidae:													
Coccyzus minor			1/1							0/2	1	3	0
Columbidae:													
Columba squamosa							0/1				0	1	…
Columbina passerina		3/5	10/10	2/14	1/2	6/9		3/7	1/5	5/12	31	64	28
Geotrygon mystacea			0/1								0	1	…
Geotrygon montana					0/3	1/1	0/5	0/1		1/7	2	17	0
Leptotila wellsi										1/9	1	9	2[a]
Zenaida auriculata										3/4	3	4	4[a]
Zenaida aurita			1/3		2/2	0/1	0/1				3	7	3
Cuculidae:													
Crotophaga ani										0/1	0	1	…
Emberizinae:													
Coereba flaveola	7/14	4/16	6/18	21/28	11/18	3/7	26/61	3/10	3/10	41/176	125	358	99
Loxigilla noctis	5/13	11/20	6/11	6/29	15/30	16/26	49/71	4/8	11/21	3/40	126	269	118
Melanospiza richardsoni							0/7				0	7	…
Tiaris bicolor	0/14	1/18	2/10	8/11	7/10	3/7	10/18	1/5	3/7	4/30	39	130	30
Voltinia jacarina										0/8	0	8	…
Falconidae:													
Falco sparverius	0/1										0	1	…
Icterinae:													
Icterus bonana						1/2					1	2	1
Icterus laudabilis							0/5				0	5	…
Icterus oberi			0/2								0	2	…
Molothrus bonarinensis							0/2		0/1	0/4	0	7	…
Quiscalus lugubris		0/2	0/3	1/7	0/1	1/4	0/4	0/1	1/14	0/11	3	47	3
Mimidae:													
Cinclocerthia ruficauda			9/9	4/4	5/6		2/3				20	22	14
Dumatella carolinensis										0/1	0	1	…
Margarops fuscatus	0/2		22/22	6/8	2/2		0/1				30	35	22
Margaropsfuscus			16/16	5/5	2/3		14/20				37	44	35
Mimus gilvus					0/1	0/3	2/5	0/4		6/16	8	29	4

Table A1 (*Continued*)

Taxon, genus, and species	Bu	An	Mo	Gu	Do	Ma	Sl	Sv	Ba	Gr	Infected	Sampled	Sequenced
Ramphocinclus brachyurus							2/5				2	5	2
Parulinae:													
Catheropeza bishopi								0/5			0	5	…
Dendroica adelaidae	0/6						4/20				4	26	3
Dendroica petechia	0/5	0/6	0/4	0/3	0/6	1/2					1	26	1
Dendroica plumbea				6/13	10/26						16	39	16
Thraupinae:													
Piranga olivacea	1/1										1	1	0
Tangara cucullata									0/3	4/15	4	18	0
Trochilidae:													
Cyanophaia bicolor					0/8	0/4					0	12	…
Eulampis holosericeus	0/2	0/1	0/3	0/6	1/15		0/3		0/2	1/11	2	43	1
Eulampis jugularis			1/5	0/4	0/16	0/9	0/36	0/4			1	74	0
Glaucis hirsuta										4/27	4	27	3
Orthorhyncus cristatus	0/5	0/1	0/2	0/4	0/5		0/3	0/4	0/1	1/37	1	62	0
Troglodytidae:													
Troglodytes aedon					0/9			0/3		1/13	1	25	1
Turdidae:													
Cichlherminia lherminieri			3/9	4/4	1/1						8	14	6
Myadestes genibarbis					0/4	2/21	0/8				2	33	0
Turdus fumigatus								3/6		4/11	7	17	1
Turdus nudigenis						0/1	0/11		0/3	6/43	6	58	4
Turdus plumbeus					4/7						4	7	4
Tyrannidae:													
Contopus latirostris				0/3	0/1	0/1	0/4				0	9	…
Elaenia flavogaster								0/3		5/23	5	26	2
Elaenia martinica	0/20	0/16	0/2	0/8	0/12	0/16	9/41	0/9	0/12		9	136	6
Myiarchus nugator								0/1		1/15	1	16	0
Myiarchus oberi	0/6			0/5	1/5	0/5	0/1				1	22	0
Tyrannus dominicensis	0/1	0/3	0/6	0/1	0/3	0/1	0/1	1/1		2/8	3	25	4[a]
Vireonidae:													
Vireo altiloquus	4/6	2/5	0/4	1/1	4/13	2/11	11/56	1/6	2/12	4/6	31	120	26
Total	17/96	21/94	77/141	64/167	66/222	37/139	129/416	16/84	21/85	97/530	545	1,975	444

Note: Species are arranged in alphabetical order by family except for species within the family Fringillidae, which are listed by subfamily following Sibley and Ahlquist (1990). Islands are arranged from north to south. Bu = Barbuda, An = Antigua, Mo = Montserrat, Gu = Guadeloupe, Do = Dominica, Ma = Martinique, Sl = St. Lucia, Sv = St. Vincent, Ba = Barbados, Gr = Grenada.

[a] Samples in which there are more sequences than infections as a result of multiple lineages being detected per individual (see "Methods").

Table A2

Geographic distribution of Lesser Antillean parasite lineages

Lineage	North America	Greater Antilles			Lesser Antilles										South America	Total
		Ja	Dr	Pr	Bu	An	Mo	Gu	Do	Ma	Sl	Sv	Ba	Gr	Ve	
HC	9			43	1	4	5	15	18	14	47	7	19	11	2	195
HH	17		64	31										17		129
HG[a]							6	2			11					19
HA	2	1		4	1	2				1	3				12	26
HU1	10											1			2	13
HB	6		2	3	3			1	2	2	2	1			7	29
HD		3		42	6		2			1	3			15	21	93
HJ			18											1		19
HE			16		5	11	1				6				3	42
HU3[a]							3		1		1					5
HK	1											1				2
HL[a]								1	1							2
HF	6						33	6	3		4				3	55
PC	5	7	9	8		1		20	22	5	31			2	4	114
Plasmodium elongatum										1	3				4	8
Plasmodium relictum			1											1		2
PG[a]							1	3								4
PH				1					1							2
PU1	1			2							1	1		1	2	8
PF			1	2					2							5
PI[a]								2								2
PB	1								1		3				1	6
PA	32	1		5			1	2	5	2	3				1	52
Cpa1			16	22		2	7	1	1	5		1		2	5	62
Cpa2			3	8		1	3			1		1		1	2	20
Zed[a]							1		1							2
Total sequenced	90	12	130	171	16	21	63	53	58	32	118	13	19	51	69	916
Total infected		22	216	357	17	21	77	64	66	37	129	16	21	97	177	1,299
Total sampled		73	1,334	1,743	96	94	141	167	222	139	416	84	85	530	429	5,553

Note: Lineages are arranged in phylogenetic order (see fig. 2). Geographic locations are presented from north to south. Ja = Jamaica, Dr = Dominican Republic, Pr = Puerto Rico, Bu = Barbuda, An = Antigua, Mo = Montserrat, Gu = Guadeloupe, Do = Dominica, Ma = Martinique, Sl = St. Lucia, Sv = St. Vincent, Ba = Barbados, Gr = Grenada, Ve = Venezuela.

[a] Endemic parasite lineages.

Table A3
Overall prevalence of infection by species

Taxon	Genus and species	Prevalence	Sample size	*G* values (df = 1)
1. Thraupinae	*Piranga olivacea*	100.00	1	1.85
2. Mimidae	*Cinclocerthia ruficauda*	95.24	21	40.14*
3. Mimidae	*Margarops fuscatus*	85.71	35	48.58*
4. Mimidae	*Margarops fuscus*	84.09	44	57.69*
5. Columbidae	*Zenaida auriculata*	75.00	4	3.69*
6. Turdidae	*Cichlherminia lherminieri*	57.14	14	5.26*
7. Turdidae	*Turdus plumbeus*	57.14	7	2.82
8. Icterinae	*Icterus bonana*	50.00	2	.80
9. Columbidae	*Columbina passerina*	48.44	64	11.41*
10. Emberizinae	*Loxigilla noctis*	46.84	269	39.69*
11. Columbidae	*Zenaida aurita*	42.86	7	1.00
12. Turdidae	*Turdus fumigatus*	41.18	17	1.54
13. Parulinae	*Dendroica plumbea*	41.03	39	3.02
14. Mimidae	*Ramphocinclus brachyurus*	40.00	5	.63
15. Emberizinae	*Coereba flaveola*	34.92	358	6.64*
16. Coccyzidae	*Coccyzus minor*	33.33	3	.29
17. Emberizinae	*Tiaris bicolor*	30.00	130	.16
18. Mimidae	*Mimus gilvus*	27.59	29	.00
19. Vireonidae	*Vireo altiloquus*	25.83	120	.38
20. Thraupinae	*Tangara cucullata*	22.22	18	.14
21. Tyrannidae	*Elaenia flavogaster*	19.23	26	.77
22. Parulinae	*Dendroica adelaidae*	15.38	26	1.78
23. Trochilidae	*Glaucis hirsuta*	14.81	27	2.07
24. Tyrannidae	*Tyrannus dominicensis*	12.00	25	2.91
25. Columbidae	*Geotrygon montana*	11.76	17	1.75
26. Columbidae	*Leptotila wellsi*	11.11	9	.65
27. Turdidae	*Turdus nudigenis*	10.34	58	10.14*
28. Tyrannidae	*Elaenia martinica*	6.62	136	39.92*
29. Icterinae	*Quiscalus lugubris*	6.38	47	12.76*
30. Tyrannidae	*Myiarchus nugator*	6.25	16	3.27*
31. Turdidae	*Myadestes genibarbis*	6.06	33	8.69*
32. Trochilidae	*Eulampis holosericeus*	4.65	43	13.90*
33. Tyrannidae	*Myiarchus oberi*	4.55	22	6.13*
34. Troglodytidae	*Troglodytes aedon*	4.00	25	7.67*
35. Parulinae	*Dendroica petechia*	3.85	26	8.19*
36. Cardinalinae	*Saltator albicollis*	1.89	53	23.72*
37. Trochilidae	*Orthorhyncus cristatus*	1.61	62	29.20*
38. Trochilidae	*Eulampis jugularis*	1.35	74	36.63*
39. Trochilidae	*Cyanophaia bicolor*	.00	12	4.10*
40. Tyrannidae	*Contopus latirostris*	.00	9	2.57
41. Emberizinae	*Voltinia jacarina*	.00	8	2.09
42. Icterinae	*Molothrus bonariensis*	.00	7	1.64
43. Emberizinae	*Melanospiza richardsoni*	.00	7	1.64
44. Icterinae	*Icterus laudabilis*	.00	5	.82
45. Parulinae	*Catheropeza bishopi*	.00	5	.82
46. Ardeidae	*Butorides virescens*	.00	2	.03
47. Icterinae	*Icterus oberi*	.00	2	.03
48. Falconidae	*Falco sparverius*	.00	1	.03
49. Columbidae	*Columba squamosa*	.00	1	.03
50. Accipitridae	*Buteo platypterus*	.00	1	.03
51. Columbidae	*Geotrygon mystacea*	.00	1	.03
52. Mimidae	*Dumatella carolinensis*	.00	1	.03
53. Cuculidae	*Crotophaga ani*	.00	1	.03
Total		27.59	1,975	

* $P < .05$, significantly different from average of 28%.