

Supplementary 1

Table S1: Species composition, abundance, richness and frequency of fly species occurrence (SO) in streams from black flies collected in Doi Inthanon National Park.

Elevations	400 m			700 m			1400 m			1700 m			2200 m			2500 m			Total	RB*	SO** (%)
Seasons	R	C	H	R	C	H	R	C	H	R	C	H	R	C	H	R	C	H			
Species																					
<i>S. (D) courtneyi</i>	0	0	0	7	2	0	4	0	0	0	0	0	0	0	0	0	0	0	13	0.3	33.3
<i>S. (G) asakoe</i> sp. gr.	0	7	0	156	32	15	48	23	6	68	45	7	14	15	7	8	0	0	451	9.6	100
<i>S. (G) burtoni</i>	0	0	0	4	5	3	4	9	0	0	0	0	0	0	0	0	0	0	25	0.5	33.3
<i>S. (G) chayamaritae</i>	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	7	0.1	16.6
<i>S. (G) Chiangdaoense</i>	0	0	0	0	0	0	0	0	0	101	41	13	15	13	0	0	0	0	183	3.9	33.3
<i>S. (G) chumpornense</i>	30	12	43	43	14	96	0	0	0	0	0	0	0	0	0	0	0	0	238	5.1	33.3
<i>S. (G) inthanonense</i> complex	0	0	0	0	0	0	20	23	2	148	69	18	16	14	0	0	0	0	310	6.6	50
<i>S. (G) sheilae</i>	0	0	0	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0.3	16.6
<i>S. (G) siamense</i> complex	22	12	5	35	23	6	0	0	0	0	0	0	0	0	0	0	0	0	103	2.2	33.3
<i>S. (G) gombakense</i>	0	0	0	0	19	1	0	0	0	0	0	0	0	0	0	0	0	0	20	0.4	16.6
<i>S. (G) maeklangense</i>	0	0	0	0	0	0	0	0	0	11	3	0	13	0	0	0	0	0	27	0.6	33.3
<i>S. (M) angkaense</i>	0	0	0	0	0	0	0	0	0	0	13	0	0	5	0	54	82	13	167	3.6	50
<i>S. (M) laoleense</i>	0	0	0	0	0	0	2	20	7	7	22	0	0	0	0	0	0	0	58	1.2	33.3
<i>S. (M) merga</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	54	82	13	181	3.9	33.3
<i>S. (M) phahompokense</i>	0	0	0	0	0	0	0	0	0	0	0	0	7	24	2	12	15	0	60	1.3	33.3
<i>S. (M) surachaii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	0	10	0.2	16.6
<i>S. (N) aureohirtum</i>	0	0	0	0	0	0	11	4	0	0	0	0	0	0	0	0	0	0	15	0.3	16.6
<i>S. (N) chomthongense</i> complex	0	0	0	0	0	0	0	0	0	0	0	0	102	32	11	75	26	2	248	5.3	33.3
<i>S. (N) fangense</i>	0	0	0	0	0	0	0	0	0	8	14	0	0	0	0	0	0	0	22	0.5	16.6
<i>S. (N) feuerborni</i> complex	0	0	0	0	0	0	3	12	0	0	0	0	0	0	0	0	0	0	15	0.3	16.6
<i>S. (N) fruticosum</i>	0	0	0	0	0	0	0	0	0	49	33	4	6	0	3	0	0	0	95	2.0	33.3
<i>S. (N) khunklangense</i>	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	0.1	16.6
<i>S. (N) maeaiense</i>	0	0	0	0	0	0	0	0	0	38	34	8	0	16	0	0	0	0	96	2.0	33.3
<i>S. (S) bullatum</i>	0	0	0	0	0	0	9	6	0	0	0	0	0	0	0	0	0	0	15	0.3	16.6
<i>S. (S.) chamlongi</i>	0	0	0	35	6	0	31	24	6	27	22	7	0	0	0	0	0	0	158	3.4	50
<i>S. (S.) crocinum</i>	0	0	0	0	0	0	14	9	0	0	0	0	0	0	0	0	0	0	23	0.5	16.6
<i>S. (S.) digrammicum</i>	0	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	0	10	0.2	16.6
<i>S. (S.) doipuiense</i> complex	0	0	0	0	0	0	70	51	25	79	65	9	0	0	0	0	0	0	299	6.4	33.3
<i>S. (S.) kiewmaepanense</i>	0	0	0	0	0	0	0	0	0	0	0	0	32	24	10	0	0	0	66	1.4	16.6
<i>S. (S.) luculentum</i>	0	0	0	0	0	0	0	0	0	13	14	0	0	0	0	0	0	0	27	0.6	16.6
<i>S. (S.) mediocoloratum</i>	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0.0	16.6
<i>S. (S.) nigrogilvum</i>	0	9	1	20	20	5	32	33	16	5	34	0	0	25	0	0	11	9	220	4.7	100
<i>S. (S.) nodosum</i>	0	0	0	18	17	16	0	0	0	0	0	0	0	0	0	0	0	0	51	1.1	16.6
<i>S. (S.) phukaense</i>	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0.1	16.6
<i>S. (S.) fenestratum</i>	0	0	0	44	17	13	0	11	6	15	17	4	0	0	0	0	0	0	127	2.7	50
<i>S. (S.) rudnicki</i>	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0.1	16.6
<i>S. (S.) setsukoae</i>	0	0	0	0	0	0	0	0	0	0	0	0	20	9	6	38	18	8	99	2.1	33.3

Elevations	400 m			700 m			1400 m			1700 m			2200 m			2500 m			Total	RB*	SO** (%)
Seasons	R	C	H	R	C	H	R	C	H	R	C	H	R	C	H	R	C	H			
Species																					
<i>S. (S.) siripoomense</i>	0	0	0	22	7	0	0	9	1	0	0	0	0	0	0	0	0	0	39	0.8	33.3
<i>S. (S.) striatum</i> sp. gr.	90	63	17	52	33	36	47	17	1	0	0	0	0	0	0	0	0	0	356	7.7	50
<i>S. (S.) suchariti</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	8	0	28	0.6	16.6
<i>S. (S.) tani</i> complex	14	26	7	12	16	1	9	2	1	0	0	0	0	0	0	0	0	0	88	1.9	50
<i>S. (S.) tenebrosum</i> complex	0	0	0	0	0	0	0	0	0	0	0	0	162	65	15	235	29	11	517	11.1	33.3
<i>S. (S.) undecimum</i>	0	0	0	0	0	0	0	0	0	0	0	0	75	37	12	0	0	0	124	2.7	16.6
<i>S. (S.) yuphae</i>	0	0	0	0	0	0	0	3	0	33	19	5	0	0	0	0	0	0	60	1.3	33.3
Seasonal abundance	156	129	73	460	216	194	311	261	71	611	448	75	464	313	66	498	279	56		100.0	
Seasonal richness	4	6	5	14	13	11	15	18	10	16	16	9	12	14	8	9	9	6			
Localities richness	6			15			19			17			16			10					

* RB = Relative abundance; **SO (%) = Species occurrence; R = Rainy; C = Cold; H = Hot