

Appendix 1: Ectoparasite infestation rates and habitat types caught of rodents and scandents.

Order	Family	Host species	Total caught	Individuals with ectoparasite	No. of host infested					Habitat types	
					Tick	Mesostigmatids	Chiggers	Lice	Listrophorids		Itch mites
Rodentia	Sciuridae	<i>Callosciurus notatus</i>	6	5	0	2	1	2	0	0	a,g
		<i>Callosciurus prevostii</i>	2	2	2	1	0	1	1	0	a
		<i>Sundasciurus lowii</i>	2	2	0	1	0	0	0	0	e
		<i>Lariscus insignis</i>	2	1	1	0	0	0	0	0	d,e
		Total	12	10	3(25.0%)	4(33.3%)	1(8.3%)	3(25.0%)	1(8.3%)	0	
		<i>Leopoldamys sabanus</i>	4	4	1	2	2	1	1	0	c,f
		<i>Maxomys ochraceiventer</i>	5	4	0	4	1	1	3	0	c
		<i>Maxomys rajah</i>	22	20	6	20	0	0	2	0	a,d,e,f
		<i>Maxomys surifer</i>	1	1	0	1	0	0	0	0	b
		<i>Maxomys whiteheadi</i>	8	8	0	8	1	0	2	0	a,b,c,e,f
		<i>Niviventer cremoriventer</i>	7	7	3	5	0	0	0	0	a,c,d
		<i>Niviventer rapit</i>	4	4	0	4	0	0	0	0	b,c
		<i>Rattus exulans</i>	2	2	1	2	0	1	1	0	c
		<i>Rattus rattus</i>	3	3	1	2	0	0	0	0	a,c
		<i>Rattus tiomanicus</i>	3	2	1	2	0	0	0	0	a
	<i>Rattus sp.</i>	3	3	0	3	0	0	0	0	a	
	<i>Sundamys muelleri</i>	50	50	22	44	6	4	18	2	a,b,c,d	
	Total	112	108	35(31.3%)	97(86.6%)	10(8.9%)	7(6.3%)	27(24.1%)	2(1.8%)		
Scandentia	Tupaiaidae	<i>Ptilocercus lowii</i>	1	1	1	0	0	0	0	0	b
		<i>Tupaia dorsalis</i>	1	1	0	0	1	0	0	0	e
		<i>Tupaia glis</i>	10	10	3	0	7	0	0	0	c,d,e
		<i>Tupaia gracilis</i>	1	1	0	0	1	0	0	0	e
		<i>Tupaia minor</i>	2	2	1	0	1	0	0	0	c,e
		<i>Tupaia picta</i>	1	1	0	0	1	0	1	0	e
		<i>Tupaia tana</i>	2	1	1	1	0	0	0	0	c
		Total	18	17	6(33.3%)	1(5.6%)	11(61.1%)	0	1(5.6%)	0	-
	Grand total	142	135 (95.0%)	44(30.9%)	102(71.8%)	22(15.5%)	10(7.0%)	29(20.4%)	2(1.4%)	-	
	H_{s_w}	-	-	1.81	1.95	1.92	1.61	136	0	-	

H_{s_w} =Shannon-Weiner Diversity Index of six types of ectoparasites, a= Secondary forest, b=Mixed dipterocarp forest, c= Limestone forest, d= Lowland dipterocarp forest, e=Hill dipterocarp forest,f= Peat swamp, g= Riverine forest.

P25- <i>Ascoschoengastia</i> sp.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	0.11
P26- <i>Gahrliopia (gahrliopia)</i>sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0.53	
P27- <i>Gahrliopia (walchia)</i>sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	27	0	0	0	0	33	0.54	
P28- <i>Leptotrombidium deliense</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	41	6	8	4	0	76	0.49	
P29- <i>Leptotrombidium</i> sp.	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	3	6	0	0	0	0	13	0.46	
P30- <i>Microtrombicula</i> sp.	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.58	
P31- <i>Siseca</i> sp.	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.61	
P32- <i>Walchiella</i> sp.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	198	0	0	1	15	0	18	0	233	0.27	
Listrophorid mites																									
P33- <i>Listrophoroides</i> sp.1	0	0	0	0	0	1	0	0	14	0	0	0	0	0	117	0	0	0	0	0	0	0	132	0.15	
P34- <i>Listrophoroides</i> sp.2	0	0	0	0	0	10	1	0	0	0	0	0	0	0	128	0	0	0	0	0	0	0	139	0.19	
P35- <i>Listrophoroides</i> sp.3	0	3	0	0	7	0	0	0	35	0	0	1	0	0	23	0	0	0	0	0	0	0	69	0.26	
P36- <i>Listrophoroides</i> sp.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0.04	
P37- <i>Listrophoroides</i> sp.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.42	
P38- <i>Listrophoroides</i> sp.6	0	6	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0.38	
P39- <i>Listrophoroides</i> sp.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0	0	0	0	0	73	0.17	
P40- <i>Listrophoroides</i> sp.8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.66	
P41- <i>Listrophorid</i> 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0.68	
Astigmatid mites																									
P42- <i>Sarcoptes scabiei</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	19	0.10	
Lice																									
P43- <i>Ancistroplox nasuta</i>	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.37	
P44- <i>Hoplopleura dissicula</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	0.07	
P45- <i>Neohaematopinus callosciuri</i>	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0.86	
P46- <i>Polypax spinulosa</i>	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.63	
P47- <i>Sathrax</i> sp. (nymph)	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0.70	
Total	16	83	6	1	35	73	556	10	282	86	89	22	34	34	28	1674	1	3	99	21	55	25	2	3235	-
d_h	0.97	0.58	1	0.43	0.73	0.57	0.91	0.60	0.79	0.44	0.51	0.68	0.20	0.28	0.21	0.62	0.71	0.76	0.77	0.45	0.74	0.51	0.70	-	-
H_{s_w}	1.33	1.40	0	0	1.74	1.77	1.59	0	1.26	0.43	0.24	1.30	0.75	0.70	0.41	1.96	0	0	1.59	0.59	0.41	0.78	0.69	-	-

d_p =specialized index for ectoparasites, d_h = specialized index for host, H1 to H23=Abbreviation for host species, P1 to P47= Abbreviation for ectoparasite species, H_{s_w} = Shanon-Weiner Diversity Index of host.