

Supplementary Materials

The Gut Microbiomes of Wild Rodents within Forested Environments in Sarawak, Borneo

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Supplementary Table 1. Sample information of rodents

Sample ID	Field ID	Species	Sex	Age	Sampling Date	Locality
G1	GGNP21-008	<i>Maxomys whiteheadi</i>	M	A	22/10/2021	Gunung Gading National Park
G2	GGNP21-011	<i>Maxomys whiteheadi</i>	F	A	22/10/2021	Gunung Gading National Park
M1	MAE22-005	<i>Niviventer cremoriventer</i>	M	A	20/05/2022	Marup Atas, Engkilili
M2	MAE22-006	<i>Maxomys tajuddinii</i>	M	A	20/05/2022	Marup Atas, Engkilili
M3	MAE22-009	<i>Maxomys whiteheadi</i>	M	A	20/05/2022	Marup Atas, Engkilili
M4	MAE22-010	<i>Maxomys tajuddinii</i>	M	A	20/05/2022	Marup Atas, Engkilili
L1	LHNP22-015	<i>Niviventer cremoriventer</i>	M	J	03/07/2022	Lambir Hills National Park
L2	LHNP22-016	<i>Sundamys muelleri</i>	M	A	03/07/2022	Lambir Hills National Park
S1	SSK22-006	<i>Sundamys muelleri</i>	M	A	15/07/2022	Sungai Sibau, Kapit
S2	SSK22-009	<i>Maxomys tajuddinii</i>	M	A	16/07/2022	Sungai Sibau, Kapit
S3	SSK22-013	<i>Maxomys surifer</i>	M	A	16/07/2022	Sungai Sibau, Kapit
S4	SSK22-014	<i>Niviventer cremoriventer</i>	F	A	16/07/2022	Sungai Sibau, Kapit
S5	SSK22-017	<i>Niviventer cremoriventer</i>	F	A	17/07/2022	Sungai Sibau, Kapit
U1	UPK23-005	<i>Maxomys tajuddinii</i>	M	A	12/03/2023	Ulu Poi, Kanowit
U2	UPK23-006	<i>Niviventer cremoriventer</i>	F	A	12/03/2023	Ulu Poi, Kanowit
U3	UPK23-009	<i>Rattus tanezumi</i>	M	A	12/03/2023	Ulu Poi, Kanowit

M = Male, F = Female, A = Adult, J = Juvenile

Supplementary Table 2. Environmental information of sampling sites

Locality	Gunung Gading National Park	Marup Atas Engkilili	Lambir Hills National Park	Sungai Sibau Kapit	Ulu Poi Kanowit
District	Lundu	Lubok Antu	Miri	Kapit	Kanowit
Protected Area	Yes	No	Yes	No	No
Habitat type	Forested area at the outskirts of township	Forested area with nearby human settlement	Forested area away from human settlement	Forested area with nearby human settlement	Forested area with nearby human settlement
Water body description	Flowing river near HQ of park; used for recreational activities	Flowing river at the outskirts of village; used by locals as water source	Flowing river at main waterfall trail; used for recreational activities	Flowing river at the outskirts of village; used by locals as water source	Fast flowing river adjacent to village; used by locals for transportation

Supplementary Table 3. GenBank and BioSample accession numbers for sampled rodents

Sample ID	GenBank	BioSample
G1	PP054540	SAMN37668508
G2	PP054541	SAMN37668509
M1	PP054544	SAMN37668512
M2	PP054545	SAMN37668513
M3	PP054546	SAMN37668514
M4	PP054547	SAMN37668515
L1	PP054542	SAMN37668510
L2	PP054543	SAMN37668511
S1	PP054548	SAMN37668516
S2	PP054549	SAMN37668517
S3	PP054550	SAMN37668518
S4	PP054551	SAMN37668519
S5	PP054552	SAMN37668520
U1	PP054553	SAMN37668521
U2	PP054554	SAMN37668522
U3	PP054555	SAMN37668523

Supplementary Table 4. Abundance table of bacterial genera of >1% relative abundance. Sample ID follows Supplementary Table 1

Genus \ Sample	G1	G2	M1	M2	M3	M4	L1	L2	S1	S2	S3	S4	S5	U1	U2	U3
<i>Anaerobutyricum</i>	187	39	723	143	234	933	32	338	171	269	141	78	211	412	88	317
<i>Anaerostipes</i>	232	147	1718	379	360	1132	71	368	622	482	259	193	293	561	151	418
<i>Bacillus</i>	220	254	306	297	291	213	263	164	277	345	286	418	359	328	270	300
<i>Bacteroides</i>	973	233	252	250	355	68	75	103	165	216	517	85	214	708	74	275
<i>Blautia</i>	646	261	1503	514	1476	1450	121	518	965	1415	1445	267	544	2369	3063	974
<i>Clostridium</i>	293	1722	473	292	818	650	91	300	568	516	961	421	815	820	168	512
<i>Duncaniella</i>	1025	732	105	573	659	171	263	150	244	384	510	559	1544	249	338	1284
<i>Escherichia</i>	227	461	34	484	365	1021	135	73	43	165	84	1004	48	77	1896	48
<i>Flavonifractor</i>	651	353	1077	748	808	645	60	655	1020	936	586	403	489	802	308	1296
<i>Flintibacter</i>	742	524	754	489	178	536	64	871	1291	1420	840	608	562	957	528	1673
<i>Intestinimonas</i>	633	357	387	273	140	382	27	501	489	601	609	240	231	309	128	497
<i>Klebsiella</i>	840	1985	19	901	268	246	37	17	17	147	15	279	25	103	3211	23
<i>Lachnoclostridium</i>	908	341	2098	782	1067	3261	111	504	724	799	1580	180	442	1425	832	797
<i>Lachnospira</i>	74	19	291	56	79	919	16	374	170	563	221	148	220	568	1072	207
<i>Lacrimispora</i>	393	54	759	247	231	841	107	297	914	395	276	149	340	624	353	411
<i>Lactobacillus</i>	3116	6862	401	2468	5499	2289	20	2183	268	2454	3123	23	9	979	7	1253
<i>Ligilactobacillus</i>	16	27	9	14	16	7	20936	8	23	33	70	10698	125	21	6326	102
<i>Limosilactobacillus</i>	897	565	1166	1468	1086	202	125	921	298	1459	429	152	546	322	7	1646
<i>Muribaculum</i>	892	781	92	509	583	140	468	90	145	312	434	387	1220	207	162	889
<i>Phascolarctobacterium</i>	1510	8	45	965	1	1	0	185	606	420	198	0	1	710	0	0
<i>Prevotella</i>	1217	271	752	279	223	100	15	414	731	132	182	138	441	753	283	910
<i>Romboutsia</i>	6	2983	98	6	344	1092	2	7	37	23	1306	10	443	12	9	35
<i>Ruminococcus</i>	2634	697	2485	7214	3362	1529	548	10864	6045	4294	2608	820	3820	3979	205	1491