

Table S1. Hyphomycetes associated with *Funtumia africana* (Benth) Stapf (Apocynaceae) leaf litter in fine-mesh litterbags exposed in the streams

Taxa (22)	Study stations												
	K1	K2	K3	AN1	AN2	N	IM	NM	C	A	Z	OB	ON
<i>Anguillospora furtiva</i> Descals	0	0	0	0	0	0	0	0	0	0	0	3	0
<i>Anguillospora longissima</i> (Saccardo & Sydow) Ingold	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Casaresia sphagnum</i> Gonz. Frag.	0	1	0	0	0	1	0	0	0	0	0	0	0
<i>Culicidospora gravida</i> R.H. Peterson	0	0	0	0	0	0	0	0	0	0	0	2	0
<i>Dendrospora torulosa</i> Descals & J. Webster	0	0	0	0	0	0	0	0	0	2	0	0	0
<i>Diplocladiella scalaroides</i> Arnaud	0	5	0	2	0	0	0	0	0	0	0	0	0
<i>Flagellospora curvula</i> Ingold	0	0	0	0	0	0	2	0	0	1	0	8	0
<i>Flagellospora penicillioides</i> Ingold	0	0	0	0	0	3	0	0	0	0	0	0	0
<i>Heliscina campanulata</i> Marvanová	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>Heliscus lugdunensis</i> Sacc. & Therry	0	0	0	0	0	0	0	1	1	4	0	4	2
<i>Lunulospora curvula</i> Ingold	16	39	12	19	24	12	19	18	46	41	48	27	47
<i>Margaritispota aquatica</i> Ingold	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>Taeniospora gracilis</i> Marvanová	0	3	0	1	2	0	0	5	0	10	0	2	5
<i>Tetrachaetum elegansi</i> Ingold	0	0	0	0	0	0	0	0	0	0	0	0	3
<i>Tricellula aquatica</i> J. Webster	0	0	0	0	0	0	0	0	0	0	0	1	1
<i>Tricladium curvisporum</i> Descals	0	0	3	0	0	0	0	0	0	0	0	0	0
<i>Tridentaria</i> sp. Preuss	0	0	0	0	0	2	0	0	0	0	0	0	0
<i>Tripospermum camelopardus</i> Ingold, Dann & P.J. McDougall	0	0	0	0	2	0	0	0	0	0	0	0	0
<i>Triscelophorus monosporus</i> Ingold	0	0	0	0	0	0	0	0	0	0	0	2	0
<i>Tumularia tuberculata</i> (Gönczöl) Descals & Marvanová	0	0	0	0	0	0	0	0	2	0	0	0	0
<i>Varicosporium elodeae</i> W. Kegel	0	0	0	0	0	0	4	0	0	0	0	0	0
<i>Volucrispora graminea</i> Ingold, P.J. McDougall & Dann	0	0	0	0	1	5	0	0	0	2	0	0	1
Total abundance (470)	16	49	15	22	29	23	25	24	49	60	48	50	60

Table S2. Values of breakdown rates and environmental factors (K_c : rate in coarse mesh, K_f : rate in fine mesh, λF : fragmentation of leaf litter, Dist: distance to the source, CV: current velocity, WW: water width, WD: water depth, %Hum: percentage of air humidity, Lux: luminosity, Wtemp: water temperature, pH: potential Hydrogen, Cond: conductivity and DO: dissolved oxygen)

Streams	Site	K_c	K_f	λF	Ratio K_c/K_f	Dist	CV	WW	WD	%Hum	Lux	Wtemp	PH	Cond	DO
Kongolo	K1	0.043	0.021	0.012	2.1	40.4	9.3	15.0	30.0	67.0	3.08	26.2	6.4	32.3	7.3
Kongolo	K1	0.039	0.039	0.000	1.0	40.4	9.3	15.0	30.0	67.0	3.08	26.2	6.4	32.3	7.3
Kongolo	K1	0.033	0.000	0.033	0.0	40.4	9.3	15.0	30.0	67.0	3.08	26.2	6.4	32.3	7.3
Kongolo	K1	0.033	0.057	0.000	0.6	40.4	9.3	15.0	30.0	67.0	3.08	26.2	6.4	32.3	7.3
Kongolo	K2	0.038	0.033	0.003	1.2	76.2	5.5	11.2	33.7	58.3	4.37	27.7	6.0	28.6	6.6
Kongolo	K2	0.029	0.039	0.000	0.7	76.2	5.5	11.2	33.7	58.3	4.37	27.7	6.0	28.6	6.6
Kongolo	K2	0.043	0.036	0.003	1.2	76.2	5.5	11.2	33.7	58.3	4.37	27.7	6.0	28.6	6.6
Kongolo	K2	0.033	0.034	0.000	1.0	76.2	5.5	11.2	33.7	58.3	4.37	27.7	6.0	28.6	6.6
Kongolo	K2	0.033	0.024	0.005	1.4	76.2	5.5	11.2	33.7	58.3	4.37	27.7	6.0	28.6	6.6
Kongolo	K3	0.031	0.039	0.000	0.8	100.0	0.9	27.9	71.7	74.0	4.15	23.6	5.9	100.4	5.4
Kongolo	K3	0.063	0.042	0.011	1.5	100.0	0.9	27.9	71.7	74.0	4.15	23.6	5.9	100.4	5.4
Kongolo	K3	0.051	0.048	0.002	1.1	100.0	0.9	27.9	71.7	74.0	4.15	23.6	5.9	100.4	5.4
Kongolo	K3	0.057	0.055	0.001	1.0	100.0	0.9	27.9	71.7	74.0	4.15	23.6	5.9	100.4	5.4
Kongolo	K3	0.045	0.052	0.000	0.9	100.0	0.9	27.9	71.7	74.0	4.15	23.6	5.9	100.4	5.4
Nloumou	AN1	0.054	0.036	0.009	1.5	19.2	7.5	10.8	18.8	67.3	2.96	26.8	6.5	23.0	7.4
Nloumou	AN1	0.034	0.027	0.004	1.3	19.2	7.5	10.8	18.8	67.3	2.96	26.8	6.5	23.0	7.4
Nloumou	AN1	0.039	0.099	0.000	0.4	19.2	7.5	10.8	18.8	67.3	2.96	26.8	6.5	23.0	7.4
Nloumou	AN1	0.041	0.036	0.003	1.1	19.2	7.5	10.8	18.8	67.3	2.96	26.8	6.5	23.0	7.4
Nloumou	AN1	0.046	0.099	0.000	0.5	19.2	7.5	10.8	18.8	67.3	2.96	26.8	6.5	23.0	7.4
Nloumou	AN2	0.014	0.023	0.000	0.6	35.2	10.6	7.8	40.3	82.9	3.75	22.6	4.9	27.3	7.2
Nloumou	AN2	0.050	0.024	0.015	2.1	35.2	10.6	7.8	40.3	82.9	3.75	22.6	4.9	27.3	7.2
Nloumou	AN2	0.044	0.042	0.001	1.0	35.2	10.6	7.8	40.3	82.9	3.75	22.6	4.9	27.3	7.2
Nloumou	N	0.056	0.033	0.013	1.7	86.5	11.2	13.3	25.8	71.6	2.91	25.6	7.2	22.8	7.4
Ibe-Mfeme	IM	0.039	0.035	0.002	1.1	9.3	1.0	27.4	32.9	87.1	3.35	21.8	4.8	13.5	6.7
Ibe-Mfeme	IM	0.042	0.045	0.000	0.9	9.3	1.0	27.4	32.9	87.1	3.35	21.8	4.8	13.5	6.7
Ibe-Mfeme	IM	0.043	0.033	0.005	1.3	9.3	1.0	27.4	32.9	87.1	3.35	21.8	4.8	13.5	6.7
Ibe-Mfeme	IM	0.042	0.035	0.004	1.2	9.3	1.0	27.4	32.9	87.1	3.35	21.8	4.8	13.5	6.7

Ibe-Mfeme	IM	0.047	0.033	0.007	1.4	9.3	1.0	27.4	32.9	87.1	3.35	21.8	4.8	13.5	6.7
Nsoe-Mekok	NM	0.061	0.045	0.009	1.4	13.5	3.6	10.3	15.0	77.4	2.49	21.9	6.2	19.9	9.5
Nsoe-Mekok	NM	0.022	0.035	0.000	0.6	13.5	3.6	10.3	15.0	77.4	2.49	21.9	6.2	19.9	9.5
Nsoe-Mekok	NM	0.058	0.049	0.004	1.2	13.5	3.6	10.3	15.0	77.4	2.49	21.9	6.2	19.9	9.5
Nsoe-Mekok	NM	0.042	0.035	0.003	1.2	13.5	3.6	10.3	15.0	77.4	2.49	21.9	6.2	19.9	9.5
Nsoe-Mekok	NM	0.027	0.055	0.000	0.5	13.5	3.6	10.3	15.0	77.4	2.49	21.9	6.2	19.9	9.5
Akoumbegue	C	0.035	0.027	0.004	1.3	7.3	6.4	11.7	26.4	80.3	2.58	21.6	4.2	17.1	6.0
Akoumbegue	C	0.043	0.048	0.000	0.9	7.3	6.4	11.7	26.4	80.3	2.58	21.6	4.2	17.1	6.0
Akoumbegue	C	0.042	0.034	0.004	1.2	7.3	6.4	11.7	26.4	80.3	2.58	21.6	4.2	17.1	6.0
Akoumbegue	C	0.039	0.045	0.000	0.9	7.3	6.4	11.7	26.4	80.3	2.58	21.6	4.2	17.1	6.0
Akoumbegue	C	0.043	0.035	0.004	1.2	7.3	6.4	11.7	26.4	80.3	2.58	21.6	4.2	17.1	6.0
Akoumbegue	A	0.055	0.038	0.009	1.4	60.6	11.2	11.7	34.1	81.7	4.17	21.7	6.1	18.3	7.9
Akoumbegue	A	0.036	0.039	0.000	0.9	60.6	11.2	11.7	34.1	81.7	4.17	21.7	6.1	18.3	7.9
Akoumbegue	A	0.037	0.037	0.000	1.0	60.6	11.2	11.7	34.1	81.7	4.17	21.7	6.1	18.3	7.9
Akoumbegue	A	0.051	0.045	0.003	1.1	60.6	11.2	11.7	34.1	81.7	4.17	21.7	6.1	18.3	7.9
Akoumbegue	A	0.043	0.045	0.000	0.9	60.6	11.2	11.7	34.1	81.7	4.17	21.7	6.1	18.3	7.9
Zoetoupsi	Z	0.047	0.030	0.009	1.6	9.3	5.3	8.1	33.3	85.0	4.01	21.6	4.4	19.2	5.3
Zoetoupsi	Z	0.042	0.043	0.000	1.0	9.3	5.3	8.1	33.3	85.0	4.01	21.6	4.4	19.2	5.3
Zoetoupsi	Z	0.035	0.037	0.000	0.9	9.3	5.3	8.1	33.3	85.0	4.01	21.6	4.4	19.2	5.3
Zoetoupsi	Z	0.035	0.033	0.001	1.1	9.3	5.3	8.1	33.3	85.0	4.01	21.6	4.4	19.2	5.3
Zoetoupsi	Z	0.045	0.042	0.002	1.1	9.3	5.3	8.1	33.3	85.0	4.01	21.6	4.4	19.2	5.3
Zoetoupsi	OB	0.038	0.041	0.000	0.9	36.8	17.1	5.1	25.5	76.3	4.09	22.4	5.5	19.5	7.8
Zoetoupsi	OB	0.046	0.047	0.000	1.0	36.8	17.1	5.1	25.5	76.3	4.09	22.4	5.5	19.5	7.8
Zoetoupsi	OB	0.037	0.045	0.000	0.8	36.8	17.1	5.1	25.5	76.3	4.09	22.4	5.5	19.5	7.8
Zoetoupsi	OB	0.044	0.037	0.004	1.2	36.8	17.1	5.1	25.5	76.3	4.09	22.4	5.5	19.5	7.8
Zoetoupsi	OB	0.047	0.039	0.004	1.2	36.8	17.1	5.1	25.5	76.3	4.09	22.4	5.5	19.5	7.8
Ossoe-Nkoro	ON	0.026	0.028	0.000	0.9	15.5	14.4	12.8	23.5	78.3	4.51	22.0	4.6	22.2	6.3
Ossoe-Nkoro	ON	0.060	0.041	0.010	1.5	15.5	14.4	12.8	23.5	78.3	4.51	22.0	4.6	22.2	6.3
Ossoe-Nkoro	ON	0.046	0.041	0.003	1.1	15.5	14.4	12.8	23.5	78.3	4.51	22.0	4.6	22.2	6.3
Ossoe-Nkoro	ON	0.029	0.056	0.000	0.5	15.5	14.4	12.8	23.5	78.3	4.51	22.0	4.6	22.2	6.3

Table S3. Macroinvertebrates collected from kick samplings in the streams. Assignment of macroinvertebrates into FFGs according to literature: Sh = Shredders; Sc = Scrapers; Co = Collectors; Fi = Filters; He = Herbivores; Pr = Predators; Om = Omnivores

Order	Family	K1	K2	K3	AN1	AN2	N	IM	NM	C	A	Z	OB	ON	FFGs
Oligochaeta	Lumbricidae	0	0	0	0	0	0	0	4	0	0	0	0	0	Co
	Haplotaxidae	0	0	0	1	0	0	0	1	0	1	0	0	0	Co
Rhynchobdellida	Glossiphoniidae	3	0	0	0	0	0	0	0	0	2	0	1	0	Pr
Bivalva	Sphaeriidae	0	0	1	0	0	0	12	1	5	0	0	7	53	Fi
Decapoda	Atyidae	84	56	0	146	201	14	25	222	34	216	2	0	0	Sc
	Potamonautidae	0	2	0	18	0	0	0	0	0	2	0	0	0	Om
Coleoptera	Noteridae	0	1	119	0	1	2	0	0	4	0	25	3	6	Pr
	Haliplidae	0	7	2	0	0	4	0	0	0	0	0	0	1	Pr
	Gyrinidae	1	0	0	10	1	1	1	29	0	0	0	0	0	Pr
	Dytiscidae	2	0	11	0	0	0	0	1	10	0	9	4	7	Pr
	Hydroscaphidae	1	0	0	0	0	0	0	1	0	0	0	0	0	Sh
	Hydraenidae	0	0	0	0	0	0	0	0	0	0	0	1	0	Pr
	Spercheidae	0	0	0	0	1	0	0	0	0	0	0	0	0	Sc
	Hydrochidae	0	1	0	0	0	0	0	0	0	0	0	0	0	Pr
	Elmidae	0	0	2	0	1	1	0	0	0	0	0	0	1	Sc
	Hydrophilidae	0	3	2	2	3	2	1	0	5	8	16	7	6	Pr
	Hygrobiiidae	0	0	0	0	0	0	0	0	0	1	0	0	0	Pr
	Scirtidae	0	0	0	0	0	0	0	0	0	0	0	0	1	Sh
	Chrysomelidae	0	0	0	0	8	0	0	0	0	0	0	1	1	He
Curculionidae	0	0	0	0	0	0	0	1	0	0	0	0	0	He	
Diptera	Chironomidae	0	2	2	0	0	2	4	0	0	1	0	1	28	Co
	Tipulidae	0	0	0	4	0	0	0	0	0	0	0	0	0	Sh
	Sciomyzidae	0	1	0	0	0	0	0	0	0	0	0	0	0	Pr
	Limoniidae	0	0	0	1	0	0	0	0	0	0	0	0	0	Sh
	Ceratopogonidae	3	2	0	0	0	1	2	0	0	0	1	0	1	Co
	Culicidae	0	0	1	0	0	0	0	0	0	0	0	0	2	Fi
	Anthomyiidae	0	0	0	0	1	0	0	0	0	0	0	0	0	Pr

Heteroptera	Naucoridae	0	1	2	4	0	0	3	1	1	0	3	10	12	Pr
	Nepidae	1	3	1	1	3	5	6	2	9	10	2	1	2	Pr
	Notonectidae	0	0	0	0	0	0	0	2	7	0	3	0	1	Pr
	Veliidae	0	0	1	39	2	26	0	23	0	7	0	10	2	Pr
	Mesoveliidae	0	0	0	0	0	0	0	0	1	0	0	0	0	Pr
	Gerridae	3	0	0	0	1	0	1	8	4	1	0	2	0	Pr
	Pleidae	1	0	0	0	0	0	0	0	0	0	0	3	0	Pr
	Hydrometridae	0	0	0	0	0	0	0	2	1	2	4	0	0	Pr
	Belostomidae	0	0	2	3	0	0	1	2	2	0	1	3	1	Pr
Odonata	Libellulidae	1	9	0	5	2	0	4	4	0	5	1	7	9	Pr
	Gomphidae	2	5	0	0	0	1	0	2	0	5	0	10	0	Pr
	Aeshnidae	1	0	0	0	0	0	0	0	0	1	0	0	0	Pr
	Macromiidae	8	0	0	5	0	11	1	10	0	1	0	0	0	Pr
	Lestidae	0	0	0	0	0	0	0	1	0	1	0	0	0	Pr
	Calopterygidae	1	0	0	1	1	4	0	0	0	3	0	0	0	Pr
	Corduliidae	1	2	0	0	1	3	2	3	4	11	0	4	3	Pr
	Cordulegasteridae	8	0	0	0	8	0	0	0	0	1	0	0	0	Pr
	Platycnemididae	2	0	0	0	0	0	0	0	0	0	0	0	0	Pr
	Coenagrionidae	1	19	0	0	20	0	4	0	0	11	9	3	0	Pr
Ephemeroptera	Caenidae	6	1	0	0	1	1	3	0	0	0	0	0	0	Co
	Leptophlebiidae	18	0	0	15	3	1	0	1	0	3	0	0	0	Co
	Ephemerellidae	2	0	0	0	0	1	0	0	0	1	0	0	0	Co
	Potamanthidae	0	0	0	0	0	3	0	0	0	0	0	0	0	Co
	Heptageniidae	0	0	0	1	0	1	0	0	0	0	0	0	0	Sc
	Baetidae	0	3	0	0	0	1	0	0	0	0	0	0	0	Sc
Plecoptera	Perlidae	7	1	0	14	2	0	0	0	1	0	0	0	Pr	
Trichoptera	Hydropsychidae	0	3	0	1	4	0	0	1	0	1	0	7	0	Co
	Limnephilidae	6	0	0	0	7	2	1	1	0	1	0	0	0	Sh
	Polycentropodidae	1	0	0	0	4	2	0	0	0	0	0	2	0	Pr
Blattodea	Blaberidae	0	0	0	0	1	1	4	1	10	3	7	0	0	Sh

Table S4. Macroinvertebrates collected from kick samplings in the streams. Assignment of macroinvertebrates into FFGs according to literature: Sh = Shredders; Sc = Scrapers; Co = Collectors; Fi = Filters; He = Herbivores; Pr = Predators; Om = Omnivores

Order	Family	K1	K2	K3	AN1	AN2	N	IM	NM	C	A	Z	OB	ON	FFGs
Gastropoda	Planorbidae	0	0	0	0	0	0	3	0	0	0	0	0	0	He
Oligochaeta	Haplotaxidae	0	0	1	0	0	0	0	0	0	0	1	0	0	Co
	Enchytraeidae	0	0	0	0	4	0	2	0	0	0	0	0	0	Co
	Tubificidae	0	0	0	0	0	0	8	0	2	0	0	0	0	Co
	Spargonophilidae	0	0	0	0	0	0	0	6	0	0	0	0	0	Co
Rhynchobdellida	Glossophoniidae	1	2	0	1	0	0	0	7	0	0	0	0	1	Pr
Ostracoda	Ostracoda	0	2	0	0	0	0	1	0	0	0	0	6	0	Co
Decapoda	Atyidae	0	6	0	4	1	0	2	9	0	0	0	0	0	Sc
Diptera	Tabanidae	0	0	1	0	0	0	0	0	0	0	0	0	0	Pr
	Chironomidae	22	20	8	63	9	1	7	2	22	47	5	21	38	Co
Coleoptera	Noteridae	0	0	3	1	0	0	0	0	0	0	0	0	0	Pr
	Dytiscidae	0	0	1	0	0	0	0	0	0	0	0	0	0	Pr
	Hydroscaphidae	0	0	0	1	0	1	0	0	0	0	0	0	0	Sh
	Scirtidae	0	1	0	0	0	1	0	0	2	0	0	0	1	Sh
	Chrysomelidae	0	0	0	1	2	0	0	0	0	2	0	2	2	He
	Elmidae	2	0	0	7	4	0	0	0	0	1	0	0	0	Sc
	Hydrophilidae	0	0	0	1	0	0	0	0	4	0	0	0	1	Pr
	Haliplidae	0	0	0	0	0	0	1	0	0	0	0	0	0	Pr
	Psephenidae	0	0	0	0	0	0	0	0	0	1	0	0	0	Sc
Dryopidae	0	0	0	0	0	0	0	0	0	0	0	0	1	He	
Heteroptera	Naucoridae	0	0	1	0	0	0	0	0	0	0	0	0	0	Pr
Odonata	Libellulidae	0	0	1	0	0	0	0	0	0	0	0	0	0	Pr
	Coenagrionidae	0	0	1	1	1	0	0	0	0	0	0	0	0	Pr
Ephemeroptera	Caenidae	0	2	0	1	2	0	0	0	0	0	0	0	0	Co
	Leptophlebiidae	1	13	0	5	8	0	4	4	0	10	0	0	2	Co
	Tricorythidae	1	0	0	0	0	0	0	0	0	0	0	0	0	Pr
Plecoptera	Perlidae	0	0	0	1	0	0	0	0	0	0	0	0	0	Pr

Trichoptera	Ecnomidae	1	2	0	3	0	0	0	0	0	0	0	0	0	Sh
	Limnephilidae	0	1	0	0	0	0	0	0	0	0	0	0	0	Sh
	Sericostomatidae	0	0	0	0	0	0	0	1	0	0	0	0	0	Sh
	Hydropsychidae	0	0	0	0	0	0	0	0	0	1	0	0	1	Co