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Table S1: Our dataset of public domain genomes

Table S1: Shows the systematic name, common name, genome version, source and submitter for the 759 genomes used in this study. Almost all are in the public domain; only four genomes were acquired through collaborators, these are marked 'Private' in the source column. Headings indicate Kingdom (METAZOA, FUNGI or VIRIDIPLANTAE), followed by Class (e.g. MAMMALIA) and Order (e.g. Monotremata).

No	Systematic Name	Common Name	Genome Version	Source	Submitter			
ME'	TAZOA							
MA	MAMMALIA							
Mor	notremata							
1	Tachyglossus aculeatus	Echidna	Tachyglossus	Private	-			
2	Ornithorhynchus anatinus	Platypus	ornAna1	UCSC	WashU			
Mar	supialia							
3	Monodelphis domestica	Opossum	monDom5	UCSC	GAT			
4	Macropus eugenii	Tammar wallaby	Meug_1.1	NCBI	Tammar Wallaby Genome Sequencing Consortium			
5	Sarcophilus harrisii	Tasmanian devil	sarHar1	UCSC	WTSI			
Xen	arthra			·				
6	Dasypus novemcinctus	Armadillo	Dasnov3.0	NCBI	BCM			
7	Choloepus hoffmanni	Sloth	choHof1	UCSC	Broad			
Afro	otheria			·				
8	Chrysochloris asiatica	Cape golden mole	ChrAsi1.0	NCBI	Broad			
9	Echinops telfairi	Tenrec	EchTel2.0	NCBI	Broad			
10	Orycteropus afer afer	Aardvark	OryAfe1.0	NCBI	Broad			
11	Elephantulus edwardii	Cape elephant shrew	EleEdw1.0	NCBI	Broad			
12	Trichechus manatus latirostris	Manatee	TriManLat1.0	NCBI	Broad			
13	Procavia capensis	Rock hyrax	proCap1	UCSC	BCM			
14	Loxodonta africana	Elephant	LAv4	Private	-			
Inse	ectivora			'				
15	Erinaceus europaeus	Hedgehog	EriEur2.0	NCBI	Broad			
16	Sorex araneus	Common shrew	SorAra2.0	NCBI	Broad			
17	Condylura cristata	Star-nosed mole	ConCri1.0	NCBI	Broad			
Chi	roptera		•		•			
18	Pteropus alecto	Black flying fox	ASM32557v1	NCBI	BGI			
19	Pteropus vampyrus	Megabat	pteVam1	UCSC	BCM			
20	Eidolon helvum	Straw-coloured fruit bat	ASM46528v1	NCBI	QMUL			
21	Megaderma lyra	Greater false vampire bat	ASM46534v1	NCBI	QMUL			
22	Rhinolophus ferrumequinum	Greater horseshoe bat	ASM46549v1	NCBI	QMUL			

No	Systematic Name	Common Name	Genome Version	Source	Submitter
23	Pteronotus parnellii	Parnells mustached bat	ASM46540v1	NCBI	QMUL
24	Eptesicus fuscus	Big brown bat	EptFus1.0	NCBI	Broad
25	Myotis brandtii	Brandts bat	ASM41265v1	NCBI	BGI
26	Myotis davidii	Mouse-eared bat	ASM32734v1	NCBI	BGI
27	Myotis lucifugus	Microbat	Myoluc2.0	NCBI	Broad
Peri	ssodactyla	,	,	<u>'</u>	
28	Ceratotherium simum simum	White rhino	CerSimSim1.0	NCBI	Broad
29	Equus przewalskii	Przewalski horse	Burgud	NCBI	IMAU
30	Equus caballus (Thoroughbred)	Thoroughbred horse	equCab2	UCSC	GAT
31	Equus caballus (Mongolian)	Mongolian horse	Ajinai1.0	NCBI	IMAU
Pho	lidota		,		
32	Manis pentadactyla	Chinese pangolin	M_pentadactyla-1.1.1	NCBI	WashU
Car	nivora				
33	Felis catus	Cat	felCat5	UCSC	International Cat Genome Sequencing Consortium
34	Panthera tigris altaica	Siberian tiger	PanTig1.0	NCBI	Personal Genomics Institute
35	Canis lupus familiaris	Dog	CanFam3.1	NCBI	Dog Genome Sequencing Consortium
36	Ursus maritimus	Polar bear	UrsMar_1.0	NCBI	BGI
37	Ailuropoda melanoleuca	Panda	ailMel1	UCSC	BGI
38	$Leptony chotes\\weddellii$	Weddell seal	LepWed1.0	NCBI	Broad
39	Odobenus rosmarus divergens	Walrus	Oros_1.0	NCBI	Marine Mammals
40	Mustela putorius furo	Ferret	MusPutFur1.0	NCBI	Ferret Genome Sequencing Consortium
Ceta	artiodactyla				
41	Camelus dromedarius	Dromedary	PRJNA234474_ Ca_dromedarius_V1.0	NCBI	King Abdulaziz City for Science and Technology
42	Camelus ferus	Bactrian camel	CB1	NCBI	Bactrian Camels Genome Sequencing and Analysis Consortium
43	Vicugna pacos	Alpaca	Vicugna_pacos-2.0.1	NCBI	WashU

No	Systematic Name	Common Name	Genome Version	Source	Submitter
44	Sus scrofa (Duroc)	Duroc pig	Sscrofa10.2	NCBI	Swine Genome Sequencing Consortium
45	Sus scrofa (Tibetan)	Tibetan pig	Tibetan_Pig_v1.0	NCBI	Novogene
46	Sus scrofa (Ellegaard Gottingen minipig)	Minipig	SscrofaMinipig	NCBI	GlaxoSmithK- line
47	Balaenoptera acutorostrata scammoni	Minke whale	BalAcu1.0	NCBI	Korea Ocean Research & Development Institute
48	Physeter catodon	Sperm whale	Physeter_ macrocephalus-2.0.2	NCBI	AGM
49	Lipotes vexillifer	Baiji (Chinese dolphin)	Lipotes_vexillifer_v1	NCBI	BGI
50	Tursiops truncatus	Bottlenose dolphin	Ttru_1.4	NCBI	BCM
51	Orcinus orca	Killer whale	Oorc_1.1	NCBI	Marine Mammals
52	Pantholops hodgsonii	Tibetan antelope	PHO1.0	NCBI	BGI
53	Capra hircus	Goat	CHIR_1.0	NCBI	International Goat Genome Consortium
54	Ovis aries (Texel)	Domestic sheep	oviAri3	UCSC	International Sheep Genome Consortium
55	Ovis aries musimon	Wild sheep	Oori1	NCBI	EBI
56	Bubalus bubalis	Water buffalo	UMD_CASPUR_ WB_2.0	NCBI	Mary
57	Bison bison bison	Bison	Bison_UMD1.0	NCBI	Mary
58	Bos mutus	Yak	BosGru_v2.0	NCBI	BGI
59	Bos indicus	Zebu	Bos_indicus_1.0	NCBI	Genoa Biotecnologia SA
60	Bos taurus	Cow	bosTau6	UCSC	Mary
Lago	omorpha				
61	Ochotona princeps	American pika	OchPri3.0	NCBI	Broad
62	Oryctolagus cuniculus	Rabbit	oryCun2	UCSC	GSP
Rod	entia	T	T	T	T
63	Ictidomys tridecemlineatus	Squirrel	SpeTri2.0	NCBI	Broad
64	Heterocephalus glaber	Naked molerat	HetGla_female_1.0	NCBI	Broad
65	Fukomys damarensis	Damaraland molerat	DMR_v1.0	NCBI	BGI
66	Cavia aperea	Brazilian guinea pig	CavAp1.0	NCBI	Leibniz Institute for Zoo and Wildlife research
67	Cavia porcellus	Guinea pig	cavPor3	UCSC	GSP
68	Chinchilla lanigera	Chinchilla	ChiLan1.0	NCBI	Broad

No	Systematic Name	Common Name	Genome Version	Source	Submitter
69	Octodon degus	Degu	OctDeg1.0	NCBI	Broad
70	Dipodomys ordii	Kangaroo rat	dipOrd1	UCSC	BCM
71	Jaculus jaculus	Lesser Egyptian jerboa	JacJac1.0	NCBI	Broad
72	Nannospalax galili	Blind molerat	S.galili_v1.0	NCBI	BGI
73	Mesocricetus auratus	Golden hamster	MesAur1.0	NCBI	Broad
74	Cricetulus griseus	Chinese hamster	CriGri_1.0	NCBI	BGI
75	Microtus ochrogaster	Prairie vole	MicOch1.0	NCBI	Broad
76	Peromyscus maniculatus bairdii	Deer mouse	Pman_1.0	NCBI	BCM
77	Rattus norvegicus	Rat	Rnor_5.0	NCBI	Rat Genome Sequencing Consortium
78	Mus musculus	Mouse	GRCm38.p2	NCBI	GRC
Scar	ndentia				
79	Tupaia belangeri	Tree shrew	tupBel1	UCSC	Broad
80	Tupaia chinensis	Chinese tree shrew	TupChi_1.0	NCBI	BGI
Prir	nates				
81	Galeopterus variegatus	Flying lemur	G_variegatus-3.0.2	NCBI	WashU
82	Otolemur garnettii	Bushbaby	OtoGar3	NCBI	Broad
83	Microcebus murinus	Mouse lemur	micMur1	UCSC	GSP
84	Tarsius syrichta	Tarsier	Tarsius_syrichta-2.0.1	NCBI	WashU
85	Callithrix jacchus	Marmoset	Callithrix_jacchus-3.2	NCBI	WashU
86	Saimiri boliviensis boliviensis	Squirrel monkey	SaiBol1.0	NCBI	Broad
87	Rhinopithecus roxellana	Snub-nosed monkey	Rrox_v1	NCBI	Novogene
88	Nasalis larvatus	Proboscis monkey	Charlie1.0	NCBI	Proboscis Monkey Functional Genome Consortium
89	Chlorocebus sabaeus	Green monkey	Chlorocebus_sabeus 1.1	NCBI	Vervet Genomics Consortium
90	Macaca fascicularis	Crab-eating macaque	Macaca_fascicularis_ 5.0	NCBI	WashU
91	Macaca mulatta	Rhesus macaque	rheMac3	UCSC	BGI
92	Papio anubis	Baboon	Panu_2.0	NCBI	BCM
93	Nomascus leucogenys	Gibbon	nomLeu3	UCSC	Gibbon Genome Sequencing Consortium
94	Pongo abelii	Sumatran orangutan	P_pygmaeus_2.0.2	NCBI	Orangutan Genome Sequencing Consortium
95	Gorilla gorilla gorilla	Gorilla	gorGor3.1	NCBI	WTSI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
96	Pan paniscus	Bonobo	panpan1	NCBI	MP
97	Pan troglodytes	Chimp	panTro4	UCSC	Chimpanzee Sequencing and Analysis Consortium
98	Homo sapiens	Human	GRCh37 (hg19)	NCBI	GRC
SAU	JROPSIDA			l	
Test	udines				
99	Apalone spinifera	Spiny softshell turtle	ASM38561v1	NCBI	WUGSC
100	Pelodiscus sinensis	Chinese softshell turtle	PelSin_1.0	NCBI	P. sinensis Genome Project Consortium
101	Chelonia mydas	Green sea turtle	CheMyd_1.0	NCBI	BGI
102	Chrysemys picta bellii	Painted turtle	chrPic1	UCSC	Painted Turtle Genome Sequencing Consortium
Stru	thioniformes	1		'	
103	Struthio camelus australis	Ostrich	ASM69896v1	NCBI	BGI
Tina	amiformes			'	
104	Tinamus guttatus	Tinamou	ASM70537v2	NCBI	BGI
Ans	eriformes				
105	Anas platyrhynchos	Mallard	BGI_duck_1.0	NCBI	State Key Laboratory for Agrobiotechnology, China Agricultural University, Beijing
Gall	iformes	1		l	
106	Lyrurus tetrix tetrix	Black grouse	tetTet1	NCBI	UU
107	Gallus gallus	Chicken	galGal4	UCSC	International Chicken Genome Consortium
108	Coturnix japonica	Japanese quail	Coja_1.0	NCBI	Tokyo University of Agriculture
109	Meleagris gallopavo	Turkey	melGal1	UCSC	Turkey Genome Consortium
110	Colinus virginianus	Bobwhite	NB1.1	NCBI	TAMU
Pass	seriformes				
111	Acanthisitta chloris	Rifleman	ASM69581v1	NCBI	BGI
112	Manacus vitellinus	Manakin	ASM69201v1	NCBI	BGI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
113	Zonotrichia albicollis	White-throated sparrow	Zonotrichia_albicollis- 1.0.1	NCBI	White-throated Sparrow
114	Geospiza fortis	Medium ground finch	geoFor1	UCSC	Consortium BGI
115	Serinus canaria	Atlantic canary	SCA1	NCBI	MP
116	Taeniopygia guttata	Zebra finch	taeGut1	UCSC	WashU
117	Ficedula albicollis	Collared flycatcher	FicAlb1.5	NCBI	UU
118	Pseudopodoces humilis	Ground tit	PseHum1.0	NCBI	BGI
119	Corvus brachyrhynchos	American crow	ASM69197v1	NCBI	BGI
120	Corvus cornix cornix	Hooded crow	Hooded_Crow_genome	NCBI	UU
	taciformes	1100dcd crow	1100ded_C10w_genome	TTODI	
121	Ara macao	Scarlet macaw	SMACv1.1	NCBI	TAMU
122	Amazona vittata	Puerto Rican parrot	AV1	NCBI	Puerto Rican Parrot Genome Project
123	Melopsittacus undulatus	Budgerigar	melUnd1	UCSC	WashU
124	Nestor notabilis	Kea	ASM69687v1	NCBI	BGI
Falc	oniformes		ı	1	
125	Falco cherrug	Saker falcon	F_cherrug_v1.0	NCBI	BGI
126	Falco peregrinus	Peregrine falcon	F_peregrinus_v1.0	NCBI	BGI
Cari	amiformes		ı	1	
127	Cariama cristata	Seriema	ASM69053v1	NCBI	BGI
Cora	aciiformes			1	
128	Merops nubicus	Bee eater	ASM69184v1	NCBI	BGI
Pici	formes	I		1	1
129	Picoides pubescens	Woodpecker	ASM69900v1	NCBI	BGI
Buc	erotiformes	<u> </u>			1
130	Buceros rhinoceros silvestris	Hornbill	ASM71030v1	NCBI	BGI
Trog	goniformes				
131	$Apaloderma\ vittatum$	Trogon	ASM70340v1	NCBI	BGI
Lept	tosomiformes				
132	$Lepto somus\ discolour$	Cuckoo roller	ASM69178v1	NCBI	BGI
Acci	pitriformes				
133	Haliaeetus albicilla	White-tailed eagle	ASM69140v1	NCBI	BGI
134	$Haliae et us \\ leu cocephalus$	Bald eagle	Haliaeetus_ leucocephalus-4.0	NCBI	The Bald Eagle Consortium
135	Aquila chrysaetos canadensis	Golden eagle	Aquila_chrysaetos- 1.0.2	NCBI	WashU
136	Cathartes aura	Turkey vulture	ASM69994v1	NCBI	BGI
Strig	giformes			•	
	Tyto alba	Barn owl	ASM68720v1	NCBI	BGI
137		I .	I.	1	1
	iformes				
	*	Mousebird	ASM69071v1	NCBI	BGI

No	Systematic Name	Common Name	Genome Version	Source	Submitter			
139	Charadrius vociferus	Killdeer	ASM70802v2	NCBI	BGI			
Gru	Gruiformes							
140	Balearica regulorum gibbericeps	Grey crane	ASM70989v1	NCBI	BGI			
141	Chlamydotis macqueenii	MacQueen's bustard	ASM69519v1	NCBI	BGI			
Cuc	uliformes							
142	Cuculus canorus	Common cuckoo	ASM70932v1	NCBI	BGI			
Pro	cellariiformes		1					
143	Fulmarus glacialis	Fulmar	ASM69083v1	NCBI	BGI			
Sph	enisciformes		1	'				
144	$Aptenodytes\ for steri$	Emperor penguin	ASM69914v1	NCBI	BGI			
145	Pygoscelis adeliae	Adelie penguin	ASM69910v1	NCBI	BGI			
Pele	ecaniformes		1	'				
146	Phalacrocorax carbo	Black cormorant	ASM70892v1	NCBI	BGI			
147	Pelecanus crispus	Pelican	ASM68737v1	NCBI	BGI			
148	Nipponia nippon	Ibis	ASM70822v1	NCBI	BGI			
149	Egretta garzetta	Egret	ASM68718v1	NCBI	College of Medicine and Forensics, Xi'an Jiaotong University			
150	Phaethon lepturus	Tropicbird	ASM68728v1	NCBI	BGI			
Gav	iiformes							
151	Gavia stellata	Loon	ASM69087v1	NCBI	BGI			
Mus	sophagiformes							
152	Tauraco erythrolophus	Turaco	ASM70936v1	NCBI	BGI			
	sthocomiformes							
153	Opisthocomus hoazin	Hoatzin	ASM69207v1	NCBI	BGI			
	ımbiformes		T					
154	Columba livia	Rock dove	Cliv_1.0	NCBI	BGI			
	roclidiformes	1	1					
155	Pterocles gutturalis	Sandgrouse	ASM69924v1	NCBI	BGI			
Apo 156	diformes Calypte anna	Anna's hummingbird	ASM69908v1	NCBI	BGI			
157	Chaetura pelagica	Chimney swift	ChaPel_1.0	NCBI	BGI			
	rimulgiformes	Jiminey Swiit	JIMI 01-1.0	11011	1001			
	Caprimulgus							
158	carolinensis	Chuck-will's-widow	ASM70074v1	NCBI	BGI			
Eur	ypygiformes	1	1					
159	Eurypyga helias	Sunbittern	ASM69077v1	NCBI	BGI			
Mes	itornithiformes	I	I		1			
160	Mesitornis unicolor	Mesite	ASM69576v1	NCBI	BGI			
Pod	icipediformes		1	1	•			
161	Podiceps cristatus	Grebe	ASM69954v1	NCBI	BGI			
Pho	enicopteriformes			•				

Phoenicopterus ruber Flamingo ASM68726v1 NCBI BGI	No	Systematic Name	Common Name	Genome Version	Source	Submitter
Alligator American alligator allMis1 UCSC ICGWG	162	_	Flamingo	ASM68726v1	NCBI	BGI
164 Aligator sinensis Chinese alligator AMM5 NCBI BGI 165 Crocodylas porosus Saltwater crocodile Cpor.2.0 NCBI ICGWG 166 Gavalis gangeticus Gharial crocodile Eggan.v0.2 NCBI ICGWG 167 Pogona vitticeps Bearded dragon Pogona.vitticeps.malc (Terry) 168 Anolis carolinensis Anole lizard anoCar2 UCSC Broad 169 Vipera berus berus Common European viper Vber.be.1.0 NCBI BCM-HGSC 170 Crotalus mitchellii pyrrhus Pit viper CrotMitch1.0 NCBI Bed-HGSC 171 Ophiophagus hamah King cobra OphIlan1.0 NCBI Biodiversity Center 172 Python bivittatus Burmese python Python.molurus.bivittatus-5.0.2 NCBI Biodiversity 173 Nanorana parkeri Tibetan frog ASM93562v1 NCBI BGI Mcenopus 174 Xenopus laevis African clawed frog Xtropicalis.v7 NCBI JGI 175 Xenopus tropicalis Western clawed frog Xtropicalis.v7 NCBI JGI 176 Lepisosteiformes Tole Lepisosteisor oculatus Spotted gar LepOcul NCBI Broad 177 Anguilla anguilla European cel Anguilla anguilla.v1. 178 Anguilla japonica Japanese eel ciOli-00025m200. Spacepremium Radolpal. R	Cro	codilia				
165 Grocodylus porosus Saltwater crocodile Cpor_2.0 NCBI ICGWG	163		American alligator	allMis1	UCSC	ICGWG
166 Gavialis yangelicus Gharial crocodile ggan.v0.2 NCBI ICGWG	164	Alligator sinensis	Chinese alligator	ASM45574v1	NCBI	BGI
Squamata Squamata Squamata Pogona viticeps Bearded dragon Pogona_viticeps.male Cerry Cerry Certy Certy	165	Crocodylus porosus	Saltwater crocodile	Cpor_2.0	NCBI	ICGWG
Bearded dragon Pogona_vitticeps.male Private (Terry)	166	Gavialis gangeticus	Gharial crocodile	ggan_v0.2	NCBI	ICGWG
167 Pogona vitticeps Bearded dragon Pogona.vitticeps.male (Terry)	Squ	amata				
Common European viper Vber.be.l.0 NCBI BCM-HGSC	167	Pogona vitticeps	Bearded dragon	Pogona_vitticeps.male		-
Vipera berus berus Viper	168	Anolis carolinensis	Anole lizard	anoCar2	UCSC	Broad
170 pyrrhus	169	Vipera berus berus	_	Vber.be_1.0	NCBI	BCM-HGSC
171 Ophiophagus hannah King cobra OphHan1.0 NCBI Biodiversity Center	170		Pit viper	CrotMitch1.0	NCBI	Reed College
Python bivittatus	171	Ophiophagus hannah	King cobra	OphHan1.0	NCBI	Biodiversity
Anura 173 Nanorana parkeri Tibetan frog ASM93562v1 NCBI BGI 174 Xenopus laevis African clawed frog Xenopus_laevis_v2 NCBI Xenopus Sequencing Consortium 175 Xenopus tropicalis Western clawed frog Xtropicalis_v7 NCBI JGI NEOPTERYGII Lepisosteiformes 176 Lepisosteus oculatus Spotted gar LepOcul NCBI Broad Anguilliformes 177 Anguilla anguilla European eel Anguilla_anguilla_v1_ 09_nov_10 NCBI ZF-S 178 Anguilla japonica Japanese eel c401b400k25m200_ sspacepremium k3a02n24_ extra.final.scaffolds Cypriniformes Cypriniformes	172	Python bivittatus	Burmese python		NCBI	for Comparative Genomics, UC
173 Nanorana parkeri Tibetan frog ASM93562v1 NCBI BGI International Xenopus laevis NCBI Xenopus laevis NCBI Sequencing Consortium	AM	PHIBIA				
African clawed frog Xenopus_laevis_v2 NCBI Xenopus Sequencing Consortium 175 Xenopus tropicalis Western clawed frog Xtropicalis_v7 NCBI JGI NEOPTERYGII Lepisosteiformes 176 Lepisosteus oculatus Spotted gar LepOcu1 NCBI Broad Anguilliformes 177 Anguilla anguilla European eel Anguilla_anguilla_v1_ 09_nov_10 japanese_eel_genome_ v1_25_oct_2011_ japonica_ c401b400k25m200_ sspacepremium k3a02n24_ extra.final.scaffolds Cypriniformes International Xenopus Sequencing Consortium NCBI JGI NCBI Broad ZF-S Japanese_eel_genome_ v1_25_oct_2011_ japonica_ Spacepremium k3a02n24_ extra.final.scaffolds	Anu	ıra				
African clawed frog Xenopus_laevis_v2 NCBI Sequencing Consortium 175	173	Nanorana parkeri	Tibetan frog	ASM93562v1	NCBI	BGI
NEOPTERYGII	174	Xenopus laevis	African clawed frog	Xenopus_laevis_v2	NCBI	Xenopus Sequencing
Lepisosteiformes 176 Lepisosteus oculatus Spotted gar LepOcu1 NCBI Broad Anguilliformes Anguilla_anguilla_v1_09_nov_10 NCBI ZF-S 177 Anguilla anguilla European eel Anguilla_anguilla_v1_09_nov_10 NCBI ZF-S 178 Anguilla japonica Japanese eel c401b400k25m200_01 NCBI ZF-S 178 Anguilla japonica Japanese eel c401b400k25m200_01 NCBI ZF-S Spacepremium k3a02n24_0 extra.final.scaffolds extra.final.scaffolds Cypriniformes	175	Xenopus tropicalis		Xtropicalis_v7	NCBI	JGI
176 Lepisosteus oculatus Spotted gar LepOcu1 NCBI Broad Anguilliformes 177 Anguilla anguilla European eel Anguilla_anguilla_v1_09_nov_10 NCBI ZF-S 178 Anguilla japonica Japanese eel v1_25_oct_2011_100000000000000000000000000000000	NE	OPTERYGII				
Anguilliformes 177 Anguilla anguilla European eel Anguilla_anguilla_v1_ 09_nov_10 japanese_eel_genome_ v1_25_oct_2011_ japonica_ c401b400k25m200_ sspacepremium k3a02n24_ extra.final.scaffolds Cypriniformes	Lep	isosteiformes				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		•	Spotted gar	LepOcu1	NCBI	Broad
177 Anguilla anguilla European eel 09_nov_10 NCBI ZF-S	Ang	guilliformes	T	T	T	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	177	Anguilla anguilla	European eel	09_nov_10	NCBI	ZF-S
7-			Japanese eel	v1_25_oct_2011_ japonica_ c401b400k25m200_ sspacepremium k3a02n24_	NCBI	ZF-S
179 Danio rerio Zebrafish danRer7 UCSC WTSI		riniformes	1	T	T	
	179	Danio rerio	Zebrafish	danRer7	UCSC	WTSI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
Cha	raciformes				
180	Astyanax mexicanus	Mexican tetra	Astyanax_mexicanus- 1.0.2	NCBI	AGM
Belo	oniformes	I			
181	Oryzias latipes	Medaka	ASM31367v1	NCBI	Medaka genome sequencing project
	rinodontiformes				_
182	Poecilia formosa	Amazon molly	Poecilia_formosa-5.1.2	NCBI	AGM
183	$Xiphophorus \ maculatus$	Southern platyfish	Xiphophorus_maculatus-4.4.2	NCBI	The Genome Institute, Washington University at St. Louis
184	Fundulus heteroclitus	Mummichog	Fundulus_heteroclitus-3.0.2	NCBI	WashU
Tetr	aodontiformes				
185	Takifugu flavidus	Yellowbelly pufferfish	version 1 of Takifugu flavidus genome	NCBI	IOCAS
186	Takifugu rubripes	Fugu	fr3	UCSC	The Fugu Genome Sequencing Consortium
187	Tetraodon nigroviridis	Tetraodon	tetNig2	UCSC	Genoscope
Pleu	ıronectiformes			1	
188	$Cynoglossus\ semilaevis$	Tongue sole	Cse_v1.0	NCBI	BGI
Perc	ciformes				
189	Haplochromis burtoni	Burton's haplo	AstBur1.0	NCBI	Broad
190	Pundamilia nyererei	Flameback cichlid	PunNye1.0	NCBI	Broad
191	Maylandia zebra	Zebra mbuna	MetZeb1.1	NCBI	Broad
192	$Ne olam prologus \ brichardi$	Fairy cichlid	NeoBri1.0	NCBI	Broad
193	Oreochromis niloticus	Nile tilapia	oreNil2	UCSC	Broad
194	Sebastes nigrocinctus	Tiger rockfish	Snig1.0	NCBI	USC
195	Sebastes rubrivinctus	Flag rockfish	SRub1.0	NCBI	USC
196	Gasterosteus aculeatus	Stickleback	gasAcu1	UCSC	Broad
Gad	iformes			1	
197	Gadus morhua	Atlantic cod	gadMor1	UCSC	Genofisk
СН	ONDRICHTHYES				
Chin	maeriformes				
198	Callorhinchus milii	Australian ghostshark	Callorhinchus_milii-6.1.3	NCBI	IMCB
Car	charhiniformes	ı	1	1	
199	Carcharhinus brachyurus	Copper shark	shark_ass	Private (Terry)	-
ECI	OYSOZOA				
	emeroptera				
	•				

No	Systematic Name	Common Name	Genome Version	Source	Submitter				
200	Ephemera danica	Green drake	Edan_1.0	NCBI	i5k				
Odo	Odonata								
201	Ladona fulva	Dragonfly	Lful_1.0	NCBI	i5k				
Phtl	niraptera		·						
202	Pediculus humanus corporis	Body louse	JCVI_LOUSE_1.0	NCBI	JCVI				
Thy	sanoptera		,	'	•				
203	Frankliniella occidentalis	Flower thrips	Focc_1.0	NCBI	i5k				
Hen	niptera								
204	Diaphorina citri	Asian citrus psyllid	Diaci psyllid genome assembly version 1.1	NCBI	International Psyllid Genome Consortium				
205	Pachypsylla venusta	Petiolegall psyllid	Pven_1.0	NCBI	i5k				
206	Acyrthosiphon pisum	Pea aphid	Acyr_2.0	NCBI	BCM				
207	Nilaparvata lugens	Brown planthopper	NilLug1.0	NCBI	Nilaparvata lugens Genome Consortium				
208	Oncopeltus fasciatus	Milkweed bug	Ofas_1.0	NCBI	BCM-HGSC i5k				
209	Rhodnius prolixus	Assassin bug	Rhodnius_prolixus- 3.0.1	NCBI	WashU				
210	Cimex lectularius	Bed bug	Clec_1.0	NCBI	i5k				
Cole	eoptera								
211	Onthophagus taurus	Taurus scarab	Otau_1.0	NCBI	i5k				
212	Agrilus planipennis	Emerald ash borer	Apla_1.0	NCBI	BCM-HGSC i5k				
213	Tribolium castaneum	Red flour beetle	Tcas_3.0	NCBI	BCM				
214	$An op lophora \ glabri pennis$	Asian long-horned beetle	Agla_1.0	NCBI	i5k				
215	Leptinotarsa decemlineata	Colorado potato beetle	Ldec_1.5	NCBI	i5k				
216	Dendroctonus ponderosae	Mountain pine beetle	DendPond_male_1.0	NCBI	The Tria Project: Mountain Pine Beetle System Genomics				
Stre	psiptera	I	T	1					
217	Mengenilla moldrzyki	Twisted-wing parasite	Memo_1.0	NCBI	Zoologisches Forschungsmuseum Alexander Koenig				
Dipt	era								
218	Aedes aegypti	Yellow fever mosquito	AaegL2	NCBI	TIGR				
219	Culex quinquefasciatus	Southern house mosquito	CulPip1.0	NCBI	Broad				
220	Anopheles albimanus	-	Anop_albi_ALBI9_A_ V1	NCBI	Broad				

No	Systematic Name	Common Name	Genome Version	Source	Submitter
221	$An opheles\ arabiens is$	-	Anop_arab_DONG5_ A_V1	NCBI	Broad
222	Anopheles atroparvus	-	Anop_atro_EBRO_V1	NCBI	Broad
223	Anopheles christyi	-	Anop_chri_ ACHKN1017_V1	NCBI	Broad
224	Anopheles culicifacies	-	Anop_culi_species_A-37_1_V1	NCBI	Broad
225	$An opheles \ darling i$	-	A_darlingi_v1	NCBI	Laboratorio Nacional de Computacao Cientifica
226	Anopheles dirus	-	Anop_diru_ WRAIR2_V1	NCBI	Broad
227	Anopheles epiroticus	-	Anop_epir_ epiroticus2_V1	NCBI	Broad
228	Anopheles farauti	-	Anop_fara_FAR1_V2	NCBI	Broad
229	Anopheles funestus	-	Anop_fune_ FUMOZ_V1	NCBI	Broad
230	Anopheles gambiae	African malaria mosquito	anoGam1	UCSC	International Anopheles Genome Project
231	Anopheles maculatus	-	Anop_macu_ maculatus3_V1	NCBI	Broad
232	Anopheles melas	-	Anop_mela_ CM1001059_ A_V2	NCBI	Broad
233	$An opheles\ merus$	-	Anop_meru_MAF_V1	NCBI	Broad
234	Anopheles minimus	-	Anop_mini_ MINIMUS1_V1	NCBI	Broad
235	$An opheles \ quadrian nulatus$	-	$Anop_quad_$ $QUAD4_A_V1$	NCBI	Broad
236	Anopheles sinensis	-	AS2	NCBI	Nanjing Medical University
237	$An opheles\ stephensi$	-	ASM30077v2	NCBI	Virginia Tech
238	Mayetiola destructor	Hessian fly	Mdes_1.0	NCBI	BCM
239	Lutzomyia longipalpis	Sand fly	Llon_1.0	NCBI	BCM
240	Phlebotomus papatasi	-	Ppap_1.0	NCBI	WashU
241	Ceratitis capitata	Med fly	Ccap_1.0	NCBI	i5k
242	$Drosophila\ albomicans$	-	DroAlb_1.0	NCBI	Kunming Institute of Zoology, Chinese Academy of Sciences
243	Drosophila ananassae	-	droAna3	UCSC	Agen
244	Drosophila biarmipes	-	Dbia_2.0	NCBI	BCM
245	Drosophila bipectinata	-	Dbip_2.0	NCBI	BCM
246	Drosophila elegans	-	Dele_2.0	NCBI	BCM

No	Systematic Name	Common Name	Genome Version	Source	Submitter
247	Drosophila erecta	-	droEre2	UCSC	Agen
248	Drosophila eugracilis	-	Deug_2.0	NCBI	modENCODE
249	Drosophila ficusphila	-	Dfic_2.0	NCBI	BCM
250	Drosophila grimshawi	-	droGri2	UCSC	Agen
251	Drosophila kikkawai	-	Dkik_2.0	NCBI	BCM
252	Drosophila melanogaster	-	Release 6 plus ISO1 MT	NCBI	The FlyBase Consortium/Berkeley Drosophila Genome Project/Celera
253	Drosophila miranda	-	DroMir_2.2	NCBI	Genomics University of California, Berkeley
254	Drosophila mojavensis	-	droMoj3	UCSC	Agen
255	Drosophila persimilis	-	droPer1	UCSC	Broad
256	Drosophila pseudoobscura pseudoobscura	-	Dpse_3.0	NCBI	BCM
257	Drosophila rhopaloa	-	Drho_2.0	NCBI	modENCODE
258	Drosophila sechellia	-	droSec1	UCSC	Broad
259	Drosophila simulans	-	dsim_caf1	NCBI	WashU
260	Drosophila suzukii	-	Dsuzukii.v01	NCBI	BGI
261	Drosophila takahashii	-	Dtak_2.0	NCBI	BCM
262	Drosophila virilis	-	droVir3	UCSC	Agen
263	Drosophila willistoni	-	dwil_caf1	NCBI	JCVI
264	Drosophila yakuba	-	dyak_caf1	NCBI	FlyBase
265	Musca domestica	House fly	Musca_domestica-2.0.2	NCBI	GGC
266	Glossina austeni	Tsetse fly	Glossina_austeni-1.0.3	NCBI	GGC
267	Glossina brevipalpis	-	Glossina_brevipalpis_ 1.0.3	NCBI	GGC
268	Glossina fuscipes fuscipes	-	Glossina_fuscipes-3.0.2	NCBI	GGC
269	Glossina morsitans morsitans	-	ASM107743v1	NCBI	WTSI
270	Glossina pallidipes	-	Glossina_pallidipes- 1.0.3	NCBI	GGC
	hoptera	I		T	T
271	Limnephilus lunatus	Caddis fly	Llun_1.0	NCBI	i5k
Lepi 272	doptera Papilio glaucus	Tiger butterfly	pgl_assembly_v1	NCBI	UT Southwestern Medical Center
273	Papilio polytes	Mormon butterfly	Ppol_1.0	NCBI	TokyoTech
274	Papilio xuthus	Swallowtail butterfly	Pxut_1.0	NCBI	TokyoTech

No	Systematic Name	Common Name	Genome Version	Source	Submitter
275	Heliconius melpomene melpomene	Postman butterfly	ASM31383v2	NCBI	Heliconius Genome Sequencing Consortium
276	Melitaea cinxia	Glanville fritillary	MelCinx1.0	NCBI	University of Helsinki
277	Danaus plexippus	Monarch butterfly	DanPle_1.0	NCBI	The Reppert Lab
278	Bombyx mori	Silkworm	ASM15162v1	NCBI	The International Silkworm Genome Sequencing Consortium
279	Manduca sexta	Tobacco hornworm	Msex_1.0	NCBI	BCM
280	Plutella xylostella	Diamondback moth	DBM_FJ_V1.1	NCBI	Plutella xylostella Genome Consortium
Hyn	nenoptera				
281	Athalia rosae	Turnip sawfly	Aros_1.0	NCBI	i5k
282	Cephus cinctus	Wheat stem sawfly	Ccin1	NCBI	UIUC
283	Orussus abietinus	Parasitic wood wasp	Oabi_1.0	NCBI	i5k
284	Ceratosolen solmsi marchali	Pollinating wasp	CerSol_1.0	NCBI	Ceratosolen solmsi Genome Consortium
285	Nasonia giraulti	Jewel wasp	Ngir_1.0	NCBI	BCM
286	Nasonia longicornis	-	Nlon_1.0	NCBI	BCM
287	Nasonia vitripennis	-	Nvit_2.1	NCBI	BCM
288	Copidosoma floridanum	Looper parasitoid wasp	Cflo_1.0	NCBI	i5k
289	Trichogramma pretiosum	-	Tpre_1.0	NCBI	i5k
290	$Microplitis\ demolitor$	-	Mdem1	NCBI	UIUC
291	Megachile rotundata	Alfalfa leafcutter bee	MROT_1.0	NCBI	University of Maryland
292	Apis dorsata	Giant honey bee	Apis dorsata 1.3	NCBI	Cold Spring Harbor Laboratory
293	Apis florea	Dwarf honey bee	Aflo_1.0	NCBI	BCM
294	Apis mellifera	Western honey bee	Amel_4.5	NCBI	Human Genome Sequencing Center

Bumblebee Bumblebee University of Illinois	No	Systematic Name	Common Name	Genome Version	Source	Submitter
	295	Bombus impatiens		BIMP_2.0	NCBI	Center, University of
Panamanian Pan	296	Bombus terrestris		Bter_1.0	NCBI	BCM
Campronotus porudanus ant Camprio_1.0 NCB1 BG1	297	Linepithema humile	Argentine ant	Lhum_UMD_V04	NCBI	AGC
Page	298	Camponotus floridanus		CamFlo_1.0	NCBI	BGI
Red imported fire ant Si.gnG NCBI UNIL	299			Aech_3.9	NCBI	BGI
Solenopsis invicta ant Si.gnG NCBI ONIL	300	Atta cephalotes	Leafcutter ant	Attacep1.0	NCBI	WashU
Barbatus Red harvester ant Pbar_LOMD_V03 NCB AGC	301	Solenopsis invicta		Si_gnG	NCBI	UNIL
	302	•	Red harvester ant	Pbar_UMD_V03	NCBI	AGC
	303	$Harpegnathos\ saltator$	Jumping ant	HarSal_1.0	NCBI	BGI
305Blattella germanicaGerman cockroachBger_1.0NCBIi5kIsopteraZootermopsis nevadensisEusocial termiteZooNev1.0NCBIBGIOrtwoptera307Locusta migratoriaMigratory locustLocustGenomeV1NCBIChinese Academy of Sciences308Daphnia pulexWater fleaV1.0NCBIJGICalamoida309Eurytemora affinisCopepodEaff_1.0NCBIi5kSignanoidaSulmon louseIsal_atl_canada_female v1NCBIJong S Leong, Ben F Koop, Eric B RondeauAmplipodaAmplipodaStrigamia maritimaScudHazt_1.0NCBIBCMGeowillomorpha312Strigamia maritimaEuropean centipedeSmar_1.0NCBIBCMArawee313Stegodyphus mimosarumSocial spiderStegodyphus mimosarum v1NCBIBGI314Latrodectus hesperusBlack widowLhes_1.0NCBIi5k315Parasteatoda tepidariorumCommon house spiderPtep_1.0NCBIi5k	304	Cerapachys biroi	Clonal raider ant	CerBir1.0	NCBI	BGI
Soptimize	Blat	todea				
	305		German cockroach	Bger_1.0	NCBI	i5k
Description	Isop					
$ \begin{array}{ c c c c c } \hline & Locusta \ migratoria & Migratory locust & LocustGenomeV1 & NCBI & Academy of Sciences \\ \hline \hline {Diplostraca} \\ \hline \hline {Diplostraca} \\ \hline \hline {308} \ Daphnia \ pulex & Water flea & V1.0 & NCBI & JGI \\ \hline \hline {Calsumoida} \\ \hline \hline {209} \ Eurytemora \ affinis & Copepod & Eaff_1.0 & NCBI & i5k \\ \hline \hline {Siphonostomatoida} \\ \hline \hline {310} \ Lepeophtheirus \\ salmonis & Salmon louse & Isal_atl_canada_female v1 & NCBI & Ben F Koop, Eric B Rondeau \\ \hline \hline {311} \ Hyalella \ azteca & Scud & Hazt_1.0 & NCBI & BCM \\ \hline \hline {Geophilomorpha} \\ \hline {312} \ Strigamia \ maritima & European \ centipede & Smar_1.0 & NCBI & BCM \\ \hline \hline {Arasiese} \\ \hline {313} \ Stegodyphus \\ mimosarum & Social \ spider & MCBI & BGI \\ \hline {314} \ Latrodectus \ hesperus & Black \ widow & Lhes_1.0 & NCBI & i5k \\ \hline {315} \ Parasteatoda \\ tepidariorum & Spider & Ptep_1.0 & NCBI & i5k \\ \hline \end{array}$	306		Eusocial termite	ZooNev1.0	NCBI	BGI
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ortl	noptera				_
	307	$Locusta\ migratoria$	Migratory locust	LocustGenomeV1	NCBI	Academy of
$ \begin{array}{ c c c c c } \hline \textbf{Cal} = \textbf{Interview of the problem} & \textbf{Copepod} & \textbf{Eaff.} 1.0 & \textbf{NCBI} & \textbf{i5k} \\ \hline \textbf{Sipt-nostomatoida} \\ \hline \textbf{Sip-nostomatoida} \\ \hline \textbf{Salmon is} & \textbf{Salmon louse} & \textbf{Isal.} = \textbf{atl.} = \textbf{canada.} \text{female-} \\ \textbf{v1} & \textbf{v1} & \textbf{NCBI} & \textbf{Jong S Leong,} \\ \textbf{Ben F Koop,} \\ \textbf{Eric B Rondeau} \\ \hline \textbf{Amphipoda} \\ \hline \textbf{311} & \textbf{Hyalella azteca} & \textbf{Scud} & \textbf{Hazt.} 1.0 & \textbf{NCBI} & \textbf{BCM} \\ \hline \textbf{Geophilomorpha} \\ \hline \textbf{312} & \textbf{Strigamia maritima} & \textbf{European centipede} & \textbf{Smar.} 1.0 & \textbf{NCBI} & \textbf{BCM} \\ \hline \textbf{Araneae} \\ \hline \textbf{313} & \textbf{Stegodyphus} \\ \hline \textbf{mimosarum} & \textbf{Social spider} & \textbf{Stegodyphus-} \\ \hline \textbf{mimosarum.} & \textbf{v1} & \textbf{NCBI} & \textbf{BGI} \\ \hline \textbf{314} & \textbf{Latrodectus hesperus} & \textbf{Black widow} & \textbf{Lhes.} 1.0 & \textbf{NCBI} & \textbf{i5k} \\ \hline \textbf{315} & \textbf{Parasteatoda} & \textbf{Common house} \\ \hline \textbf{tepidariorum} & \textbf{spider} & \textbf{Stepol.} \\ \hline \textbf{316} & \textbf{Common house} \\ \hline \textbf{316} & \textbf{Spider} & \textbf{Stepol.} \\ \hline \textbf{317} & \textbf{NCBI} & \textbf{Stepol.} \\ \hline \textbf{318} & \textbf{Stepidariorum} & \textbf{Stepol.} \\ \hline \textbf{318} & \textbf{NCBI} & \textbf{Stepol.} \\ \hline \textbf{318} & St$	Dipl	ostraca				
Salmon louse Salm	308	Daphnia pulex	Water flea	V1.0	NCBI	JGI
	Cala	noida				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	309	Eurytemora affinis	Copepod	Eaff_1.0	NCBI	i5k
Scud Hazt_1.0 NCBI BCM	310	Lepeophtheirus	Salmon louse		NCBI	Ben F Koop,
Geophilomorpha 312 Strigamia maritima European centipede Smar_1.0 NCBI BCM Araneae 313 Stegodyphus Social spider Stegodyphus MCBI BGI 314 Latrodectus hesperus Black widow Lhes_1.0 NCBI i5k 315 Parasteatoda Common house spider Ptep_1.0 NCBI i5k	Amı	ohipoda				
312 Strigamia maritima European centipede Smar_1.0 NCBI BCM Araneae Stegodyphus mimosarum Social spider Stegodyphus mimosarum_ v1 NCBI BGI 314 Latrodectus hesperus Black widow Lhes_1.0 NCBI i5k 315 Parasteatoda tepidariorum Common house spider Ptep_1.0 NCBI i5k	311		Scud	Hazt_1.0	NCBI	BCM
Araneae 313 Stegodyphus simmosarum 314 Latrodectus hesperus 315 Parasteatoda tepidariorum 316 Social spider 317 Stegodyphus simmosarum v1 318 NCBI 319 NCBI 310 NCBI 310 NCBI 310 NCBI 310 NCBI 3110		•	I		T	
313 Stegodyphus mimosarum Social spider Stegodyphus mimosarum_ v1 NCBI BGI 314 Latrodectus hesperus Black widow Lhes_1.0 NCBI i5k 315 Parasteatoda tepidariorum Common house spider Ptep_1.0 NCBI i5k			European centipede	Smar_1.0	NCBI	BCM
mimosarum Social spider mimosarum_ v1 NCBI BGI 314 Latrodectus hesperus Black widow Lhes_1.0 NCBI i5k 315 Parasteatoda Common house spider Ptep_1.0 NCBI i5k	Ara		I	G. 1 1	I	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	313	mimosarum	-	mimosarum_ v1		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	314			Lhes_1.0	NCBI	i5k
Prostigmata	315			Ptep_1.0	NCBI	i5k
	Pros	stigmata				

No	Systematic Name	Common Name	Genome Version	Source	Submitter
316	Tetranychus urticae	Red spider mite	ASM23943v1	NCBI	Spider Mite Consortium
Asti	igmata		I	l	
317	Dermatophagoides farinae	House dust mite	Dfarinae1.0	NCBI	CUHK
318	Sarcoptes scabiei type canis	Dog mite	SarSca1.0	NCBI	Wright State University
Orib	patida		I		
319	Achipteria coleoptrata	-	SM98876v1	NCBI	UNIL
320	Hypochthonius rufulus	-	ASM98884v1	NCBI	UNIL
321	Platynothrus peltifer	Oribatid mite	ASM98890v1	NCBI	UNIL
322	Steganacarus magnus	-	ASM98888v1	NCBI	UNIL
Ixoc	lida				
323	Ixodes ricinus	Castor bean tick	ASM97304v1	NCBI	Luxembourg Institute of Health
324	Ixodes scapularis	Deer tick	JCVI_ISG_i3_1.0	NCBI	JCVI
325	Rhipicephalus microplus	Cattle tick	CCG_Rmi_1.0	NCBI	USDA-ARS
Mes	sostigmata		I		
326	Metaseiulus occidentalis	Western predatory mite	Mocc_1.0	NCBI	BCM
327	Varroa destructor	Honeybee mite	BRL_Vdes_1.0	NCBI	Varroa Genome Sequencing Consortium
Scor	rpiones				l
328	Centruroides exilicauda	Baja california bark scorpion	Cexi_1.0	NCBI	i5k
329	Mesobuthus martensii	Chinese scorpion	M_martensii_Version_1	NCBI	Institute of Plant Physiology & Ecology, Shanghai Insitutes for Biology Sciences, CAS
Xipl	hosura				
330	Limulus polyphemus	Atlantic horseshoe crab	Limulus_polyphemus- 2.1.2	NCBI	WashU
Tric	hocephalida				
331	Trichinella spiralis	Pork worm	Trichinella spiralis-3.7.1	NCBI	WashU
Asca	aridida				
332	Ascaris suum	Pig roundworm	AscSuum_1.0	NCBI	BGI
Spir	urida			•	
333	Elaeophora elaphi	Red deer nematode	EEL001	NCBI	WTSI
334	Onchocerca volvulus	_	OVOC001	NCBI	WTSI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
Rha	bditida				
335	Steinernema	_	S_monti_v1	NCBI	Caltech
000	monticolum		S_IIIOIIti_V1	NODI	Carteen
336	Panagrellus redivivus	Microworm	Pred3	NCBI	Caltech
337	Haemonchus contortus	Wireworm	HCON	NCBI	WTSI
338	Necator americanus	Human hookworm	N ₋ americanus ₋ v1	NCBI	WashU
339	$Heterorhab ditis \ bacteriophora$	Beneficial nematode	Heterorhabditis_bacteriophora-7.0	NCBI	WashU
340	Caenorhabditis angaria	-	ps1010rel4	NCBI	California Institute of Technology, Division of Biology
341	Caenorhabditis brenneri	-	C_brenneri-6.0.1b	NCBI	Caenorhabditis brenneri Sequencing and Analysis Consortium
342	Caenorhabditis briggsae	-	ASM455v1	NCBI	The C.briggsae Sequencing Consortium
343	Caenorhabditis elegans	-	WBcel235	NCBI	C. elegans Sequencing Consortium
344	$Caenorhab ditis \ japonica$	-	C_japonica-7.0.1	NCBI	WashU
345	Caenorhabditis sp. 11 MAF-2010	-	Caenorhabditis_sp11_ JU1373-3.0.1	NCBI	WashU
Pria	pulimorphida	I			
346	Priapulus caudatus	Cactus worm	Priapulus_caudatus- 4.0.1	NCBI	WashU
ROT	ΓIFERA	l			
Bde	lloidea				
347	Adineta vaga	Rotifer	AMS_PRJEB1171_v1	NCBI	Genoscope CEA
PLA	TYHELMINTHES		<u>'</u>	<u>'</u>	
	geidida				
348	Schistosoma curassoni	-	S_curassoni_Dakar	NCBI	WTSI
349	Schistosoma haematobium	-	SchHae_1.0	NCBI	CHGC
350	Schistosoma japonicum	-	ASM15177v1	NCBI	CHGC
351	Schistosoma mansoni	-	ASM23792v2	NCBI	Schistosoma Genome Network
352	Schistosoma margrebowiei	-	S_margrebowiei_ Zambia	NCBI	WTSI
353	Schistosoma mattheei	-	S_mattheei_Denwood	NCBI	WTSI

No	Systematic Name	Common Name	Genome Version	Source	Submitter				
354	Schistosoma rodhaini	-	S_rodhaini_Burundi	NCBI	WTSI				
Opi	Opisthorchiida								
355	Clonorchis sinensis	Chinese liver fluke	C_sinensis-2.0	NCBI	Department of Parasitology, Zhongshan School of Medicine, Sun Yat-sen University				
Cyc	lophyllidea			'					
356	Echinococcus granulosus	Hyper tapeworm	EGRAN001	NCBI	WTSI				
357	Echinococcus multilocularis	Fox tapeworm	EMULTI001	NCBI	WTSI				
358	Hymenolepis microstoma	Rodent tapeworm	HMIC001	NCBI	WTSI				
Poly	yopisthocotylea	I							
359	Protopolystoma xenopodis	Frog parasite	P_xenopodis_South_ Africa	NCBI	WTSI				
AN	NELIDA								
Scol	lecida		1						
360	Capitella teleta	Polychaete worm	Capca1	NCBI	JGI				
Rhy	nchobdellida		1						
361	Helobdella robusta	Leech	Helobdella robusta v1.0	NCBI	JGI				
MO	LLUSCA								
Ost	reoida								
362	Crassostrea gigas	Pacific oyster	oyster_v9	NCBI	BGI				
	tropoda	I							
363	Lottia gigantea	Owl limpet	Helro1	NCBI	JGI				
364	Aplysia californica	California sea hare	AplCal3.0	NCBI	Broad				
365	Biomphalaria glabrata	Freshwater snail	ASM45736v1	NCBI	WashU				
	IDARIA								
Act	iniaria 		1						
366	Nematostella vectensis	Starlet sea anemone	ASM20922v1	NCBI	JGI				
	hoathecata	T	T						
367	Hydra vulgaris	Freshwater polyp	Hydra_RP_1.0	NCBI	JCVI				
	NTACULATA								
Lob	ata								
368	Mnemiopsis leidyi	Warty comb jelly	MneLei_Aug2011	NCBI	National Human Genome Research Institute, National Institutes of Health				

No	Systematic Name	Common Name	Genome Version	Source	Submitter			
PLACOZOA								
369	Trichoplax adhaerens	Placozoan	v1.0	NCBI	JGI			
POI	RIFERA							
Hap	losclerida							
370	$Amphimedon \ queens landica$	Sea sponge	v1.0	NCBI	JGI			
ECH	HINOIDEA							
Tem	nopleuroida							
371	Lytechinus variegatus	Green sea urchin	Lvar_0.4	NCBI	BCM			
Echi	inoida	T			T			
372	Strongylocentrotus purpuratus	Purple sea urchin	Spur_3.1	NCBI	BCM			
	TEROIDEA							
Valv	vatida							
373	Patiria miniata	Bat star	Pmin_1.0	NCBI	Sea Urchin Genome Sequencing Consortium			
ENT	TEROPNEUSTA							
374	Saccoglossus kowalevskii	Acorn worm	Skow_1.1	NCBI	BCM			
TUI	NICATA		·					
Ente	erogona							
375	Ciona intestinalis	Sea squirt	КН	NCBI	Organization: Department of Zoology, Graduate School			
376	Ciona savignyi	-	ASM14926v1	NCBI	Broad			
Pleu	irogona			-				
377	Botryllus schlosseri	Star ascidian	356a-chromosome- assembly	NCBI	Stanford University			
_	elata	T	ACD FOCOTO 4	MODI	0 05:			
378	Oikopleura dioica	Larvaceans	ASM20953v1	NCBI	Genoscope CEA			
	TOCARDII							
Am	phioxiformes Branchiostoma							
379	floridae	Lancelet	Version 2	NCBI	JGI			
	PHALASPIDOMORP	HI						
Petr	romyzontiformes	I						
380	Lethenteron camtschaticum	Arctic lamprey	LetJap1.0	NCBI	IMCB			
381	Petromyzon marinus	Sea lamprey	petMar2	UCSC	WashU			
	RCOPTERYGII							
	lacanthiformes							
382	Latimeria chalumnae	Coelacanth	latCha1	UCSC	Broad			
FUI	FUNGI							

No	Systematic Name	Common Name	Genome Version	Source	Submitter
\mathbf{AG}	ARICOMYCETES				
Aga	ricales				
383	Agaricus bisporus var. bisporus	Edible basidiomycete mushroom	ASM30057v2	NCBI	JGI-PSF
384	Agaricus bisporus var. burnettii	-	Agabi_varbur_1	NCBI	JGI
385	Schizophyllum commune	Mushroom	v1.0	NCBI	JGI-PGF
386	Coprinopsis cinerea	Small mushroom	CC3	NCBI	Broad
387	Moniliophthora roreri	Frosty pod rot	ASM146670v1	NCBI	Purdue University
388	Laccaria bicolor	Tan-colored mushroom	V1.0	NCBI	Laccaria Genome Consortium
Aur	iculariales				
389	Auricularia subglabra	Jelly fungi	Auricularia subglabra SS-5 V1.0	NCBI	JGI
Bole	etales				
390	Coniophora puteana	Wet rot fungus	Conpu1	NCBI	DOE JGI
391	Serpula lacrymans	Dry rot fungus	v1.0	NCBI	JGI-PGF
Cor	ticiales				
392	Punctularia strigosozonata	Steroid fungi	Punctularia strigosozonata v1.0	NCBI	JGI
Glo	eophyllales				
393	Gloeophyllum trabeum	Brown-rot fungi	Glotr1_1	NCBI	JGI
Hyn	nenochaetales				
394	Fomitiporia mediterranea	-	Fomme1	NCBI	JGI
Poly	porales				
395	Dichomitus squalens	Poroid crust fungi	Dichomitus squalens v1.0	NCBI	JGI
396	Fibroporia radiculosa	-	ASM31352v1	NCBI	Forest Products, Mississippi State University
397	Phanerochaete carnosa	Crust fungus	Phanerochaete carnosa HHB-10118-Sp v1.0	NCBI	DOE JGI
398	Postia placenta	Brown rot fungus	PosplRSB12_1	NCBI	DOE JGI
399	Trametes versicolor	Polypore mushroom	Trametes versicolor v1.0	NCBI	JGI
Rus	sulales			•	
400	Heterobasidion irregulare	Tree root rotting pathogenic fungus	Heterobasidion irregulare v2.0	NCBI	JGI
401	Stereum hirsutum	False turkey tail	Stehi1	NCBI	JGI
CH	YTRIDIOMYCETES		.		
	ellomycetales				

No	Systematic Name	Common Name	Genome Version	Source	Submitter
402	Spizellomyces	Chytrid fungus	S_punctatus_V1	NCBI	Broad
DI	punctatus		•		
Khiz	zophydiales	A 1-1- 1 1			T
403	$Batrachochytrium\\ dendrobatidis$	Amphibian chytrid fungus	v1.0	NCBI	JGI-PGF
DO	THIDEOMYCETES				
Boti	ryosphaeriales				
404	Diplodia corticola	-	ASM188384v1	NCBI	University of Aveiro
405	Neofusicoccum parvum	-	UCRNP2V3	NCBI	UC Davis
Cap	nodiales				
406	Baudoinia panamericana	-	Bauco1	NCBI	JGI
407	Cercospora beticola	Fungal plant pathogen	CB0940_V2	NCBI	VIB
408	Pseudocercospora fijiensis	Black leaf streak fungus	Mycfi2	NCBI	DOE JGI
409	Sphaerulina musiva	-	Septoria musiva SO2202 v1.0	NCBI	JGI
410	Zymoseptoria tritici	Filamentous fungus	MYCGR v2.0	NCBI	DOE JGI
Dot	hideales	-			
411	$Aureobasidium \ namibiae$	Black yeast-like fungus	Aureobasidium pullulans var. namibiae CBS 147.97 v1.0	NCBI	DOE JGI
412	$Aureobasidium \ subglaciale$	-	Aureobasidium pullulans var. subglaciale EXF-2481 v1.0	NCBI	JGI
Dot	hideomycetes incertae	sedis			
413	Coniosporium apollinis	-	Coni_apol_CBS100218 _V1	NCBI	Broad
Pleo	sporales				
414	Paraphaeosphaeria sporulosa	-	Parsp1	NCBI	DOE JGI
415	Parastagonospora nodorum	-	ASM14691v2	NCBI	Broad
416	Leptosphaeria maculans	Blackleg disease fungus	ASM23037v1	NCBI	Genoscope
417	Alternaria alternata	-	Altal1	NCBI	DOE JGI
418	Bipolaris maydis	Stalk rot fungus	CocheC4_1	NCBI	JGI
419	Bipolaris oryzae	-	Cochliobolus miyabeanus v1.0	NCBI	JGI
420	Bipolaris sorokiniana	-	Cocsa1	NCBI	JGI
421	Bipolaris victoriae	-	Cochliobolus victoriae v1.0	NCBI	JGI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
422	Bipolaris zeicola	-	Cochliobolus carbonum v1.0	NCBI	JGI
423	Pyrenophora teres	Necrotrophic fungus	PTT_W1-1	NCBI	CURTIN UNIVERSITY
424	Pyrenophora tritici-repentis	-	ASM14998v1	NCBI	Broad
425	Setosphaeria turcica	-	Setospaeria trucica Et28A v1.0	NCBI	JGI
Ven	turiales				
426	Verruconis gallopava	-	O_gall_CBS43764	NCBI	Broad
EUI	ROTIOMYCETES			1	
Cha	etothyriales				
427	Cyphellophora europaea	-	Phia_euro_CBS_ 101466_V1	NCBI	Broad
428	Capronia coronata	Black yeast	Capr_coro_CB_617_ 96_V1	NCBI	Broad
429	Capronia epimyces	-	Capr_epim_CBS_606_ 96_V1	NCBI	Broad
430	Cladophialophora bantiana	Dematiaceous fungus	Clad_bant_CBS_173_ 52_V1	NCBI	Broad
431	Cladophialophora carrionii	Melanized fungus	Clad_carr_CBS_160_ 54_V1	NCBI	Broad
432	Cladophialophora immunda	-	Clad_immu_CBS83496_ V1	NCBI	Broad
433	Cladophialophora psammophila	-	Clad_psam_CBS_ 110553_V1	NCBI	Broad
434	Cladophialophora yegresii	-	Clad_yegr_CBS_ 114405_V1	NCBI	Broad
435	Exophiala aquamarina	-	Exop_aqua_CBS_ 119918_V1	NCBI	Broad
436	Exophiala dermatitidis	-	Exop_derm_V1	NCBI	Broad
437	Exophiala mesophila	-	Exop_meso_CBS40295_ V1	NCBI	Broad
438	Exophiala oligosperma	-	Exop_olig_CBS72588_ V1	NCBI	Broad
439	Exophiala spinifera	-	Exop_spin_CBS89968_ V1	NCBI	Broad
440	Exophiala xenobiotica	-	Exop_xeno_CBS118157_ V1	NCBI	Broad
441	Fonsecaea erecta	-	ASM165198v1	NCBI	Federal University of Parana

No	Systematic Name	Common Name	Genome Version	Source	Submitter
442	Fonsecaea monophora	-	ASM164247v1	NCBI	Federal University of Parana
443	Fonsecaea multimorphosa	-	Fons_mult_CBS_ 102226_V1	NCBI	Broad
444	Fonsecaea nubica	-	ASM164696v1	NCBI	Federal University of Parana
445	Fonsecaea pedrosoi	-	Fons_pedr_CBS_271_ 37_V1	NCBI	Submitter
446	Phialophora attae	Black yeast	ASM129925v1	NCBI	CBS-KNAW Fungal Biodiversity Centre
447	Rhinocladiella mackenziei	-	Rhin_mack_CBS_650_ 93_V1	NCBI	Broad
Eur	otiales		1		
448	Aspergillus aculeatus	-	Aspac1	NCBI	JGI
449	Aspergillus bombycis	-	ASM179269v1	NCBI	USDA-ARS- SRRC
450	Aspergillus clavatus	-	ASM271v1	NCBI	J. Craig Venter Institute
451	Aspergillus fischeri	-	ASM14964v1	NCBI	TIGR
452	Aspergillus flavus	-	JCVI-afl1-v2.0	NCBI	J. Craig Venter Institute
453	Aspergillus fumigatus	-	ASM265v1	NCBI	J. Craig Venter Institute
454	Aspergillus glaucus	-	Aspgl1	NCBI	DOE JGI
455	Aspergillus nidulans	-	ASM14920v2	NCBI	Broad
456	Aspergillus niger	-	ASM285v2	NCBI	DSM, The Netherlands
457	Aspergillus nomius	-	ASM120477v1	NCBI	USDA-ARS- SRRC
458	Aspergillus oryzae	-	ASM18445v3	NCBI	NITE
459	Aspergillus terreus	Mold fungus	ASM14961v1	NCBI	Broad
460	Penicilliopsis zonata	-	Aspzo1	NCBI	DOE JGI
461	Penicillium arizonense	-	ASM177332v1	NCBI	Chalmers University of Technology
462	Penicillium chrysogenum	-	ASM71027v1	NCBI	Ruhr- Univeristaet Bochum
463	Penicillium digitatum	-	PdigPd1_v1	NCBI	CRG
464	Penicillium expansum	Psychrophilic blue mold	ASM76974v1	NCBI	CRG
465	Penicillium marneffei	-	JCVI-PMFA1-2.0	NCBI	J. Craig Venter Institute

No	Systematic Name	Common Name	Genome Version	Source	Submitter
466	Rasamsonia emersonii		ASM96859v1	NCBI	DSM Bio-based Products &
400		_	A510190059V1	NODI	Services B.V.
					Technical
467	Talaromyces	-	ASM190759v1	NCBI	University of
	atroroseus				Denmark
468	/T. 1		ICVI FORM 1 2 0	NODI	J. Craig Venter
400	Talaromyces stipitatus	-	JCVI-TSTA1-3.0	NCBI	Institute
Ony	genales				
469	Ajellomyces	_	BD_ER3_V1	NCBI	Broad
	dermatitidis				
470	Arthroderma otae	-	ASM15114v1	NCBI	Broad
471	Coccidioides immitis	-	ASM14933v2	NCBI	Broad
472	Coccidioides posadasii	-	JCVI-cpa1-1.0	NCBI	TIGR
473	$Histoplasma \ capsulatum$	_	ASM14958v1	NCBI	Broad
474	Nannizzia gypsea	-	MS_CBS118893	NCBI	Broad
475	Paracoccidioides	Dimorphic fungus	Paracocci_br_Pb18_ V2	NCBI	Broad
110	brasiliensis	Dimorphic rangus	Taracocci bi i bio_ v2	TODI	Broad
476	Paracoccidioides lutzii	-	Paracocci_br_Pb01_ V2	NCBI	Broad
					Arthroderma
477	Trichophyton	_	ASM15112v2	NCBI	Genome
	$ig \ benhamiae$				Sequencing
470	m · 1 · 1 · 1		102515110	NGDI	Consortium
478	Trichophyton rubrum	-	ASM15142v1	NCBI	Broad
	m:1 1 ,				Arthroderma
479	Trichophyton	-	ASM15150v1	NCBI	Genome
	$\mid verrucosum \mid$				Sequencing Consortium
480	Uncinocarpus reesii	_	ASM351v2	NCBI	Broad
	cucariales		110111001112	IVODI	Dioad
. 511					Chinese
481	Endocarpon pusillum	_	EPUS	NCBI	Academy of
					Sciences
EXC	DBASIDIOMYCETES	ı		1	
	rgefischeriales				
482	Tilletiaria anomala		Tilletiaria anomala	NCBI	DOE JGI
		-	UBC 951 v1.0	INOD1	DOE 1GI
	OTIOMYCETES				
Helo	otiales	I	1	T	
400			102511050	1105-	Syngenta
483	Botryotinia fuckeliana	Gray mold fungus	ASM14353v4	NCBI	Biotechnology,
					Inc.
404			CLADEA	NODI	Chinese
484	Glarea lozoyensis	-	GLAREA	NCBI	Academy of
					Sciences

No	Systematic Name	Common Name	Genome Version	Source	Submitter
					Nanjing
485	Marssonina brunnea	-	ASM29877v1	NCBI	Forestry
					University
486	Phialocephala	_	Phisc1	NCBI	DOE JGI
400	scopi form is	-	1 msc1	NODI	DOE JGI
487	Sclerotinia	White mold fungus	ASM14694v2	NCBI	Broad
101	sclerotiorum	Winte mold rangus	1101111100112	TTODI	Dioad
Leot	iomycetes incertae sec	dis		1	
488	Pseudogymnoascus	Cold-loving fungus	ASM164126v1	NCBI	US Forest
	destructans			_	Service
489	Pseudogymnoascus	_	ASM166265v1	NCBI	US Forest
	verrucosus				Service
	LASSEZIOMYCETES	5			
Mal	asseziales	I	T	T	
					The Procter &
490	$Malassezia\ globosa$	-	ASM18169v1	NCBI	Gamble
					Company
491	Malassezia	_	MalaPachy	NCBI	University of
400	pachydermatis				Utrecht
492	Malassezia sympodialis	-	ASM34930v2	NCBI	SciLifeLab
	CROBOTRYOMYCET	TES			
	ridiobolales	I	T	T	
493	Rhodotorula graminis	Pigmented yeast	Rhoba1_1	NCBI	DOE JGI
					Dalian Institute
494	Rhodotorula toruloides	-	RHOziaDV1.0	NCBI	of Chemical
					Physics
	IOMYCETES				
Mix		T	T	T	1
495	Mixia osmundae	-	Mixia osmundae v1.0	NCBI	DOE JGI
ORI	BILIOMYCETES				
Orb	iliales				
496	Arthrobotrys oligospora	-	AOL24927 1.0	NCBI	P. R. China
497	$Dactylellina\ haptotyla$	-	MHA_v2	NCBI	Lund University
PEZ	IZOMYCETES				
Pezi	zales				
					The
498	Tuber melanosporum	Black truffle	ASM15164v1	NCBI	French-Italian
100	- aver metamosporant	Diam of unit	TIMITUTUTVI	11001	Tuber Genome
					Consortium
PNI	EUMOCYSTIDOMYC	CETES			
Pne	umocystidales				_
499	Pneumocystis carinii	Yeast-like fungus	Pneu_cari_B80_ V3	NCBI	Broad
500	$Pneumocystis\ jirovecii$	-	Pneu_jiro_RU7_ V2	NCBI	Broad
501	Pneumocystis murina	-	Pneumo_murina_B123_ V4	NCBI	Broad
PUC	CCINIOMYCETES	<u> </u>		•	·

No	Systematic Name	Common Name	Genome Version	Source	Submitter
Puc	ciniales				
502	Melampsora	Poplar leaf rust	v1.0	NCBI	JGI-PGF
302	larici-populina	fungus	V1.0	NCBI	JGI-PGF
500	D	Wheat stem rust	A CD #1 4000 1	NCDI	D I
503	Puccinia graminis	fungus	ASM14992v1	NCBI	Broad
SAC	CCHAROMYCETES			<u>'</u>	
Saco	charomycetales				
504	Q 11.1 11.1	77	A G2 54 000 0	NGDI	Stanford
504	Candida albicans	Yeast	ASM18296v3	NCBI	University
			1.02.5		Indian Institute
505	Candida auris	-	ASM118947v1	NCBI	of Science
506	Candida dubliniensis	_	ASM2694v1	NCBI	Wellcome
					Genolevures
507	Candida glabrata	-	ASM254v2	NCBI	Consortium
					Trinity College
508	Candida orthopsilosis	-	ASM31587v1	NCBI	Dublin
509	Candida tanzawaensis	_	Canta1	NCBI	Submitter
510	Candida tenuis	_	Candida tenuis v1.0	NCBI	DOE JGI
511	Candida tropicalis	-	ASM633v2	NCBI	Broad
011	Lodderomyces		11011100012	TODI	Droad
512	elongisporus	-	ASM14968v1	NCBI	Broad
513	Ascoidea rubescens	_	Ascru1	NCBI	DOE JGI
514			Babin1	NCBI	DOE JGI
515	Babjeviella inositovora	-	ASM383v1	NCBI	Broad
	Clavispora lusitaniae	-			
516	Cyberlindnera jadinii	-	Cybja1	NCBI	DOE JGI
					University of
517	Debaryomyces fabryi	-	debFab1.0	NCBI	Natural
					Resources and
	D 1				Life Sciences
518	Debaryomyces	-	ASM644v2	NCBI	Genolevures
	hansenii				Consortium
519	Eremothecium	-	ASM23536v1	NCBI	Carlsberg
	cymbalariae		1.000.000.000		Laboratory
520	Eremothecium gossypii	-	ASM9102v4	NCBI	Biozentrum
521	Eremothecium	_	ASM154855v1	NCBI	Duke University
	sinecaudum				
522	Hyphopichia burtonii	-	Hypbu1	NCBI	DOE JGI
523	Kazachstania africana	_	Ka_CBS2517	NCBI	Wolfe
	-				Laboratory
524	Kazachstania	_	ASM34898v1	NCBI	Wolfe
	naganishii			1.021	Laboratory
525	Kluyveromyces lactis	_	ASM251v1	NCBI	Genolevures
			110111111111111111111111111111111111111	11001	Consortium
526	Kluyveromyces	_	Kmar_1.0	NCBI	Yamaguchi
520	marxianus				University
527	Komagataella phaffii	-	ASM2700v1	NCBI	VIB
528	Kuraishia capsulata	_	AUH_PRJEB4427_v1	NCBI	Genoscope CEA

No	Systematic Name	Common Name	Genome Version	Source	Submitter
529	Lachancea lanzarotensis	-	LALA0	NCBI	INRA UMR 1319
530	$Lachancea \ thermotolerans$	-	ASM14280v1	NCBI	Genolevures Consortium
531	Metschnikowia bicuspidata	-	Metbi1	NCBI	DOE JGI
532	Meyerozyma guilliermondii	-	ASM14942v1	NCBI	Broad
533	Naumovozyma castellii	-	ASM23734v1	NCBI	Trinity College Dublin
534	Naumovozyma dairenensis	-	ASM22711v2	NCBI	Trinity College Dublin
535	Ogataea parapolymorpha	-	Hansenula_2	NCBI	Centre
536	Ogataea polymorpha	-	Hanpo2	NCBI	JGI-PGF
537	Saccharomyces cerevisiae	-	R64	NCBI	Saccharomyces Genome Database
538	Saccharomyces eubayanus	-	SEUB3.0	NCBI	University of Wisconsin- Madison
539	Spathaspora passalidarum	-	Spathaspora passalidarum v2.0	NCBI	DOE JGI
540	$Sugiyama ella \ lignohabitans$	-	ASM164002v2	NCBI	University of Natural Resources and Life Sciences
541	Tetrapisispora blattae	-	ASM31591v1	NCBI	Wolfe Laboratory
542	Tetrapisispora phaffii	-	ASM23690v1	NCBI	Wolfe Laboratory
543	Torulaspora delbrueckii	-	ASM24337v1	NCBI	Wolfe Laboratory
544	Vanderwaltozyma polyspora	-	ASM15003v1	NCBI	Trinity College Dublin
545	Yarrowia lipolytica	-	ASM252v1	NCBI	Genolevures Consortium
546	Zygosaccharomyces rouxii	-	ASM2636v1	NCBI	Genolevures Consortium
547	Wickerhamomyces anomalus	-	Wican1	NCBI	JGI-PSF
548	Wickerhamomyces ciferrii	-	ASM31348v1	NCBI	Center for Biotechnology
549	Scheffersomyces stipitis	-	ASM20916v1	NCBI	DOE JGI
550	Pichia kudriavzevii	-	ASM198332v1	NCBI	WUR
551	Pichia membranifaciens	-	Picme2	NCBI	JGI-PSF

No	Systematic Name	Common Name	Genome Version	Source	Submitter			
	SCHIZOSACCHAROMYCETES							
Schi	izosaccharomycetales	T	1					
552	Schizosaccharomyces cryophilus	-	SCY4	NCBI	Broad			
553	Schizosaccharomyces japonicus	-	SJ5	NCBI	Broad			
554	Schizosaccharomyces octosporus	-	SO6	NCBI	Broad			
555	Schizosaccharomyces pombe	-	ASM294v2	NCBI	EUPOM			
SOF	RDARIOMYCETES				-			
Нур	ocreales							
556	Metarhizium acridum	-	MetAcr_May2010	NCBI	Metarhizium genome sequencing Consortium			
557	Metarhizium brunneum	-	MBR_1.0	NCBI	Shanghai Insititutes for Biological Sciences			
558	Metarhizium majus	-	MAJ_1.0	NCBI	Shanghai Insititutes for Biological Sciences			
559	Metarhizium robertsii	-	MAA 2.0	NCBI	Metarhizium genome sequencing Consortium			
560	Pochonia chlamydosporia	-	ASM165323v2	NCBI	The Institute of Vegetables and Flowers CAAS			
561	Beauveria bassiana	-	ASM28067v1	NCBI	Zhejiang University, China			
562	Cordyceps militaris	-	CmilitarisCM01_v01	NCBI	SIBS			
563	Isaria fumosorosea	-	ISF 1.0	NCBI	Shanghai Institutes for Biological Sciences			
564	Trichoderma atroviride	-	TRIAT v2.0	NCBI	DOE JGI			
565	Trichoderma gamsii	-	TGAM01v2	NCBI	University of Pisa			
566	Trichoderma reesei	-	v2.0	NCBI	DOE JGI			
567	Trichoderma virens	-	TRIVI v2.0	NCBI	DOE JGI			
568	Fusarium fujikuroi	-	Fusarium_fujikuroi_ IMI58289_V2	NCBI	HMGU-IBIS			

No	Systematic Name	Common Name	Genome Version	Source	Submitter
569	Fusarium graminearum	-	ASM24013v3	NCBI	International Gibberella zeae Genomics Consortium
570	Fusarium oxysporum	-	ASM14995v2	NCBI	Broad
571	Fusarium pseudograminearum	Crown rot fungus	FP7	NCBI	CSIRO
572	Fusarium verticillioides	-	ASM14955v1	NCBI	Syngenta Biotechnology, Inc.
573	Nectria haematococca	-	v2.0	NCBI	DOE JGI
574	Purpureocillium lilacinum	-	ASM 165326v1	NCBI	The Institute of Vegetables and Flowers CAAS
Glo	merellales				
575	Colletotrichum fioriniae	-	ASM293045v1	NCBI	VIB
576	Colletotrichum gloeosporioides	-	ASM290110v1	NCBI	Yeungnam University
577	Colletotrichum graminicola	-	C_graminicola_M1_ 001_V1	NCBI	Broad
578	Colletotrichum higginsianum	-	ASM167251v1	NCBI	GATC Biotech AG
579	Colletotrichum orchidophilum	-	CORC01	NCBI	University of Western Brittany
580	Verticillium alfalfae	Verticillium wilt fungus	ASM15082v1	NCBI	Broad
581	Verticillium dahliae	-	ASM15067v2	NCBI	Broad
Mag	gnaporthales				
582	Magnaporthe oryzae	Rice blast fungus	MG8	NCBI	International Rice Blast Genome Consortium
583	Gaeumannomyces tritici	-	Gae_graminis_V2	NCBI	Broad
Mic	roascales				
584	Scedosporium apiospermum	Environmental mold	ScApio1.0	NCBI	LUNAM - Angers University
Oph	iostomatales				
585	Grosmannia clavigera	-	Sanger-454- IlluminaPA _2.0	NCBI	The Tria Project
586	Sporothrix schenckii	Dimorphic fungus	S_schenckii_v1	NCBI	LNCC
Sor	lariales				
587	Chaetomium globosum	-	ASM14336v1	NCBI	The Genome Assembly Team

No	Systematic Name	Common Name	Genome Version	Source	Submitter
588	$Chaetomium \ thermophilum$	-	CTHT_3.0	NCBI	EMBL
589	Neurospora crassa	-	NC12	NCBI	Broad
590	Neurospora tetrasperma	-	v2.0	NCBI	JGI-PGF
591	Podospora anserina	-	ASM22654v1	NCBI	Genoscope
592	Sordaria macrospora	-	ASM18280v2	NCBI	Ruhr University Bochum
593	$Thermothelomyces \\ thermophila$	-	ASM22609v1	NCBI	DOE JGI
594	Thielavia terrestris	-	ASM22611v1	NCBI	DOE JGI
Togr	niniales				
595	Phaeoacremonium minimum	-	UCRPA7V03	NCBI	UC Davis
	ariales				
596	Eutypa lata	-	UCREL1V03	NCBI	UC Davis
597	Pestalotiopsis fici	Endophytic fungus	PFICI	NCBI	Chinese Academy of Sciences
TRE	EMELLOMYCETES				
Tren	nellales				
598	$Cryptococcus \ amy lolentus$	-	Cryp_amyl_CBS6039 _V3	NCBI	Broad
599	Cryptococcus gattii	-	ASM18594v1	NCBI	Canada Michael Smith Genome Sciences Centre
600	Cryptococcus neoformans var. grubii	Encapsulated yeast	CNA3	NCBI	Broad
601	Cryptococcus neoformans var. neoformans JEC21	-	ASM9104v1	NCBI	TIGR
602	Cryptococcus neoformans var. neoformans B-3501A	-	ASM14938v1	NCBI	Stanford University
603	$Kockova ella\ imperatae$	-	Kocim1	NCBI	DOE JGI
604	$Kwoniella\ bestiolae$	-	Cryp_best_CBS10118 _V1	NCBI	Broad
605	Kwoniella dejecticola	-	Cryp_deje_CBS10117 _V1	NCBI	Broad
606	Kwoniella mangroviensis	-	Kwon_mang_CBS8507 _V2	NCBI	Broad
607	Kwoniella pini	-	Cryp_pinu_CBS10737 _V1	NCBI	Broad
		1	m 1	NCBI	DOE JGI
608	Tremella mesenterica	-	Treme1	NCDI	DOE JGI

610 Cutaneotrichosporon - Triol1 NCBI	
oleaginosus - Illoir NCBi	DOE JGI
611 Trichosporon asahii - Trichosporon asahii 1 NCBI	Beijing Military Command General Hospital of PLA
USTILAGINOMYCETES	
Ustilaginales	
	Universite Laval
613 Kalmanozyma brasiliensis - PSEUBRA1 NCBI	Laboratorio Nacional de Ciencia e Tecnologia do Bioetanol
614 Moesziomyces antarcticus - ASM74776v1 NCBI	National Institute of Advanced Industrial Science and Technology
615 Pseudozyma hubeiensis - ASM40351v1 NCBI	Kitami Institute of Technology
616 Ustilago maydis Common smut fungus Umaydis521_2.0 NCBI	Broad
WALLEMIOMYCETES	
Wallemiales	
617 Wallemia ichthyophaga richthyophaga richthyophaga version 1.0 NCBI	BGI
618 Wallemia mellicola - Wallemia sebi v1.0 NCBI	JGI
XYLONOMYCETES	
Xylonales	
	DOE JGI
TAPHRINOMYCOTINA INCERTAE SEDIS	
Taphrinomycotina	
620 Saitoella complicata - Saico1 NCBI	JGI-PSF
FUNGI INCERTAE SEDIS	
Mortierellales	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	DOE JGI
Mucorales	-
622 Phycomyces blakesleeanus - Phybl2 NCBI	JGI-PSF
623 Rhizopus microsporus Soil fungus Rhimi1_1 NCBI	DOE JGI
Microsporidia	

No	Systematic Name	Common Name	Genome Version	Source	Submitter
624	Encephalitozoon cuniculi	Rabbit fungus	ASM9122v1	NCBI	Genoscope
625	$Encephalitozoon \ hellem$	-	ASM27781v3	NCBI	University of British Columbia
626	Encephalitozoon intestinalis	-	ASM14646v1	NCBI	University of British Columbia
627	$Ence phalitozo on \\ romale a e$	-	ASM28003v2	NCBI	University of Ottawa
628	Enterocytozoon bieneusi	-	ASM20948v1	NCBI	Tufts Cummings School of Veterinary Medicine
629	$Mitosporidium \ daphniae$	-	UGP1.0	NCBI	Illinois Institute of Technology
630	Nematocida parisii	Nematode-killer from Paris	Nema_parisii_ERTm1 _V3	NCBI	Broad
631	Nosema ceranae	Microsporidian	ASM98816v1	NCBI	University of Ottawa
632	Ordospora colligata	-	ASM80326v1	NCBI	University of British Columbia
633	Vavraia culicis	Spore-forming parasite	Vavr_culi_ floridensis_V1	NCBI	Broad
634	Vittaforma corneae	-	Vitt_corn_V1	NCBI	Broad
VIR	IDIPLANTAE				
Mar	niellales				
635	Micromonas pusilla CCMP1545	-	Micromonas pusilla CCMP1545 v2.0	NCBI	Micromonas Genome Consortium
636	Micromonas sp. RCC299	-	ASM9098v2	NCBI	Micromonas Genome Consortium
637	Ostreococcus lucimarinus CCE9901	-	ASM9206v1	NCBI	JGI
638	Ostreococcus tauri	-	version 050606	NCBI	Laboratoire Arago, France
Chla	amydomonadales	•	•		•
639	Chlamydomonas reinhardtii	-	v3.0	NCBI	JGI
Volv	vocales				
640	Volvox carteri f. nagariensis	-	v1.0	NCBI	JGI
Chlo	orellales				

No	Systematic Name	Common Name	Genome Version	Source	Submitter
642	$Auxen och lorella \ protothe coides$	Green microalga	ASM73321v1	NCBI	BGI
643	Helicosporidium sp. ATCC 50920	-	Helico_v1.0	NCBI	University of British Columbia
Chlo	orococcales		1		
644	Coccomyxa subellipsoidea C-169	-	Coccomyxa subellipsoidae v2.0	NCBI	JGI
Klek	osormidiales		_		
645	$Klebsormidium \ flaccidum$	-	ASM70883v1	NCBI	TokyoTech
Funa	ariales				
646	Physcomitrella patens	-	V1.1	NCBI	Moss Genome Consortium
Sela	ginellales				
647	$Se laginella \ moellendorf fii$	Spikemoss	v1.0	NCBI	Selaginella Consortium
Pina	ales				
648	Pinus taeda	Loblolly pine	PtaedaFosmidLib.0.8	NCBI	UC Davis
Aml	oorellales				
649	$Amborella\ trichopoda$	Amborellaceae	AMTR1.0	NCBI	Amborella Genome Sequencing Project
Alis	matales			1	
650	Spirodela polyrhiza	Greater duckweed	Spirodela_polyrhiza_v01	NCBI	Waksman Institute
Are	cales				
651	Phoenix dactylifera	Date palm	DPV01	NCBI	Joint Center for Genomics Research
652	Elaeis oleifera	American oil palm	EO8	NCBI	Orion Genomics
Zing	giberales				
653	Ensete ventricosum	Ethiopian banana	v1.1	NCBI	University of Exeter
654	Musa acuminata subsp. malaccensis	-	ASM31385v1	NCBI	Geno- scope/IG/CEA
Poal	les				
655	Sorghum bicolor	Sorghum	Sorbi1	NCBI	Sorghum Consortium
656	Zea mays	Maize	B73 RefGen_v3	NCBI	Maize Genome Sequencing Project
657	Setaria italica	Foxtail millet	Setaria V1	NCBI	JGI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
					JGI and The
CF0	Brachypodium		1.0	NODI	International
658	distachyon	Purple false brome	v1.0	NCBI	Brachypodium
	, and the second				Initiative
					Arizona
659	Leersia perrieri	_	Lperr_V1.4	NCBI	Genomics
	1		1		Institute
					Oryza Chr3
					Short Arm
660	Oryza barthii	Rice	O.barthii_v1.3	NCBI	Comparative
000		Terec	O.bai tiiii_v1.5	INODI	Sequencing
					Project
					The Institute of
661	Oryza brachyantha	-	Oryza_brachyantha.	NCBI	Genetics and
			v1.4b		Developmental
					Biology
662	Oryza glumipatula	_	Oryza_glumaepatula_	NCBI	OMAP
	organ granreparata		v1.5	I TODI	OWITE
663	Oryza longistaminata	-	O_longistaminata_v1.0	NCBI	BGI
664	0	i a	Oryza_meridionalis_	NCBI	OMAP
004	Oryza meridionalis	-	v1.3	NODI	OWAI
665	Oryza nivara	-	Oryza_nivara_v1.0	NCBI	OMAP
666	Oryza punctata	-	Oryza_punctata_v1.2	NCBI	OMAP
	Oryza sativa Japonica				International
cc z			Build 4.0	NCBI	Rice Genome
667	Group				Sequencing
	aro wp				Project
		Manchurian wild			Zhejiang
668	Zizania latifolia	rice	Zizania_latifolia_v01	NCBI	University
669	Aegilops tauschii	Tausch's goatgrass	ASM34733v1	NCBI	BGI
670	Triticum urartu	Wild einkorn	ASM34745v1	NCBI	BGI
	teales	1 ,,			1 - 0
671	Nelumbo nucifera	Sacred lotus	Chinese Lotus 1.1	NCBI	UIUC
Faba	· ·	200104 10000	Jimose Bouds 1.1	1,001	1 0100
rana	arco				Donartment of
					Department of
050	T	DI I		NODI	Agriculture and
672	Lupinus angustifolius	Blue lupin	Lupin genome scaffold	NCBI	Food, WA
					government,
					Australia
673	Phaseolus vulgaris	Common bean	PhaVulg1_0	NCBI	JGI
674	Cajanus cajan	Pigeon pea	Cajanus_cajan_	NCBI	AKI-PGI
V, 1	- ajanao cajan	- 180011 POW	Asha_ver1.0	1,011	11111111111
675	Vigna angularis var.	Adzuki bean	Vigna angularis	NCBI	SNU
019	angularis	Auzuki beali	vigna angularis	NODI	BINU
676	Vigna radiata var.		Var diete ee C	MODI	CNII
676	radiata	-	Vradiata_ver6	NCBI	SNU
	Taatata				

No	Systematic Name	Common Name	Genome Version	Source	Submitter
678	Glycine soja	-	W05v1.0	NCBI	CUHK
679	Cicer arietinum	Chickpea	ASM33114v1	NCBI	BGI
680	Medicago truncatula	Barrel clover	MedtrA17_3.5	NCBI	International Medicago Genome Annotation Group
681	Trifolium pratense	Red clover	Tp1.0	NCBI	Masaryk University
682	Lotus japonicus	Birdsfoot trefoil	ASM18111v1	NCBI	KDRI
Rosa	ales	1	I.		
683	Malus x domestica	Apple	MalDomGD1.0	NCBI	IASMA research center
684	Pyrus x bretschneideri	Chinese white pear	Pbr_v1.0	NCBI	Nanjing Agricultural University
685	Prunus mume	Japanese apricot	P.mume_V1.0	NCBI	BGI
686	Prunus persica	Peach	Prupe1_0	NCBI	JGI
687	Fragaria iinumae	Japanese strawberry	FII_r1.1	NCBI	KDRI
688	Fragaria nubicola	Himalayan strawberry	FNU_r1.1	NCBI	KDRI
689	Fragaria orientalis	Wild asian strawberry	FOR_r1.1	NCBI	KDRI
690	Fragaria vesca subsp. vesca	Woodland strawberry	FraVesHawaii_1.0	NCBI	Virginia Bioinformatics Institute
691	Fragaria x ananassa	Garden strawberry	FANhybrid_r1.2	NCBI	KDRI
692	Morus notabilis	Mulberry tree	ASM41409v2	NCBI	BGI
693	Cannabis sativa	Cannabis	canSat3	NCBI	University of Toronto
Faga	ales				
694	Castanea mollissima	Chinese chestnut	ASM76360v1	NCBI	Clemson University Genomics Institute
695	Betula nana	Dwarf birch	ASM32700v1	NCBI	QMUL
Cuc	urbitales				
696	Cucumis melo	Muskmelon	ASM31304v1	NCBI	Genetica Molecular, Centre de Recerca en Agrigenomica
697	Cucumis sativus	Cucumber	CucSat_1.0	NCBI	The Cucumber Genome Initiative

No	Systematic Name	Common Name	Genome Version	Source	Submitter
					National
					Engineering
					Research Center
					for Vegetables,
698	Citrullus lanatus	Watermelon	CiLa_1.0	NCBI	Beijing
					Academy of
					Agriculture and
					Forestry
					Sciences
					Institute of
					Vegetables,
					Zhejiang
699	Lagenaria siceraria	Calabash	$Bottle_gourd$	NCBI	Academy of
					Agricultural
					Sciences
3.7.1	. 1 . 1				Sciences
Wal	pighiales				T1
700	Populus euphratica	Desert poplar	PopEup_1.0	NCBI	Lanzhou
					University
701	Populus trichocarpa	Black cottonwood	Poptr2_0	NCBI	JGI
		Physic nut	JatCur_1.0	NCBI	Chinese
702	Jatropha curcas				Academy of
					Sciences
	Manihot esculenta				The Cassava
703		-	$MW_{-}v2d$	NCBI	Genome
	subsp. flabellifolia				Consortium
704	Ricinus communis	Castor oil plant	JCVI_RCG_1.1	NCBI	JCVI
705	Linum usitatissimum	Flax	LinUsi_v1.1	NCBI	TUFGEN
Myr	rtales				
706	Eucalyptus camaldulensis	River red gum	EUC_r1.0	NCBI	KDRI
707	Eucalyptus grandis	Rose gum	Egrandis1_0	NCBI	Geneglob
Bras	ssicales				
					The Papaya
					Genome
708	Carica papaya	Papaya	Papaya1.0	NCBI	Sequencing
					Consortium
	Arabidopsis halleri				
709	subsp. gemmifera	-	Ahal_1.0	NCBI	TokyoTech
	Arabidopsis lyrata				
710	subsp. lyrata	-	v.1.0	NCBI	JGI
	savap. igraia				The Arabidopsis
711	Arabidoneia thaliana		TAID10	NCBI	Information
111	Arabidopsis thaliana	-	TAIR10	NCBI	Resource
710	G 1: ::	G 1:		NODE	Agriculture &
712	Camelina sativa	Camelina	Cs	NCBI	AgriFood
					Canada
713	Capsella rubella	Capsella	Caprub1_0	NCBI	JGI

No	Systematic Name	Common Name	Genome Version	Source	Submitter
714	Brassica napus	Rapeseed	Brassica_napus_ assembly_v1.0	NCBI	BGI
715	Brassica oleracea var. oleracea	-	BOL	NCBI	CanSeq
716	Brassica rapa	Field mustard	Brapa_1.0	NCBI	Brassica rapa Genome Sequencing Project, BraGSP
717	Raphanus raphanistrum subsp. raphanistrum	-	ASM76984v1	NCBI	Michigan State University
718	Raphanus sativus	Radish	ASM80110v1	NCBI	Myongji University
719	Aethionema arabicum	-	VEGI_AA_v_1.0	NCBI	McGill
720	Arabis alpina	Alpine rockcress	A_alpina_V4	NCBI	TRANSNET
721	Eutrema parvulum	-	Eutrema_parvulum_v01	NCBI	University of Illinois
722	Eutrema salsugineum	Saltwater cress	Eutsalg1_0	NCBI	JGI
723	Sisymbrium irio	London rocket	VEGI_SI_v_1.0	NCBI	McGill
724	$Leaven worthia \ alabamica$	Alabama gladecress	VEGI_LA_v_1.0	NCBI	McGill
725	Tarenaya hassleriana	Pink queen	ASM46358v1	NCBI	BGI
Mal	vales				
726	Gossypium arboreum	Tree cotton	Gossypium_arboreum_v1.0	NCBI	BGI
727	Gossypium raimondii	New world cotton	Graimondii2_0	NCBI	JGI
728	Theobroma cacao	Cacao	Theobroma_cacao_ 20110822	NCBI	Cacao Genome Consortium
729	Aquilaria agallochum	-	Aquilaria_agallocha_v1	NCBI	Academia Sinica
Sapi	ndales				
730	$Az a dirachta\ indica$	Indian lilac	AzaInd2.0	NCBI	Centre for Cellular and Molecular Plateforms
731	Citrus clementine	Clementine	Citrus_clementina_v1.0	NCBI	International Citrus Genome Consortium
732	Citrus sinensis	Orange	Csi_valencia_1.0	NCBI	China Sweet Orange Genome Project
Vita	lles	1		T	T _
733	Vitis vinifera	Common grape vine	12X	NCBI	International Grape Genome Program
Cary	yophyllales	1		ı	

No	Systematic Name	Common Name	Genome Version	Source	Submitter
734	Amaranthus hypochondriacus	Prince's feather	AHP 1.0	NCBI	Institute of Bioinformatics and Applied Biotechnology
735	Amaranthus tuberculatus	Tall waterhemp	ASM18065v1	NCBI	University of Illinois
736	Beta vulgaris subsp. vulgaris	-	RefBeet-1.2.1	NCBI	Beta vulgaris Resource
737	Spinacia oleracea	Spinach	Viroflay-1.0.1	NCBI	BeetSeq
738	Dianthus caryophyllus	Clove pink	DCA_r1.0	NCBI	KDRI
Eric	ales	1		'	1
739	Actinidia chinensis	Kiwi fruit	Kiwifruit_v1	NCBI	Boyce Thompson Institute
740	Vaccinium macrocarpon	Large cranberry	ASM77533v1	NCBI	Rutgers University
741	Diospyros lotus	Caucasian persimmon	ASM77412v1	NCBI	University of California Davis
742	Primula veris	Cowslip	ASM78844v1	NCBI	University of Zurich
Sola	nales	1			
743	Solanum arcanum	-	Soarc10	NCBI	PRI
744	Solanum habrochaites	-	Sohab10	NCBI	PRI
745	Solanum lycopersicum	Tomato	SL2.40	NCBI	Solanaceae Genomics Project
746	Solanum melongena	Eggplant	SME_r2.5.1	NCBI	KDRI
747	Solanum pennellii	-	Sopen10	NCBI	PRI
748	Solanum pimpinellifolium	Currant tomato	Sol_pimpi_v1.0	NCBI	Sol Genomics Network
749	Solanum tuberosum	Potato	SolTub_3.0	NCBI	Potato Genome Sequencing Consortium
750	Capsicum annuum	Hot pepper	PGAv.1.5	NCBI	SNU
751	Nicotiana sylvestris	Woodland tobacco	Nsyl	NCBI	Philip Morris International R&D
752	$Nicotiana \ tomentosi formis$	-	Ntom_v01	NCBI	Philip Morris International R&D
Lam	niales	1	1		1
753	Fraxinus excelsior	European ash	BATG-0.4	NCBI	QMUL
754	Penstemon centranthifolius	Scarlet bugler	ASM73743v1	NCBI	Ohio State University
755	Penstemon grinnellii	Grinnell's beardtongue	ASM73742v1	NCBI	Ohio State University

No	Systematic Name	Common Name	Genome Version	Source	Submitter
					Oil Crops
					Institute of the
756	$Sesamum\ indicum$	Sesame	S_indicum_v1.0	NCBI	Chinese
					Institute of the Chinese Academy of Agricultural Sciences Lomonosov Moscow State University, Evolutionary Genomics
					Agricultural
					Sciences
					Lomonosov
					Moscow State
757	Genlisea aurea	Corkscrew plant	GenAur_1.0	NCBI	University,
101	Gennsea aarea	Corksciew plant	GenAut_1.0	NCDI	Evolutionary
					Genomics
					Laboratory
758	Missoulus souttatus	Common	Mino mu 1 O	NCBI	JGI
100	Mimulus guttatus	monkey-flower	Mimgu1_0	NCDI	
Aste	erales				
759	Conyza canadensis	Horseweed	ASM77593v1	NCBI	University of
100	Conyza canaacusis	Horseweed	ADMITTOGOVI	NODI	Evolutionary Genomics Laboratory JGI

Table S2: L1s in genomic data

Table S2: Shows which genomes contain L1s (559/759) and the number of hits and length distribution of hits. L1 elements were detected with protein based searches using TBLASTN and nucleotide similarity searches using LASTZ. All hits had to satisfy a 'reciprocal best hit' check: they were screened with CENSOR against the Repbase library of known repeats, and kept if the best hit was an L1 element (not some other repeat). Overlapping hits were merged to produce a non-redundant set of L1s for each genome. The Notes column highlights unusual observations.

Species	# L1 hits	Length distribution (bp)	Notes
METAZOA			
MAMMALIA			
Tachyglossus aculeatus	0	-	
Ornithorhynchus anatinus	0	-	3 tiny fragments found in platypus while mining for L1s. Checked against a pacbio assmebly - found 6 similar fragments, but all are flanked by L2 and L3 5' and 3' elements. More likely to be of the L2/CR1 clade.
Monodelphis domestica	368300	min 26, median 396, max 12466	
Macropus eugenii	120437	min 29, median 469, max 7787	
Sarcophilus harrisii	132100	min 26, median 264, max 8834	
Dasypus novemcinctus	249548	min 26, median 503, max 13923	
Choloepus hoffmanni	166782	min 35, median 612, max 11920	
Chrysochloris asiatica	188020	min 26, median 320, max 7157	
Echinops telfairi	80067	min 26, median 347, max 7224	
Orycteropus afer afer	280733	min 26, median 338, max 10311	
Elephantulus edwardii	337288	min 26, median 302, max 7108	
Trichechus manatus latirostris	230983	min 26, median 435, max 14101	
Procavia capensis	156595	min 32, median 736, max 11303	
Loxodonta africana	253130	min 26, median 474, max 14036	
Erinaceus europaeus	130943	min 26, median 308, max 10024	
Sorex araneus	133563	min 26, median 332, max 10424	
Condylura cristata	89051	min 26, median 275, max 7199	
Pteropus alecto	148833	min 26, median 401, max 12178	
Pteropus vampyrus	86961	min 32, median 309, max 9856	
Eidolon helvum	67966	min 32, median 219, max 8961	
Megaderma lyra	58222	min 32, median 210, max 9765	
Rhinolophus ferrumequinum	75604	min 33, median 212, max 9717	
Pteronotus parnellii	69432	min 32, median 188, max 9062	
Eptesicus fuscus	110090	min 26, median 315, max 11254	
Myotis brandtii	120200	min 26, median 317, max 10288	
Myotis davidii	95878	min 26, median 267, max 11658	
Myotis lucifugus	118834	min 26, median 366, max 12207	

Species	# L1 hits	Length distribution (bp)	Notes
$Ceratotherium\ simum$	197102	min 26, median 392, max 12095	
simum	137102	11111 20, median 332, max 12030	
Equus przewalskii	123829	min 29, median 377, max 15366	
Equus caballus	200731	min 26, median 410, max 13504	
(Thoroughbred)			
Equus caballus	115028	min 32, median 324, max 15282	
(Mongolian)	100471		
Manis pentadactyla	133451	min 29, median 195, max 10267	
Felis catus	206663	min 26, median 371, max 11426	
Panthera tigris altaica	195025	min 26, median 385, max 13604	
Canis lupus familiaris	189577	min 26, median 368, max 11672	
Ursus maritimus	193442	min 26, median 378, max 13373	
Ailuropoda melanoleuca	124602	min 26, median 289, max 11844	
Leptonychotes weddellii	146135	min 26, median 330, max 10738	
Odobenus rosmarus	164744	min 26, median 371, max 11279	
divergens	109100	. 96 1, 969 10010	
Mustela putorius furo	193128	min 26, median 362, max 10819	
Camelus dromedarius	155118	min 26, median 344, max 11206	
Camelus ferus	132511	min 26, median 328, max 11795	
Vicugna pacos	194213	min 26, median 346, max 10598	
Sus scrofa (Duroc)	251960	min 26, median 350, max 11196	
Sus scrofa (Tibetan)	169743	min 26, median 383, max 13253	
Sus scrofa (Ellegaard Gottingen minipig)	143892	min 29, median 372, max 11185	
Balaenoptera	239254	min 26, median 401, max 10933	
acutorostrata scammoni Physeter catodon	162334	min 29, median 407, max 13070	
Lipotes vexillifer	198338	min 26, median 458, max 15715	
Tursiops truncatus	206606	min 29, median 296, max 14307	
Orcinus orca	243602	min 26, median 415, max 12828	
Pantholops hodgsonii	140895	min 26, median 293, max 10045	
Capra hircus	172850	min 26, median 307, max 11295	
Ovis aries (Texel)	170755	min 26, median 320, max 12550	
Ovis aries musimon	118754	· · · · · · · · · · · · · · · · · · ·	
Bubalus bubalis	170578	min 26, median 287, max 12652 min 26, median 372, max 16417	
Bison bison bison	222104	min 26, median 366, max 12472	
Bos mutus	125229	min 26, median 291, max 12276	
Bos indicus	162944	min 26, median 291, max 12276 min 26, median 329, max 12582	
Bos inaicus Bos taurus	183282	min 26, median 329, max 12582 min 26, median 338, max 12798	
		· · · · · · · · · · · · · · · · · · ·	
Ochotona princeps	63231 165637	min 26, median 319, max 7183	
Oryctolagus cuniculus Ictidomys	100097	min 26, median 386, max 13252	
tridecemlineatus	153340	min 29, median 359, max 8996	
Heterocephalus glaber	211256	min 26, median 365, max 9489	
Fukomys damarensis	179459	min 26, median 377, max 10470	
Cavia aperea	215721	min 26, median 344, max 12977	

Species	# L1 hits	Length distribution (bp)	Notes
Cavia porcellus	202062	min 26, median 524, max 13197	
Chinchilla lanigera	162543	min 26, median 374, max 9883	
Octodon degus	181971	min 26, median 365, max 7751	
Dipodomys ordii	39663	min 29, median 111, max 7728	
Jaculus jaculus	132427	min 26, median 365, max 7362	
Nannospalax galili	136751	min 26, median 407, max 7868	
Mesocricetus auratus	117603	min 26, median 374, max 9681	
Cricetulus griseus	90706	min 26, median 329, max 11338	
Microtus ochrogaster	91178	min 26, median 332, max 6404	
Peromyscus maniculatus	70150	. 96 1. 994 9999	
bairdii	72159	min 26, median 335, max 9389	
Rattus norvegicus	193696	min 26, median 518, max 11866	
Mus musculus	197761	min 26, median 502, max 18858	
Tupaia belangeri	68588	min 32, median 463, max 10269	
Tupaia chinensis	110904	min 26, median 393, max 11021	
Galeopterus variegatus	176635	min 26, median 174, max 9846	
Otolemur garnettii	196900	min 26, median 363, max 8925	
Microcebus murinus	106690	min 32, median 286, max 10808	
Tarsius syrichta	186988	min 26, median 385, max 16139	
Callithrix jacchus	271588	min 26, median 430, max 12568	
Saimiri boliviensis	202012	. 96 1. 907 11077	
boliviens is	203913	min 26, median 397, max 11877	
Rhinopithecus roxellana	185188	min 26, median 443, max 15293	
Nasalis larvatus	202605	min 26, median 395, max 10716	
Chlorocebus sabaeus	233704	min 26, median 386, max 12077	
Macaca fascicularis	252545	min 26, median 400, max 13479	
Macaca mulatta	238315	min 26, median 329, max 10898	
Papio anubis	263380	min 26, median 404, max 14592	
Nomascus leucogenys	244864	min 26, median 416, max 14766	
Pongo abelii	297567	min 26, median 421, max 13087	
Gorilla gorilla gorilla	263332	min 26, median 395, max 27891	
Pan paniscus	233415	min 26, median 440, max 14715	
Pan troglodytes	264123	min 26, median 410, max 16238	
Homo sapiens	257636	min 26, median 406, max 18773	
SAUROPSIDA			
Apalone spinifera	2560	min 29, median 372, max 5911	
Pelodiscus sinensis	2031	min 32, median 511, max 7157	
Chelonia mydas	5240	min 32, median 477, max 8320	
Chrysemys picta bellii	3714	min 32, median 551, max 8573	
Struthio camelus australis	61	min 75, median 254, max 3825	
Tinamus guttatus	27	min 83, median 281, max 1197	
Anas platyrhynchos	51	min 98, median 236, max 4578	
Lyrurus tetrix tetrix	21	min 72, median 248, max 780	
Gallus gallus	22	min 87, median 192, max 4412	
Coturnix japonica	8	min 82, median 146, max 893	
Meleagris gallopavo	14	min 86, median 230, max 4020	

Species	# L1 hits	Length distribution (bp)	Notes
Colinus virginianus	127	min 70, median 357, max 4090	
Acanthisitta chloris	42	min 90, median 287, max 4493	
Manacus vitellinus	36	min 102, median 251, max 4602	
Zonotrichia albicollis	37	min 65, median 211, max 4512	
Geospiza fortis	27	min 114, median 272, max 4489	
Serinus canaria	386	min 61, median 103, max 4516	
Taeniopygia guttata	30	min 84, median 258, max 4354	
Ficedula albicollis	34	min 108, median 272, max 4569	
Pseudopodoces humilis	40	min 68, median 227, max 4312	
Corvus brachyrhynchos	57	min 68, median 248, max 4515	
Corvus cornix cornix	43	min 76, median 257, max 4586	
Ara macao	50	min 107, median 278, max 2083	
Amazona vittata	63	min 72, median 268, max 3513	
Melopsittacus undulatus	38	min 73, median 280, max 3737	
Nestor notabilis	54	min 95, median 267, max 3928	
Falco cherrug	59	min 101, median 280, max 4512	
Falco peregrinus	58	min 86, median 276, max 3806	
Cariama cristata	62	min 125, median 273, max 4604	
Merops nubicus	40	min 121, median 269, max 4075	
Picoides pubescens	37	min 72, median 212, max 641	
Buceros rhinoceros	40	. 71 1: 000 4710	
silvestris	43	min 71, median 289, max 4513	
Apaloderma vittatum	32	min 117, median 316, max 3858	
Leptosomus discolour	46	min 128, median 267, max 3646	
Haliaeetus albicilla	65	min 116, median 290, max 4593	
Haliaeetus leucocephalus	68	min 85, median 290, max 4600	
Aquila chrysaetos	6.4	197 1: 901 4567	
can a densis	64	min 127, median 291, max 4567	
Cathartes aura	81	min 89, median 305, max 4211	
Tyto alba	100	min 75, median 272, max 4540	
$Colius\ striatus$	42	min 85, median 275, max 4391	
$Charadrius\ vociferus$	64	min 106, median 290, max 4520	
Balearica regulorum	61	min 111, median 316, max 4608	
gibbericeps	01	1111, incuran 910, max 4000	
$Chlamydotis\ macqueenii$	57	min 69, median 270, max 4065	
Cuculus canorus	42	min 119, median 252, max 3744	
Fulmarus glacialis	68	min 70, median 280, max 4628	
$Aptenodytes\ for steri$	79	min 76, median 269, max 4724	
Pygoscelis adeliae	75	min 89, median 281, max 4834	
Phalacrocorax carbo	57	min 50, median 289, max 3731	
Pelecanus crispus	57	min 121, median 286, max 4581	
Nipponia nippon	71	min 76, median 296, max 4564	
Egretta garzetta	66	min 92, median 276, max 4598	
Phaethon lepturus	47	min 151, median 308, max 4615	
Gavia stellata	74	min 88, median 262, max 4577	
Tauraco erythrolophus	45	min 115, median 289, max 4514	

Opisthocomus hoozin 80 min 147, median 326, max 4184 Columba livia 55 min 109, median 281, max 4523 Petrocles gutturalis 56 min 103, median 279, max 4508 Calgpte auma 31 min 137, median 286, max 3924 Chactura pelagica 29 min 100, median 253, max 4553 Caprimalgus carolinensis 68 min 83, median 268, max 4374 Ewrypaga helias 41 min 130, median 251, max 4514 Mesitornis unicolor 41 min 130, median 262, max 4730 Phoenecopterus ruber 77 min 124, median 278, max 4626 ruber 77 min 124, median 278, max 4626 Alligator mississippiensis 4412 min 32, median 624, max 13520 Alligator sinensis 6253 min 29, median 569, max 9201 Crocodylus porosus 3948 min 32, median 679, max 7709 Gavaidis gangeticus 3989 min 29, median 569, max 9201 Crocodylus porosus 3948 min 32, median 440, max 4971 Anolis carolinensis 12551 min 32, median 518, max 9160 Vipera berus berus 5714 min 41, medi	Species	# L1 hits	Length distribution (bp)	Notes
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Peterocles gutturalis	*	55	· · · · · · · · · · · · · · · · · · ·	
Calgpte anna		56	· · · · · · · · · · · · · · · · · · ·	
Chacturu pelagica 29		31		
Caprimulgus carolinensis 68		29		
Mesitornis unicolor		68		
Mesitornis unicolor 41 min 130, median 300, max 4484 Podiceps cristatus 50 min 127, median 282, max 4730 Phoenicopterus ruber ruber 77 min 124, median 278, max 4626 Alligator mississippicnsis 4412 min 32, median 624, max 13520 Alligator sinensis 6253 min 29, median 569, max 9201 Crocodylus porosus 3948 min 32, median 579, max 7709 Gavialis gangeticus 3989 min 29, median 569, max 9201 Pogona vitticeps 6767 min 32, median 579, max 709 Anolis carolinensis 12551 min 26, median 518, max 9160 Vipera berus berus 5714 min 41, median 585, max 5375 Crotalus mitchellii 3591 min 53, median 390, max 4019 Ophiophagus hannah 9742 min 38, median 364, max 6767 Python bivittatus 4679 min 38, median 542, max 5737 AMPHIBIA Xenopus lacvis 26764 min 32, median 659, max 9353 NEOPTERYGII Xenopus tropicalis 878 min 38, median 767, max 5619 Kenopus tropicalis 876 min 65, median 596, max 5363		41		
Podiceps cristatus		41		
Phoenicopterus ruber ruber ruber ruber ruber ruber ruber min 124, median 278, max 4626		50		
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Anguilla japonica 1833 min 53, median 517, max 5112 Danio rerio 5140 min 29, median 614, max 8441 Astyanax mexicanus 975 min 41, median 479, max 4962 Oryzias latipes 4496 min 41, median 641, max 5918 Poecilia formosa 1505 min 29, median 659, max 5676 Xiphophorus maculatus 1217 min 47, median 652, max 5655 Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 383, max 4385 Haplochromis burtoni 1666 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 698, max 6629	Lepisosteus oculatus	876	min 65, median 596, max 5363	
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Astyanax mexicanus 975 min 41, median 479, max 4962 Oryzias latipes 4496 min 41, median 641, max 5918 Poecilia formosa 1505 min 29, median 659, max 5676 Xiphophorus maculatus 1217 min 47, median 652, max 5655 Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 698, max 6629 Oreochromis niloticus 3265 min 47, median 698, max 6629	Anguilla japonica	1833	min 53, median 517, max 5112	
Oryzias latipes 4496 min 41, median 641, max 5918 Poecilia formosa 1505 min 29, median 659, max 5676 Xiphophorus maculatus 1217 min 47, median 652, max 5655 Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Danio rerio	5140	min 29, median 614, max 8441	
Poecilia formosa 1505 min 29, median 659, max 5676 Xiphophorus maculatus 1217 min 47, median 652, max 5655 Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 695, max 5895 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Astyanax mexicanus	975	min 41, median 479, max 4962	
Xiphophorus maculatus 1217 min 47, median 652, max 5655 Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Oryzias latipes	4496	min 41, median 641, max 5918	
Fundulus heteroclitus 2825 min 38, median 617, max 5485 Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Poecilia formosa	1505	min 29, median 659, max 5676	
Takifugu flavidus 709 min 59, median 564, max 5147 Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Xiphophorus maculatus	1217	min 47, median 652, max 5655	
Takifugu rubripes 825 min 44, median 553, max 5497 Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Fundulus heteroclitus	2825	min 38, median 617, max 5485	
Tetraodon nigroviridis 232 min 32, median 539, max 5422 Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Takifugu flavidus	709	min 59, median 564, max 5147	
Cynoglossus semilaevis 196 min 73, median 383, max 4385 Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Takifugu rubripes	825	min 44, median 553, max 5497	
Haplochromis burtoni 1666 min 44, median 729, max 6085 Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Tetraodon nigroviridis	232	min 32, median 539, max 5422	
Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Cynoglossus semilaevis	196	min 73, median 383, max 4385	
Pundamilia nyererei 1852 min 41, median 695, max 5895 Maylandia zebra 2116 min 44, median 680, max 6900 Neolamprologus brichardi 1915 min 47, median 620, max 5431 Oreochromis niloticus 3265 min 47, median 698, max 6629	Haplochromis burtoni	1666	min 44, median 729, max 6085	
Neolamprologus brichardi1915min 47, median 620, max 5431Oreochromis niloticus3265min 47, median 698, max 6629	Pundamilia nyererei	1852		
Oreochromis niloticus 3265 min 47, median 698, max 6629	Maylandia zebra	2116	min 44, median 680, max 6900	
	Neolamprologus brichardi	1915	min 47, median 620, max 5431	
Sebastes nigrocinctus 912 min 74, median 494, max 6241	Oreochromis niloticus	3265	min 47, median 698, max 6629	
in i	Sebastes nigrocinctus	912	min 74, median 494, max 6241	

Species	# L1 hits	Length distribution (bp)	Notes
Sebastes rubrivinctus	878	min 68, median 507, max 6040	
Gasterosteus aculeatus	507	min 71, median 493, max 4992	
Gadus morhua	1635	min 44, median 410, max 5389	
CHONDRICHTHYES			•
Callorhinchus milii	209	min 32, median 368, max 2778	
Carcharhinus brachyurus	3388	min 44, median 200, max 5019	
ECDYSOZOA			
Ephemera danica	114	min 56, median 700, max 3669	
Ladona fulva	477	min 38, median 770, max 3645	
Pediculus humanus	60	min 90 modian 200 mar 1910	
corporis	68	min 89, median 308, max 1819	
Frankliniella occidentalis	193	min 70, median 256, max 4011	
Diaphorina citri	1175	min 75, median 289, max 3389	
Pachypsylla venusta	243	min 84, median 217, max 2029	
Acyrthosiphon pisum	155	min 80, median 672, max 2723	
Nilaparvata lugens	2093	min 44, median 452, max 8772	
Oncopeltus fasciatus	244	min 72, median 203, max 1815	
Rhodnius prolixus	165	min 74, median 641, max 3250	
Cimex lectularius	1070	min 81, median 203, max 2489	
Onthophagus taurus	161	min 83, median 669, max 2726	
Agrilus planipennis	197	min 35, median 455, max 2009	
Tribolium castaneum	34	min 53, median 686, max 2591	
Anoplophora glabripennis	121	min 83, median 611, max 2501	
Leptinotarsa decemlineata	484	min 59, median 785, max 2698	
Dendroctonus ponderosae	135	min 53, median 569, max 2322	
Mengenilla moldrzyki	15	min 73, median 189, max 2534	
Aedes aegypti	3589	min 38, median 737, max 5629	
Culex quinquefasciatus	947	min 41, median 743, max 5511	
Anopheles albimanus	45	min 88, median 192, max 4306	
Anopheles arabiensis	179	min 59, median 442, max 3029	
Anopheles atroparvus	191	min 71, median 516, max 2842	
Anopheles christyi	112	min 89, median 446, max 2247	
Anopheles culicifacies	279	min 62, median 407, max 3851	
Anopheles darlingi	35	min 71, median 176, max 3308	
Anopheles dirus	390	min 88, median 575, max 3077	
Anopheles epiroticus	194	min 41, median 486, max 4385	
Anopheles farauti	403	min 59, median 520, max 4720	
Anopheles funestus	192	min 70, median 551, max 4515	
Anopheles gambiae	321	min 35, median 546, max 4880	
Anopheles maculatus	97	min 65, median 533, max 2325	
Anopheles melas	138	min 71, median 376, max 3158	
Anopheles merus	250	min 65, median 425, max 4176	
Anopheles minimus	163	min 107, median 493, max 3995	
Anopheles			
quadrian nulatus	185	min 65, median 399, max 3170	
	104	min 92, median 499, max 4494	

Species	# L1 hits	Length distribution (bp)	Notes
Anopheles stephensi	110	min 91, median 494, max 3220	
Mayetiola destructor	29	min 83, median 677, max 2666	
Lutzomyia longipalpis	11	min 150, median 1016, max 2372	
Phlebotomus papatasi	36	min 68, median 1082, max 2675	
Ceratitis capitata	112	min 53, median 335, max 7274	
Drosophila albomicans	50	min 73, median 136, max 1699	
Drosophila ananassae	24	min 68, median 179, max 1091	
Drosophila biarmipes	25	min 78, median 225, max 1759	
Drosophila bipectinata	19	min 68, median 329, max 1503	
Drosophila elegans	32	min 63, median 186, max 1241	
Drosophila erecta	24	min 82, median 200, max 956	
Drosophila eugracilis	25	min 89, median 227, max 1472	
Drosophila ficusphila	77	min 88, median 758, max 3911	
Drosophila grimshawi	70	min 76, median 114, max 882	
Drosophila kikkawai	36	min 87, median 221, max 1311	
Drosophila melanogaster	16	min 97, median 134, max 2001	
Drosophila miranda	30	min 76, median 148, max 4515	
Drosophila mojavensis	113	min 68, median 210, max 1345	
Drosophila persimilis	36	min 67, median 122, max 837	
Drosophila pseudoobscura			
pseudoobscura	34	min 70, median 157, max 953	
Drosophila rhopaloa	18	min 104, median 179, max 1143	
Drosophila sechellia	17	min 92, median 225, max 629	
Drosophila simulans	19	min 77, median 169, max 531	
Drosophila suzukii	38	min 86, median 174, max 5555	
Drosophila takahashii	26	min 96, median 180, max 1660	
Drosophila virilis	68	min 69, median 125, max 2055	
Drosophila willistoni	41	min 72, median 152, max 1050	
Drosophila yakuba	22	min 66, median 182, max 2240	
Musca domestica	117	min 44, median 393, max 2615	
Glossina austeni	156	min 71, median 187, max 1413	
Glossina brevipalpis	188	min 81, median 232, max 1514	
Glossina fuscipes fuscipes	162	min 69, median 169, max 2801	
Glossina morsitans			
morsitans	151	min 72, median 176, max 2225	
Glossina pallidipes	139	min 75, median 168, max 1505	
Limnephilus lunatus	105	min 44, median 266, max 1604	
Papilio glaucus	144	min 35, median 410, max 1434	
Papilio polytes	13	min 126, median 275, max 2819	
Papilio xuthus	22	min 138, median 1647, max 2328	
Heliconius melpomene			
melpomene	12	min 89, median 150, max 2300	
Melitaea cinxia	30	min 85, median 213, max 2459	
Danaus plexippus	27	min 71, median 416, max 3429	
Bombyx mori	4934	min 82, median 306, max 2427	
Manduca sexta	33	min 70, median 772, max 2360	

Species	# L1 hits	Length distribution (bp)	Notes
Plutella xylostella	143	min 80, median 1475, max 2747	
Athalia rosae	26	min 64, median 214, max 2468	
Cephus cinctus	52	min 94, median 300, max 2198	
Orussus abietinus	31	min 89, median 362, max 1745	
Ceratosolen solmsi	250	min 75 modian 169 may 1495	
marchali	258	min 75, median 163, max 1425	
Nasonia giraulti	41	min 76, median 206, max 2043	
Nasonia longicornis	32	min 83, median 200, max 2489	
$Nasonia\ vitripennis$	84	min 67, median 151, max 2216	
$Copidosoma\ floridanum$	157	min 74, median 386, max 2177	
$Trichogramma\ pretiosum$	53	min 80, median 440, max 2543	
$Microplitis\ demolitor$	139	min 88, median 929, max 2435	
$Megachile\ rotundata$	98	min 85, median 616, max 2474	
Apis dorsata	31	min 95, median 247, max 1367	
Apis florea	42	min 73, median 174, max 1045	
Apis mellifera	35	min 85, median 199, max 2018	
Bombus impatiens	69	min 80, median 603, max 2302	
$Bombus\ terrestris$	52	min 90, median 301, max 1412	
$Line pithema\ humile$	54	min 77, median 209, max 2480	
$Camponotus\ floridanus$	37	min 86, median 232, max 9746	
$A cromyrmex\ echinatior$	79	min 68, median 163, max 2261	
$Atta\ cephalotes$	54	min 71, median 149, max 3899	
$Solenopsis\ invicta$	78	min 81, median 177, max 2619	
Pogonomyrmex barbatus	29	min 85, median 196, max 1617	
$Harpegnathos\ saltator$	294	min 83, median 187, max 1510	
Cerapachys biroi	47	min 68, median 191, max 1883	
$Blattella\ germanica$	2437	min 47, median 688, max 4506	
$Zooter mops is\ nevadens is$	91	min 47, median 488, max 2552	
$Locusta\ migratoria$	6154	min 29, median 973, max 5039	
Daphnia pulex	284	min 44, median 744, max 5142	
Eurytemora affinis	404	min 85, median 450, max 3719	
$Le peoph their us\ salmon is$	18478	min 26, median 473, max 4755	
Hyalella azteca	211	min 41, median 287, max 2477	
Strigamia maritima	62	min 90, median 855, max 3003	
$Stegodyphus\ mimosarum$	929	min 65, median 1223, max 2759	
Latrodectus hesperus	273	min 56, median 770, max 2636	
$Parasteatoda\ tepidariorum$	125	min 98, median 1082, max 2492	
Tetranychus urticae	54	min 104, median 273, max 1964	
$Dermatophagoides\ farinae$	14	min 109, median 164, max 1677	
Sarcoptes scabiei type canis	49	min 83, median 233, max 2369	
Achipteria coleoptrata	9	min 90, median 819, max 2525	
Hypochthonius rufulus	22	min 81, median 302, max 2180	
Platynothrus peltifer	17	min 203, median 833, max 1340	
Steganacarus magnus	39	min 107, median 362, max 2664	
Ixodes ricinus	871	min 41, median 992, max 4181	

Species	# L1 hits	Length distribution (bp)	Notes
Ixodes scapularis	2134	min 41, median 830, max 4043	
Rhipicephalus microplus	216	min 134, median 673, max 3144	
Metaseiulus occidentalis	75	min 96, median 1058, max 1820	
Varroa destructor	19	min 95, median 168, max 692	
Centruroides exilicanda	729	min 62, median 1001, max 3491	
Mesobuthus martensii	370	min 75, median 857, max 4684	
Limulus polyphemus	583	min 44, median 674, max 4269	
Trichinella spiralis	15	min 79, median 284, max 1578	
Ascaris suum	41	min 98, median 694, max 2568	
Elaeophora elaphi	0	-	
Onchocerca volvulus	0	-	
Steinernema monticolum	42	min 85, median 405, max 824	
Panagrellus redivivus	16	min 102, median 495, max 2278	
Haemonchus contortus	721	min 38, median 398, max 2289	
Necator americanus	50	min 77, median 553, max 1634	
Heterorhabditis	1	244 244 244	
bacteriophora	1	min 244, median 244, max 244	
Caenorhabditis angaria	16	min 139, median 215, max 1606	
$Cae nor hab ditis\ brenneri$	42	min 107, median 457, max 3145	
$Cae nor hab ditis\ briggs ae$	19	min 93, median 240, max 1476	
Caenorhabditis elegans	12	min 211, median 401, max 922	
Caenorhabditis japonica	56	min 38, median 662, max 2528	
Caenorhabditis sp. 11	14	min 93, median 308, max 1032	
MAF-2010	14	min 55, median 500, max 1052	
Priapulus caudatus	296	min 53, median 329, max 3346	
ROTIFERA			
Adineta vaga	45	min 111, median 653, max 3304	
PLATYHELMINTHES			
Schistosoma curassoni	173	min 52, median 64, max 2248	
Schistosoma haematobium	159	min 50, median 62, max 2059	
Schistosoma japonicum	136	min 44, median 464, max 6036	
Schistosoma mansoni	98	min 54, median 61, max 2968	
Schistosoma margrebowiei	142	min 50, median 62, max 3942	
Schistosoma mattheei	125	min 51, median 62, max 5065	
Schistosoma rodhaini	95	min 51, median 62, max 4927	
Clonorchis sinensis	411	min 50, median 213, max 2207	
Echinococcus granulosus	4	min 688, median 1110, max 1514	
Echinococcus	8	min 128, median 341, max 1246	
multilocularis			
Hymenolepis microstoma	7	min 92, median 719, max 1445	
Protopolystoma xenopodis	25	min 140, median 779, max 4759	
ANNELIDA			
Capitella teleta	25	min 89, median 452, max 2708	
Helobdella robusta	652	min 35, median 437, max 2483	
MOLLUSCA	1044	1 01 01	
Crassostrea gigas	1344	min 47, median 911, max 6771	

Species	# L1 hits	Length distribution (bp)	Notes
Lottia gigantea	559	min 59, median 862, max 5151	
Aplysia californica	1819	min 47, median 216, max 7250	
Biomphalaria glabrata	761	min 53, median 253, max 3280	
CNIDARIA	I	,	1
Nematostella vectensis	191	min 74, median 569, max 5309	
Hydra vulgaris	1607	min 35, median 678, max 5900	
TENTACULATA		, ,	
Mnemiopsis leidyi	68	min 93, median 868, max 2366	
PLACOZOA			
Trichoplax adhaerens	0	-	
ECHINOIDEA	1 "		
Amphimedon			
queens landica	12	min 110, median 580, max 1238	
Lytechinus variegatus	2319	min 44, median 470, max 5196	
Strongylocentrotus			
purpuratus	4014	min 32, median 398, max 6094	
ASTEROIDEA	I		I.
Patiria miniata	328	min 59, median 704, max 4514	
ENTEROPNEUSTA			
Saccoglossus kowalevskii	2412	min 32, median 670, max 6255	
TUNICATA			
Ciona intestinalis	110	min 77, median 546, max 4833	
Ciona savignyi	2744	min 38, median 839, max 11990	
Botryllus schlosseri	726	min 68, median 1564, max 4179	
Oikopleura dioica	5	min 282, median 983, max 2117	
LEPTOCARDII			
$Branchiostoma\ floridae$	759	min 53, median 845, max 5842	
CEPHALASPIDOMOF	RPHI		
Lethenteron	010	min 47 modian 651 may 6526	
camts chaticum	918	min 47, median 651, max 6536	
Petromyzon marinus	529	min 44, median 644, max 7409	
SARCOPTERYGII			
Latimeria chalumnae	12303	min 38, median 739, max 12520	
FUNGI			
Agaricus bisporus var.	14	min 527, median 1358, max 3596	
bisporus	1.1	mii 521, inculaii 1550, iliax 5550	
Agaricus bisporus var.	15	min 674, median 1490, max 3473	
burnettii	10	mm 014, median 1430, max 3473	
Schizophyllum commune	2	min 2963, median 2963, max	
Some progression continuing		3002	
Coprinopsis cinerea	4	min 1052, median 1184, max 2629	
Moniliophthora roreri	2	min 908, median 908, max 3198	
Laccaria bicolor	2	min 1262, median 1262, max 2974	
Auricularia subglabra	73	min 650, median 3038, max 3746	

Species	# L1 hits	Length distribution (bp)	Notes
Serpula lacrymans	0	-	
Punctularia	15	min 065 medien 2199 men 2690	
strigosozonata	15	min 965, median 3182, max 3689	
Gloeophyllum trabeum	11	min 428, median 1256, max 3527	
Fomitiporia mediterranea	1	min 1142, median 1142, max	
Tomosporta measterranea		1142	
Dichomitus squalens	4	min 1656, median 2546, max	
		3374	
Fibroporia radiculosa	1	min 770, median 770, max 770	
Phanerochaete carnosa	10	min 530, median 1421, max 2897	
Postia placenta	5	min 1187, median 1703, max	
		2944	
$Trametes\ versicolor$	29	min 2426, median 3143, max 3512	
$Heterobasidion\ irregulare$	5	min 1529, median 1706, max 3103	
		min 2108, median 2324, max	
Stereum hirsutum	4	3530	
Spizellomyces punctatus	0	-	
Batrachochytrium			
dendrobatidis	0	-	
Diplodia corticola	0	_	
Neofusicoccum parvum	0	_	
Baudoinia panamericana	0		
Cercospora beticola	0		
Pseudocercospora fijiensis	8	min 896, median 2708, max 2753	
- · · · ·		min 1589, median 1589, max	
Sphaerulina musiva	1	1589	
Zymoseptoria tritici	5	902, median 1595, max 1685	
Aureobasidium namibiae	0	-	
Aureobasidium subglaciale	0	-	
Coniosporium apollinis	0	_	
Paraphaeosphaeria	_		
sporulosa	0	-	
Parastagonospora	2	min 1352, median 1352, max	
nodorum	2	2459	
Leptosphaeria maculans	12	min 755, median 1685, max 2792	
Alternaria alternata	0	-	
Bipolaris maydis	0	-	
Bipolaris oryzae	0	-	
Bipolaris sorokiniana	0	-	
Bipolaris victoriae	0	-	
Bipolaris zeicola	0	-	
Pyrenophora teres	0	-	
Pyrenophora	0		
tritici-repentis	0	-	
Setosphaeria turcica	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Verruconis gallopava	0	-	
Cyphellophora europaea	0	-	
Capronia coronata	0	-	
Capronia epimyces	0	-	
${\it Cladophialophora}$	0	_	
bantiana	0		
Cladophialophora	0	_	
carrionii	Ŭ		
Cladophialophora	0	_	
immunda			
Cladophialophora	0	-	
psammophila			
Cladophialophora yegresii	0	-	
Exophiala aquamarina	0	-	
Exophiala dermatitidis	0	-	
Exophiala mesophila	0	-	
Exophiala oligosperma	0	-	
Exophiala spinifera	0	-	
Exophiala xenobiotica	0	-	
Fonsecaea erecta	0	-	
Fonsecaea monophora	0	-	
Fonsecaea multimorphosa	0	-	
Fonsecaea nubica	0	-	
Fonsecaea pedrosoi	0	-	
Phialophora attae	0	-	
Rhinocladiella mackenziei	0	-	
Aspergillus aculeatus	0	-	
Aspergillus bombycis	0	-	
Aspergillus clavatus	0	-	
Aspergillus fischeri	0	-	
Aspergillus flavus	0	-	
Aspergillus fumigatus	0	-	
Aspergillus glaucus	0	-	
Aspergillus nidulans	0	-	
Aspergillus niger	0	-	
Aspergillus nomius	0	-	
Aspergillus oryzae	0	-	
Aspergillus terreus	0	-	
Penicilliopsis zonata	0	-	
Penicillium arizonense	0	-	
Penicillium chrysogenum	0	-	
Penicillium digitatum	0	-	
Penicillium expansum	0	-	
Penicillium marneffei	0	-	
Rasamsonia emersonii	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Talaromyces atroroseus	1	min 1589, median 1589, max 1589	
Talaromyces stipitatus	7	min 239, median 863, max 1274	
Ajellomyces dermatitidis	25	min 494, median 953, max 1439	
Arthroderma otae	1	min 318, median 318, max 318	
Coccidioides immitis	3	min 944, median 944, max 1433	
Coccidioides posadasii	0	-	
Histoplasma capsulatum	1	min 1442, median 1442, max 1442	
Nannizzia gypsea	0	-	
Paracoccidioides	2	min 662, median 662, max 695	
brasiliensis	2	min 602, median 602, max 635	
Paracoccidioides lutzii	0	-	
Trichophyton benhamiae	0	-	
Trichophyton rubrum	0	-	
Trichophyton verrucosum	0	-	
Uncinocarpus reesii	2	min 758, median 758, max 794	
Endocarpon pusillum	7	min 215, median 323, max 953	
Tilletiaria anomala	0	-	
Botryotinia fuckeliana	0	-	
Glarea lozoyensis	0	-	
Marssonina brunnea	0	-	
Phialocephala scopiformis	0	-	
Sclerotinia sclerotiorum	0	-	
Pseudogymnoascus destructans	3	min 1009, median 1494, max 2726	
Pseudogymnoascus verrucosus	0	-	
Malassezia globosa	0	-	
Malassezia pachydermatis	0	-	
Malassezia sympodialis	5	min 347, median 947, max 1133	
Rhodotorula graminis	0	-	
Rhodotorula toruloides	1	min 2537, median 2537, max 2537	
Mixia osmundae	0	-	
Arthrobotrys oligospora	0	-	
Dactylellina haptotyla	1	min 1802, median 1802, max 1802	
Tuber melanosporum	2	min 218, median 218, max 1871	
Pneumocystis carinii	0	-	
Pneumocystis jirovecii	0	-	
Pneumocystis murina	0	-	
Melampsora	c	min 1373, median 1475, max	
larici-populina	6	2144	
Puccinia graminis	1	min 752, median 752, max 752	
Candida albicans	8	min 221, median 1097, max 3446	

Species	# L1 hits	Length distribution (bp)	Notes
Candida auris	1	min 2327, median 2327, max 2327	
Candida dubliniensis	35	min 41, median 390, max 4952	
Candida glabrata	0	-	
Candida orthopsilosis	0	-	
Candida tanzawaensis	1	min 1844, median 1844, max 1844	
Candida tenuis	0	-	
Candida tropicalis	0	-	
Lodderomyces	0	_	
elongisporus	-		
Ascoidea rubescens	0	-	
Babjeviella inositovora	0	-	
Clavispora lusitaniae	0	-	
Cyberlindnera jadinii	0	-	
Debaryomyces fabryi	0	-	
Debaryomyces hansenii	0	-	
Eremothecium	0	-	
cymbalariae			
Eremothecium gossypii	0	-	
$Eremothecium \ sine caudum$	0	-	
Hyphopichia burtonii	0	_	
Kazachstania africana	0	-	
Kazachstania naganishii	0	-	
Kluyveromyces lactis	0	_	
Kluyveromyces marxianus	0	_	
Komagataella phaffii	0	-	
Kuraishia capsulata	0	_	
Lachancea lanzarotensis	0	-	
Lachancea thermotolerans	0	-	
Metschnikowia Metschnikowia			
bicuspidata	3	min 158, median 410, max 1358	
Meyerozyma	0	-	
guilliermondii	0		
Naumovozyma castellii Naumovozyma dairenensis	0	-	
Ogataea parapolymorpha	0	-	
Ogataea polymorpha Ogataea polymorpha	0	-	
Saccharomyces cerevisiae	0	-	
Saccharomyces eubayanus	0	-	
Spathaspora passalidarum	0	-	
Sugiyamaella			
lignohabitans	0	-	
Tetrapisispora blattae	0	-	
Tetrapisispora phaffii	0	-	
T T T T T T T T T T T T T T T T T T T	_	I	

Species	# L1 hits	Length distribution (bp)	Notes
Torulaspora delbrueckii	0	-	
Vanderwaltozyma			
polyspora	0	-	
Yarrowia lipolytica	36	min 89, median 926, max 6079	
Zygosaccharomyces rouxii	0	-	
Wickerhamomyces	,	. 440 11 450 0000	
anomalus	4	min 449, median 458, max 2606	
Wickerhamomyces ciferrii	8	min 230, median 1787, max 2927	
Scheffersomyces stipitis	25	min 1679, median 3077, max 3386	
Pichia kudriavzevii	0	-	
Pichia membranifaciens	0	-	
Schizos accharomyces	0		
cryophilus	0		
Schizos accharomyces			
japonicus	,		
Schizos accharomyces	0		
octosporus			
Schizosaccharomyces			
pombe			
Metarhizium acridum	0	-	
Metarhizium brunneum	0	-	
Metarhizium majus	0	-	
$Metarhizium\ robertsii$	0	-	
Pochonia chlamydosporia	0	-	
Beauveria bassiana	2	min 404, median 404, max 1391	
Cordyceps militaris	0	-	
Isaria fumosorosea	0	-	
$Trichoderma\ atroviride$	0	-	
Trichoderma gamsii	0	-	
Trichoderma reesei	0	-	
Trichoderma virens	0	-	
Fusarium fujikuroi	0	-	
Fusarium graminearum	0	-	
Fusarium oxysporum	4	min 1260, median 1343, max 1523	
Fusarium	0		
pseudogramine arum	0	-	
Fusarium verticillioides	1	min 1292, median 1292, max 1292	
Nectria haematococca	0	-	
Purpureocillium lilacinum	0	-	
Colletotrichum fioriniae	0	-	
Colletotrichum	1	min 1235, median 1235, max	
gloeos porioides	1	1235	
Colletotrichum	0		
graminicola	U	-	

Species	# L1 hits	Length distribution (bp)	Notes
Colletotrichum	3	min 913, median 1328, max 2177	
higginsianum	0		
Colletotrichum		min 2174, median 2174, max	
orchidophilum	1	2174	
Verticillium alfalfae	0	-	
$Verticillium\ dahliae$	0	-	
$Magnaporthe\ oryzae$	0	-	
$Gaeuman no myces\ tritici$	0	-	
Scedosporium	0	_	
apiospermum	U		
$Grosmannia\ clavigera$	0	-	
$Sporothrix\ schenckii$	0	-	
Chaetomium globosum	0	-	
Chaetomium	0		
thermophilum	U	-	
Neurospora crassa	0	-	
Neurospora tetrasperma	0	-	
Podospora anserina	0	-	
Q 1 :	_	min 1025, median 1025, max	
Sordaria macrospora	1	1025	
Thermothelomyces	2	. 250 1: 250 722	
thermophila	2	min 359, median 359, max 722	
Thielavia terrestris	6	min 530, median 554, max 848	
Phae o a cremonium			
minimum	0	-	
Eutypa lata	0	-	
Pestalotiopsis fici	0	-	
Cryptococcus amylolentus	0	-	
Cryptococcus gattii	0	-	
Cryptococcus neoformans			
var. grubii	0	-	
Cryptococcus neoformans			
var. neoformans JEC21	0	-	
Cryptococcus neoformans			
var. neoformans B-3501A	0	-	
Kockovaella imperatae	0	-	
Kwoniella bestiolae	0	-	
Kwoniella dejecticola	0	-	
Kwoniella mangroviensis	0	-	
Kwoniella pini	0	-	
Tremella mesenterica	0	-	
Tsuchiyaea wingfieldii	0	_	
Cutaneotrichosporon			
oleaginosus	0	-	
Trichosporon asahii	0	_	
Anthracocystis flocculosa	0	_	
Kalmanozyma brasiliensis	0		
таннаногунна отахшеных	_ U	1-	

Species	# L1 hits	Length distribution (bp)	Notes
Moesziomyces antarcticus	0	-	
Pseudozyma hubeiensis	0	-	
Ustilago maydis	1	min 2996, median 2996, max 2996	
Wallemia ichthyophaga	0	-	
Wallemia mellicola	0	-	
Xylona heveae	0	-	
Saitoella complicata	2	min 912, median 912, max 1379	
Lobosporangium	1.7	. 405 11 0055 0104	
transversale	17	min 485, median 2977, max 3134	
Phycomyces blakesleeanus	146	min 182, median 2471, max 3203	
Rhizopus microsporus	35	min 317, median 1229, max 2936	
Encephalitozoon cuniculi	0	-	
Encephalitozoon hellem	0	-	
Encephalitozoon	0		
intestinal is	0	-	
Encephalitozoon romaleae	0	-	
Enterocytozoon bieneusi	0	-	
Mitosporidium daphniae	0	-	
Nematocida parisii	0	-	
Nosema ceranae	2	min 218, median 218, max 694	
Ordospora colligata	0	-	
Vavraia culicis	0	-	
Vittaforma corneae	0	-	
VIRIDIPLANTAE			
Micromonas pusilla CCMP1545	0	-	
Micromonas sp. RCC299	0	-	
Ostreococcus lucimarinus CCE9901	0	-	
Ostreococcus tauri	0	-	
Chlamydomonas reinhardtii	675	min 56, median 719, max 6259	
Volvox carteri f. nagariensis	297	min 56, median 1013, max 8376	
Chlorella variabilis	14	min 72, median 788, max 2753	
Auxenochlorella	0		
protothecoides	0	-	
Helicosporidium sp.	0		
ATCC 50920	0	-	
Coccomyxa subellipsoidea C-169	298	min 44, median 286, max 8994	
Klebsormidium flaccidum	8	min 521, median 1571, max 3187	
Physcomitrella patens	275	min 82, median 707, max 3257	
Selaginella moellendorffii	221	min 82, median 1180, max 17033	
Pinus taeda	1744	min 44, median 1130, max 5806	
	l .	, , , , , , , , , , , , , , , , , , , ,	

Species	# L1 hits	Length distribution (bp)	Notes
Spirodela polyrhiza	135	min 53, median 1130, max 4144	
Phoenix dactylifera	3589	min 35, median 916, max 6802	
Elaeis oleifera	4151	min 35, median 772, max 4405	
Ensete ventricosum	55	min 50, median 716, max 2405	
Musa acuminata subsp.	724	min 68, median 964, max 3524	
malaccensis			
Sorghum bicolor	4272	min 35, median 801, max 8289	
Zea mays	6618	min 32, median 870, max 7283	
Setaria italica	2918	min 41, median 953, max 7323	
Brachypodium distachyon	3074	min 35, median 893, max 7282	
Leersia perrieri	1954	min 50, median 762, max 6583	
Oryza barthii	1610	min 32, median 800, max 7342	
Oryza brachyantha	485	min 47, median 698, max 5902	
Oryza glumipatula	1552	min 38, median 807, max 7736	
$Oryza\ longistaminata$	1301	min 38, median 806, max 7116	
Oryza meridionalis	1448	min 47, median 758, max 7197	
Oryza nivara	1617	min 38, median 830, max 7342	
Oryza punctata	1504	min 38, median 812, max 7473	
$Oryza\ sativa\ Japonica$	1700	min 38, median 925, max 7409	
Group	1700	illii 50, illediaii 525, illax 7405	
Zizania latifolia	1564	min 53, median 1016, max 5345	
Aegilops tauschii	11027	min 35, median 1767, max 7683	
Triticum urartu	10977	min 44, median 1778, max 8407	
Nelumbo nucifera	19318	min 29, median 614, max 7648	
$Lupinus\ angustifolius$	2027	min 41, median 1151, max 5768	
Phaseolus vulgaris	4448	min 35, median 881, max 5861	
Cajanus cajan	1228	min 50, median 1048, max 5476	
Vigna angularis var. angularis	144	min 89, median 349, max 2875	
Vigna radiata var. radiata	223	min 47, median 330, max 3013	
Glycine max	5640	min 41, median 758, max 7151	
Glycine soja	3923	min 41, median 827, max 11768	
Cicer arietinum	1325	min 41, median 419, max 5029	
Medicago truncatula	2829	min 41, median 617, max 7369	
Trifolium pratense	1968	min 65, median 511, max 5762	
Lotus japonicus	2	min 50, median 1071, max 4150	
$Malus \ x \ domestica$	1729	min 56, median 779, max 6604	
Pyrus x bretschneideri	1729	min 41, median 784, max 6922	
Prunus mume	912	min 50, median 704, max 5952	
Prunus persica	797	min 53, median 710, max 5889	
Fragaria iinumae	1019	min 41, median 589, max 6012	
Fragaria nubicola	1168	min 68, median 528, max 4773	
Fragaria orientalis	1446	min 72, median 470, max 5421	
Fragaria vesca subsp.		12, modul 110, max 0421	
vesca	1241	min 44, median 663, max 6199	
Fragaria x ananassa	929	min 41, median 380, max 6013	

Species	# L1 hits	Length distribution (bp)	Notes
Morus notabilis	980	min 41, median 295, max 5400	
Cannabis sativa	4612	min 38, median 1254, max 5289	
Castanea mollissima	4957	min 35, median 1287, max 4424	
Betula nana	3589	min 50, median 710, max 5054	
Cucumis melo	1118	min 32, median 777, max 3963	
Cucumis sativus	880	min 50, median 708, max 3316	
Citrullus lanatus	1116	min 47, median 785, max 5049	
Lagenaria siceraria	1019	min 59, median 383, max 2613	
Populus euphratica	1127	min 56, median 923, max 6319	
Populus trichocarpa	1547	min 41, median 754, max 6523	
Jatropha curcas	1905	min 32, median 661, max 5478	
Manihot esculenta subsp. flabellifolia	1690	min 44, median 755, max 5606	
Ricinus communis	843	min 62, median 591, max 3924	
Linum usitatissimum	2158	min 44, median 759, max 5346	
Eucalyptus camaldulensis	4127	min 65, median 976, max 6573	
Eucalyptus grandis	5885	min 35, median 1058, max 7266	
Carica papaya	2451	min 47, median 667, max 6410	
Arabidopsis halleri subsp.	2050	:. 60	
gemmifera	3059	min 68, median 157, max 7434	
Arabidopsis lyrata subsp.	1740	min 65, median 1274, max 6932	
lyrata	1740	mm 05, median 1274, max 0952	
$Arabidopsis\ thaliana$	542	min 35, median 926, max 6834	
Camelina sativa	8025	min 47, median 1175, max 7902	
Capsella rubella	654	min 41, median 1131, max 6249	
Brassica napus	9753	min 44, median 1580, max 8479	
Brassica oleracea var. oleracea	6991	min 41, median 1040, max 6121	
Brassica rapa	3425	min 44, median 848, max 6125	
Raphanus raphanistrum subsp. raphanistrum	1728	min 76, median 2107, max 5996	
Raphanus sativus	3064	min 53, median 1787, max 6103	
Aethionema arabicum	1308	min 70, median 1628, max 5667	
Arabis alpina	3703	min 44, median 1184, max 6298	
Eutrema parvulum	787	min 47, median 952, max 6073	
Eutrema salsugineum	1892	min 41, median 1502, max 6363	
Sisymbrium irio	1961	min 59, median 1081, max 6116	
Leavenworthia alabamica	739	min 56, median 1139, max 5965	
Tarenaya hassleriana	620	min 62, median 1094, max 4380	
Gossypium arboreum	3758	min 44, median 1038, max 5838	
Gossypium raimondii	5445	min 35, median 730, max 5724	
Theobroma cacao	2190	min 35, median 700, max 6934	
Aquilaria agallochum	2814	min 44, median 725, max 4272	
Azadirachta indica	489	min 47, median 561, max 5194	
Citrus clementine	1771	min 41, median 899, max 5669	
Citrus sinensis	2011	min 44, median 887, max 5712	

Species	# L1 hits	Length distribution (bp)	Notes
Vitis vinifera	6108	min 29, median 1028, max 6808	
Amaranthus hypochondriacus	2669	min 74, median 525, max 4869	
Amaranthus tuberculatus	184	min 62, median 231, max 1352	
Beta vulgaris subsp. vulgaris	9915	min 41, median 989, max 6948	
Spinacia oleracea	2817	min 50, median 1365, max 6337	
Dianthus caryophyllus	2072	min 68, median 1925, max 4459	
Actinidia chinensis	1052	min 47, median 913, max 5954	
Vaccinium macrocarpon	1861	min 47, median 812, max 4536	
Diospyros lotus	2	min 1382, median 1382, max 1950	
Primula veris	978	min 47, median 857, max 4168	
Solanum arcanum	2517	min 62, median 1360, max 16602	
Solanum habrochaites	2891	min 59, median 1273, max 14525	
Solanum lycopersicum	3046	min 41, median 1014, max 28999	
Solanum melongena	3223	min 50, median 1173, max 10878	
Solanum pennellii	2648	min 38, median 1241, max 16789	
Solanum pimpinellifolium	4046	min 43, median 785, max 16052	
Solanum tuberosum	4713	min 44, median 878, max 16344	
Capsicum annuum	10918	min 35, median 1305, max 6394	
Nicotiana sylvestris	6487	min 53, median 1724, max 6385	
Nicotiana tomentosiformis	4987	min 41, median 1597, max 7374	
Fraxinus excelsior	1798	min 41, median 1215, max 4845	
Penstemon centranthifolius	38	min 50, median 516, max 2734	
Penstemon grinnellii	23	min 203, median 596, max 1456	
Sesamum indicum	3571	min 35, median 902, max 4635	
Genlisea aurea	86	min 121, median 1097, max 4055	
Mimulus guttatus	1304	min 65, median 1112, max 5583	
Conyza canadensis	952	min 62, median 1526, max 4530	

Table S3: BovBs in genomic data

Table S3: Shows which genomes contain BovBs (72/759) and the number of hits and length distributions. As before, BovB elements were detected with protein based searches using TBLASTN and nucleotide similarity searches using LASTZ. All hits had to satisfy a 'reciprocal best hit' check to check they were really BovBs (and not other repeats). Overlapping hits were merged to produce a non-redundant set of BovBs for each genome.

Species	# L1 hits	Length distribution (bp)	Notes
METAZOA			
MAMMALIA			
Tachyglossus aculeatus	3196	min 29, median 371, max 3794	
Ornithorhynchus anatinus	3720	min 26, median 393, max 3849	
$Monodelphis\ domestica$	6340	min 29, median 353, max 3511	
Macropus eugenii	2302	min 32, median 503, max 3497	
Sarcophilus harrisii	4948	min 29, median 410, max 3788	
Dasypus novemcinctus	0	-	
Choloepus hoffmanni	0	-	
Chrysochloris asiatica	240967	min 29, median 296, max 6242	
Echinops telfairi	54734	min 29, median 275, max 3603	
Orycteropus afer afer	155026	min 26, median 362, max 8015	
Elephantulus edwardii	392850	min 26, median 329, max 5564	
Trichechus manatus latirostris	47995	min 29, median 326, max 6541	
Procavia capensis	16229	min 41, median 1049, max 5482	
Loxodonta africana	65259	min 26, median 289, max 6341	
Erinaceus europaeus	0	-	
Sorex araneus	0	-	
Condylura cristata	0	-	
Pteropus alecto	112	min 50, median 293, max 3182	
Pteropus vampyrus	83	min 38, median 279, max 3200	
Eidolon helvum	93	min 38, median 338, max 3195	
Megaderma lyra	79	min 41, median 272, max 3092	
Rhinolophus ferrumequinum	101	min 53, median 314, max 3469	
Pteronotus parnellii	75	min 74, median 278, max 3363	
Eptesicus fuscus	88	min 35, median 287, max 3554	
Myotis brandtii	116	min 47, median 268, max 3373	
Myotis davidii	90	min 41, median 320, max 3615	
Myotis lucifugus	100	min 53, median 345, max 3917	
Ceratotherium simum simum	389	min 38, median 547, max 3668	
Equus przewalskii	283	min 46, median 649, max 3737	
Equus caballus (Thoroughbred)	343	min 44, median 359, max 3751	
Equus caballus (Mongolian)	302	min 56, median 655, max 3750	
Manis pentadactyla	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Felis catus	0	-	
Panthera tigris altaica	0	-	
Canis lupus familiaris	0	-	
Ursus maritimus	0	-	
Ailuropoda melanoleuca	0	-	
Leptonychotes weddellii	0	-	
Odobenus rosmarus	0		
divergens	0	-	
Mustela putorius furo	0	-	
Camelus dromedarius	0	-	
Camelus ferus	0	-	
Vicugna pacos	0	-	
Sus scrofa (Duroc)	0	-	
Sus scrofa (Tibetan)	0	-	
Sus scrofa (Ellegaard	0		
Gottingen minipig)	0		
Balaen optera	0	_	
acutorostrata scammoni			
Physeter catodon	0	-	
Lipotes vexillifer	0	-	
Tursiops truncatus	0	-	
Orcinus orca	0	-	
Pantholops hodgsonii	335036	min 26, median 437, max 6825	
Capra hircus	367621	min 26, median 405, max 7217	
Ovis aries (Texel)	360487	min 26, median 486, max 7170	
Ovis aries musimon	266125	min 26, median 518, max 7181	
Bubalus bubalis	360889	min 26, median 516, max 7930	
Bison bison bison	393414	min 26, median 498, max 8305	
Bos mutus	304207	min 26, median 500, max 8654	
Bos indicus	310238	min 26, median 609, max 8107	
Bos taurus	334418	min 26, median 608, max 8639	
Ochotona princeps	0	-	
Oryctolagus cuniculus	0	-	
Ictidomys	0		
tridecemlineatus	J		
Heterocephalus glaber	0	-	
Fukomys damarensis	0	-	
Cavia aperea	0	-	
Cavia porcellus	0	-	
Chinchilla lanigera	0	-	
Octodon degus	0	-	
Dipodomys ordii	0	-	
Jaculus jaculus	0	-	
Nannospalax galili	0	-	
Mesocricetus auratus	0	-	
Cricetulus griseus	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Microtus ochrogaster	0	-	
Peromyscus maniculatus	0		
bairdii	0	_	
Rattus norvegicus	0	-	
Mus musculus	0	-	
Tupaia belangeri	0	-	
Tupaia chinensis	0	-	
Galeopterus variegatus	0	-	
Otolemur garnettii	0	-	
Microcebus murinus	0	-	
Tarsius syrichta	0	-	
Callithrix jacchus	0	-	
Saimiri boliviensis		_	
boliviensis	Ŭ		
Rhinopithecus roxellana	0	-	
Nasalis larvatus	0	-	
Chlorocebus sabaeus	0	-	
Macaca fascicularis	0	-	
Macaca mulatta	0	-	
Papio anubis	0	-	
Nomascus leucogenys	0	-	
Pongo abelii	0	-	
Gorilla gorilla gorilla	0	-	
Pan paniscus	0	-	
Pan troglodytes	0	-	
Homo sapiens	0	-	
SAUROPSIDA			
Apalone spinifera	0	-	Contains RTEs
Pelodiscus sinensis	0	-	Contains RTEs
Chelonia mydas	0	-	Contains RTEs
Chrysemys picta bellii	0	-	Contains RTEs
Struthio camelus australis	0	-	
Tinamus guttatus	0	-	
Anas platyrhynchos	0	-	
Lyrurus tetrix tetrix	0	-	
Gallus gallus	0	-	
Coturnix japonica	0	-	
Meleagris gallopavo	0	-	
Colinus virginianus	0	-	
Acanthisitta chloris	0	-	
Manacus vitellinus	0	-	
Zonotrichia albicollis	0	-	
Geospiza fortis	0	-	
Serinus canaria	0	-	
Taeniopygia guttata	0	-	
Ficedula albicollis	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Pseudopodoces humilis	0	-	
Corvus brachyrhynchos	0	-	
Corvus cornix cornix	0	-	
Ara macao	0	-	
Amazona vittata	0	-	
Melopsittacus undulatus	0	-	
Nestor notabilis	0	-	
Falco cherrug	0	-	
Falco peregrinus	0	-	
Cariama cristata	0	-	
Merops nubicus	0	-	
Picoides pubescens	0	-	
Buceros rhinoceros	0		
silvestris	0	-	
Apaloderma vittatum	0	-	
Leptosomus discolour	0	-	
Haliaeetus albicilla	0	-	
Haliaeetus leucocephalus	0	-	
Aquila chrysaetos	0		
can a densis	0	_	
Cathartes aura	0	-	
Tyto alba	0	-	
Colius striatus	0	-	
Charadrius vociferus	0	-	
Balearica regulorum	0		
gibbericeps	Ŭ		
Chlamydotis macqueenii	0	-	
Cuculus canorus	0	-	
Fulmarus glacialis	0	-	
Aptenodytes forsteri	0	-	
Pygoscelis adeliae	0	-	
Phalacrocorax carbo	0	-	
Pelecanus crispus	0	-	
Nipponia nippon	0	-	
Egretta garzetta	0	-	
Phaethon lepturus	0	-	
Gavia stellata	0	-	
Tauraco erythrolophus	0	-	
Opisthocomus hoazin	0	-	
Columba livia	0	-	
Pterocles gutturalis	0	-	
Calypte anna	0	-	
Chaetura pelagica	0	-	
Caprimulgus carolinensis	0	-	
Eurypyga helias	0	-	
Mesitornis unicolor	0	-	

Podiceps cristatus Phoenicopterus ruber ruber	0		
-		-	
ruber	0		
	0	-	
Alligator mississippiensis	0	-	Contains RTEs
Alligator sinensis	0	-	Contains RTEs
Crocodylus porosus	0	-	Contains RTEs
Gavialis gangeticus	0	-	Contains RTEs
Pogona vitticeps	63989	min 26, median 399, max 3821	
Anolis carolinensis	20144	min 29, median 386, max 3562	
Vipera berus berus	8885	min 32, median 394, max 3490	
Crotalus mitchellii	1540	min 25 modian 271 may 2260	
pyrrhus	1940	min 35, median 371, max 3360	
Ophiophagus hannah	2858	min 29, median 344, max 3667	
Python bivittatus	6503	min 26, median 384, max 3793	
AMPHIBIA			
Nanorana parkeri	99	min 47, median 322, max 1766	
Xenopus laevis	81	min 71, median 278, max 2303	
Xenopus tropicalis	69	min 74, median 281, max 2623	
NEOPTERYGII			
Lepisosteus oculatus	102	min 47, median 525, max 3079	
Anguilla anguilla	0	-	
Anguilla japonica	0	-	
Danio rerio	30	min 164, median 608, max 3079	
Astyanax mexicanus	0	-	
Oryzias latipes	0	-	
Poecilia formosa	0	-	
Xiphophorus maculatus	0	-	
Fundulus heteroclitus	0	-	
Takifugu flavidus	0	-	
Takifugu rubripes	0	-	
Tetraodon nigroviridis	0	-	
Cynoglossus semilaevis	6	min 292, median 476, max 2463	
Haplochromis burtoni	0	-	
Pundamilia nyererei	0	-	
Maylandia zebra	0	-	
Neolamprologus brichardi	0	-	
Oreochromis niloticus	11	min 185, median 1066, max 2829	
Sebastes nigrocinctus	0	-	
Sebastes rubrivinctus	0	-	
Gasterosteus aculeatus	0	-	
Gadus morhua	0	-	
CHONDRICHTHYES	•		•
Callorhinchus milii	0	-	
Carcharhinus brachyurus	0	-	
ECDYSOZOA	-1	-	1
Ephemera danica	4	min 905, median 1259, max 2744	

Species	# L1 hits	Length distribution (bp)	Notes
Ladona fulva	0	-	
Pediculus humanus	0		
corporis	0	-	
Frankliniella occidentalis	0	-	
Diaphorina citri	38	min 131, median 623, max 3089	
Pachypsylla venusta	0	-	
Acyrthosiphon pisum	0	-	
Nilaparvata lugens	93	min 182, median 1427, max 2906	
Oncopeltus fasciatus	0	-	
Rhodnius prolixus	0	-	
Cimex lectularius	176	min 38, median 400, max 2625	
Onthophagus taurus	0	-	
Agrilus planipennis	0	-	
Tribolium castaneum	0	-	
Anoplophora glabripennis	0	-	
Leptinotarsa decemlineata	0	-	
Dendroctonus ponderosae	0	-	
Mengenilla moldrzyki	0	-	
Aedes aegypti	0	_	
Culex quinquefasciatus	0	_	
Anopheles albimanus	0	_	
Anopheles arabiensis	0	_	
Anopheles atroparvus	0	_	
Anopheles christyi	0	_	
Anopheles culicifacies	0		
Anopheles darlingi	0	_	
Anopheles dirus	0	_	
Anopheles epiroticus	0	- -	
Anopheles farauti	0		
Anopheles funestus	0	-	
Anopheles gambiae	0	-	
	0	-	
Anopheles maculatus		-	
Anopheles melas	0	-	
Anopheles merus	0	-	
Anopheles minimus	0	-	
Anopheles	0	-	
quadriannulatus Anonhalas sinensis	0		
Anopheles sinensis	-	-	
Anopheles stephensi	0	-	
Mayetiola destructor	0	-	
Lutzomyia longipalpis	0	-	
Phlebotomus papatasi	0	-	
Ceratitis capitata	0	-	
Drosophila albomicans	0	-	
Drosophila ananassae	0	-	
Drosophila biarmipes	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Drosophila bipectinata	0	-	
Drosophila elegans	0	-	
Drosophila erecta	0	-	
Drosophila eugracilis	0	-	
Drosophila ficusphila	0	-	
Drosophila grimshawi	0	-	
Drosophila kikkawai	0	-	
Drosophila melanogaster	0	-	
Drosophila miranda	0	-	
Drosophila mojavensis	0	-	
Drosophila persimilis	0	-	
Drosophila pseudoobscura			
pseudoobscura	0	-	
Drosophila rhopaloa	0	-	
Drosophila sechellia	0	-	
Drosophila simulans	0	-	
Drosophila suzukii	0	-	
Drosophila takahashii	0	-	
Drosophila virilis	0	-	
Drosophila willistoni	0	-	
Drosophila yakuba	0	-	
Musca domestica	0	-	
Glossina austeni	0	-	
Glossina brevipalpis	0	-	
Glossina fuscipes fuscipes	0	-	
Glossina morsitans			
morsitans	0	-	
Glossina pallidipes	0	-	
Limnephilus lunatus	0	-	
Papilio glaucus	320	min 77, median 479, max 2981	
Papilio polytes	0	-	Contains RTEs
Papilio xuthus	0	-	Contains RTEs
Heliconius melpomene	1	min 2124, median 2775, max	
melpomene	4	2872	
Melitaea cinxia	0	-	
Danaus plexippus	33	min 62, median 470, max 2705	
Bombyx mori	883	min 44, median 455, max 2995	
Manduca sexta	42	min 143, median 553, max 3042	
Plutella xylostella	19	min 368, median 902, max 3194	
Athalia rosae	0	-	
Cephus cinctus	0	-	
Orussus abietinus	0	-	
Ceratosolen solmsi			
marchali	0	-	
Nasonia giraulti	0	-	
Nasonia longicornis	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Nasonia vitripennis	0	-	
Copidosoma floridanum	0	-	
Trichogramma pretiosum	0	-	
Microplitis demolitor	0	-	
Megachile rotundata	0	-	
Apis dorsata	0	-	
Apis florea	0	-	
Apis mellifera	0	-	
Bombus impatiens	0	-	
Bombus terrestris	0	-	
Linepithema humile	6	min 92, median 320, max 2960	
Camponotus floridanus	0	-	
Acromyrmex echinatior	0	-	
Atta cephalotes	0	-	
Solenopsis invicta	30	min 209, median 549, max 3090	
Pogonomyrmex barbatus	5	min 59, median 422, max 2948	
Harpegnathos saltator	0	-	
Cerapachys biroi	0	-	
Blattella germanica	0	-	
Zootermopsis nevadensis	0	-	
Locusta migratoria	2724	min 26, median 659, max 3258	
Daphnia pulex	0	-	
Eurytemora affinis	0	-	
$Lepe oph their us\ salmon is$	0	-	
Hyalella azteca	0	-	
Strigamia maritima	0	-	
$Stegodyphus\ mimosarum$	0	-	
$Latrodectus\ hesperus$	0	-	
$Parasteatoda\ tepidariorum$	0	-	
Tetranychus urticae	0	-	
$Dermatophagoides\ farinae$	0	-	
Sarcoptes scabiei type canis	0	-	
Achipteria coleoptrata	0	-	
Hypochthonius rufulus	0	-	
Platynothrus peltifer	0	-	
Steganacarus magnus	0	-	
Ixodes ricinus	0	-	
Ixodes scapularis	0	-	
Rhipicephalus microplus	0	-	
Metaseiulus occidentalis	0	-	
Varroa destructor	0	-	
Centruroides exilicauda	213	min 59, median 642, max 3251	
Mesobuthus martensii	443	min 59, median 874, max 3737	
Limulus polyphemus	0	-	
Trichinella spiralis	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Ascaris suum	0	-	
Elaeophora elaphi	0	-	
Onchocerca volvulus	0	-	
Steinernema monticolum	0	-	
Panagrellus redivivus	0	-	
Haemonchus contortus	0	-	
Necator americanus	0	-	
Heterorhab ditis	0	_	
bacteriophora	0	_	
Caenorhabditis angaria	0	-	
Caenorhabditis brenneri	0	-	
$Cae nor hab ditis\ briggs ae$	0	-	
$Cae nor hab ditis\ elegans$	0	-	
$Caenorhabditis\ japonica$	0	-	
Caenorhabditis sp. 11	0		
MAF-2010	<u> </u>		
Priapulus caudatus	0	-	
ROTIFERA			
Adineta vaga	26	min 110, median 1160, max 3077	
PLATYHELMINTHES			
Schistosoma curassoni	0	-	
Schistosoma haematobium	0	-	
$Schistosoma\ japonicum$	0	-	
$Schistosoma\ mansoni$	0	-	
$Schistosoma\ margrebowiei$	0	-	
Schistosoma mattheei	0	-	
$Schistosoma\ rodhaini$	0	-	
Clonorchis sinensis	0	-	
$Echinococcus\ granulosus$	0	-	
Echinococcus	0	_	
multilocularis	0		
Hymenolepis microstoma	0	-	
Protopolystoma xenopodis	0	-	
ANNELIDA	ı		
Capitella teleta	19	min 134, median 329, max 1317	
Helobdella robusta	136	min 59, median 541, max 3005	
MOLLUSCA			
Crassostrea gigas	0	-	
Lottia gigantea	0	-	
Aplysia californica	0	-	
Biomphalaria glabrata	0	-	
CNIDARIA	I		
Nematostella vectensis	0	-	
Hydra vulgaris	0	-	
TENTACULATA	ı		
Mnemiopsis leidyi	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
PLACOZOA	1 - 1		1
Trichoplax adhaerens	0	-	
ECHINOIDEA	1		•
Amphimedon	0		
que en slandica	0	-	
$Lyte chinus\ variegatus$	8	min 95, median 474, max 970	
Strongy locentrotus	70	min 38, median 470, max 3112	
purpuratus	10	min 50, median 170, max 5112	
ASTEROIDEA	_		
Patiria miniata	0	-	
ENTEROPNEUSTA	_		
Saccoglossus kowalevskii	0	-	
TUNICATA			
Ciona intestinalis	0	-	
Ciona savignyi	19	min 155, median 799, max 2852	RTE-like BovBs
Botryllus schlosseri	0	-	
Oikopleura dioica	0	-	
LEPTOCARDII	1		1
Branchiostoma floridae	0	-	
CEPHALASPIDOMOF	RPHI		
Lethenteron	31	min 200, median 731, max 2279	
camts chaticum	01	min 200, median 101, man 2210	
Petromyzon marinus	0	-	Contains RTEs
SARCOPTERYGII	_		
Latimeria chalumnae	166	min 41, median 511, max 2919	
FUNGI	_		
Agaricus bisporus var.	0	-	
bisporus			
Agaricus bisporus var.	0	-	
burnettii			
Schizophyllum commune	0	-	
Coprinopsis cinerea	0	-	
Moniliophthora roreri	0	-	
Laccaria bicolor	0	-	
Auricularia subglabra	0	-	
Coniophora puteana	0	-	
Serpula lacrymans	0	-	
Punctularia	0	-	
strigosozonata			
Gloeophyllum trabeum	0	-	
Fomitiporia mediterranea	0	-	
Dichomitus squalens	0	-	
Fibroporia radiculosa	0	-	
Phanerochaete carnosa	0	-	
Postia placenta	0	-	
Trametes versicolor	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Heterobasidion irregulare	0	-	
Stereum hirsutum	0	-	
Spizellomyces punctatus	0	-	
Batrachochytrium	0		
dendrobatidis	0	-	
Diplodia corticola	0	-	
Neofusicoccum parvum	0	-	
Baudoinia panamericana	0	-	
Cercospora beticola	0	-	
Pseudocercospora fijiensis	0	-	
Sphaerulina musiva	0	-	
Zymoseptoria tritici	0	-	
Aureobasidium namibiae	0	-	
Aureobasidium subglaciale	0	-	
Coniosporium apollinis	0	-	
Paraphaeosphaeria	0		
sporulosa	0	-	
Parastagonospora			
nodorum	0	-	
Leptosphaeria maculans	0	-	
Alternaria alternata	0	-	
Bipolaris maydis	0	-	
Bipolaris oryzae	0	-	
Bipolaris sorokiniana	0	-	
Bipolaris victoriae	0	-	
Bipolaris zeicola	0	-	
Pyrenophora teres	0	-	
Pyrenophora	0		
tritici-repentis	0	-	
Setosphaeria turcica	0	-	
Verruconis gallopava	0	-	
Cyphellophora europaea	0	-	
Capronia coronata	0	-	
Capronia epimyces	0	-	
Cladophialophora	0		
bantiana	0	-	
Cladophialophora			
carrionii	0	-	
${\it Cladophialophora}$	0		
immunda		-	
${\it Cladophialophora}$	0		
psammophila		-	
Cladophialophora yegresii	0	-	
Exophiala aquamarina	0	-	
Exophiala dermatitidis	0	-	
Exophiala mesophila	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Exophiala oligosperma	0	-	
Exophiala spinifera	0	-	
Exophiala xenobiotica	0	-	
Fonsecaea erecta	0	-	
Fonsecaea monophora	0	-	
Fonsecaea multimorphosa	0	-	
Fonsecaea nubica	0	-	
Fonsecaea pedrosoi	0	-	
Phialophora attae	0	-	
Rhinocladiella mackenziei	0	-	
Aspergillus aculeatus	0	-	
Aspergillus bombycis	0	-	
Aspergillus clavatus	0	-	
Aspergillus fischeri	0	-	
Aspergillus flavus	0	-	
Aspergillus fumigatus	0	-	
Aspergillus glaucus	0	_	
Aspergillus nidulans	0	_	
Aspergillus niger	0	-	
Aspergillus nomius	0	_	
Aspergillus oryzae	0	_	
Aspergillus terreus	0	_	
Penicilliopsis zonata	0	_	
Penicillium arizonense	0	_	
Penicillium chrysogenum	0	_	
Penicillium digitatum	0	_	
Penicillium expansum	0		
Penicillium marneffei	0		
Rasamsonia emersonii	0		
Talaromyces atroroseus	0		
Talaromyces stipitatus	0	-	
	0		
Ajellomyces dermatitidis Arthroderma otae	0	-	
Coccidioides immitis	0	-	
	0	-	
Coccidioides posadasii		-	
Histoplasma capsulatum	0	-	
Nannizzia gypsea Paracoccidioides	0	-	
Paracoccidioides brasiliensis	0	-	
Paracoccidioides lutzii	0	-	
Trichophyton benhamiae	0	-	
Trichophyton rubrum	0	-	
Trichophyton verrucosum	0	-	
Uncinocarpus reesii	0	-	
Endocarpon pusillum	0	-	
Tilletiaria anomala	0	_	
_ 5000000000000000000000000000000000000		1	

Species	# L1 hits	Length distribution (bp)	Notes
Botryotinia fuckeliana	0	-	
Glarea lozoyensis	0	-	
Marssonina brunnea	0	-	
Phialocephala scopiformis	0	-	
Sclerotinia sclerotiorum	0	-	
Pseudogymnoascus	0		
destructans	Ů	_	
Pseudogymnoascus	0		
verrucosus			
Malassezia globosa	0	-	
Malassezia pachydermatis	0	-	
Malassezia sympodialis	0	-	
Rhodotorula graminis	0	-	
Rhodotorula toruloides	0	-	
Mixia osmundae	0	-	
Arthrobotrys oligospora	0	-	
Dactylellina haptotyla	0	-	
Tuber melanosporum	0	-	
Pneumocystis carinii	0	-	
Pneumocystis jirovecii	0	-	
Pneumocystis murina	0	-	
Melampsora	0		
larici-populina			
Puccinia graminis	0	-	
Candida albicans	0	-	
Candida auris	0	-	
Candida dubliniensis	0	-	
Candida glabrata	0	-	
Candida orthopsilosis	0	-	
Candida tanzawaensis	0	-	
Candida tenuis	0	-	
Candida tropicalis	0	-	
Lodderomyces	0	_	
elongisporus			
Ascoidea rubescens	0	-	
Babjeviella inositovora	0	-	
Clavispora lusitaniae	0	-	
Cyberlindnera jadinii	0	-	
Debaryomyces fabryi	0	-	
Debaryomyces hansenii	0	-	
Eremothecium	0	_	
cymbalariae		-	
Eremothecium gossypii	0	-	
Eremothecium	0	_	
sinecaudum Hambanishia hantanii	0		
Hyphopichia burtonii	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Kazachstania africana	0	-	
Kazachstania naganishii	0	-	
Kluyveromyces lactis	0	-	
Kluyveromyces marxianus	0	-	
Komagataella phaffii	0	-	
Kuraishia capsulata	0	-	
Lachancea lanzarotensis	0	-	
Lachancea thermotolerans	0	-	
Metschnikowia	0		
bicuspidata	0	-	
Meyerozyma	0	-	
guillier mondii	O .	_	
Naumovozyma castellii	0	-	
Naumovozyma dairenensis	0	-	
Ogataea parapolymorpha	0	-	
Ogataea polymorpha	0	-	
Saccharomyces cerevisiae	0	-	
Saccharomyces eubayanus	0	-	
Spathaspora passalidarum	0	-	
Sugiya maella	0	_	
lignohabitans	U	_	
Tetrapisispora blattae	0	-	
Tetrapisispora phaffii	0	-	
Torulaspora delbrueckii	0	-	
Vanderwaltozyma	0	_	
polyspora	0	_	
Yarrowia lipolytica	0	-	
Zygosaccharomyces rouxii	0	-	
Wickerhamomyces	0		
anomalus	0		
Wickerhamomyces ciferrii	0	-	
Scheffersomyces stipitis	0	-	
Pichia kudriavzevii	0	-	
Pichia membranifaciens	0	-	
Schizosaccharomyces	0	_	
cryophilus	0		
Schizosaccharomyces	0	_	
japonicus			
Schizosaccharomyces	0	_	
octosporus			
Schizosaccharomyces	0	_	
pombe			
Metarhizium acridum	0	-	
Metarhizium brunneum	0	-	
Metarhizium majus	0	-	
Metarhizium robertsii	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Pochonia chlamydosporia	0	-	
Beauveria bassiana	0	-	
Cordyceps militaris	0	-	
Isaria fumosorosea	0	-	
Trichoderma atroviride	0	-	
Trichoderma gamsii	0	-	
Trichoderma reesei	0	-	
Trichoderma virens	0	-	
Fusarium fujikuroi	0	-	
Fusarium graminearum	0	-	
Fusarium oxysporum	0	-	
Fusarium	0	_	
pseudogramine arum	0	_	
Fusarium verticillioides	0	-	
Nectria haematococca	0	-	
Purpureocillium lilacinum	0	-	
Colletotrichum fioriniae	0	-	
Colletotrichum	0	_	
gloeosporioides	0	_	
Colletotrichum		_	
graminicola			
Colletotrichum	0	_	
higginsianum			
Colletotrichum	0	_	
orchidophilum			
Verticillium alfalfae	0	-	
Verticillium dahliae	0	-	
Magnaporthe oryzae	0	-	
Gaeumannomyces tritici	0	-	
Scedosporium	0	-	
apiospermum			
Grosmannia clavigera	0	-	
Sporothrix schenckii	0	-	
Chaetomium globosum	0	-	
Chaetomium	0	-	
thermophilum Noumanara errassa	0		
Neurospora crassa	0	-	
Neurospora tetrasperma	0	-	
Podospora anserina		-	
Sordaria macrospora Thermothelemuses	0	-	
Thermothelomyces thermophila	0	-	
Thielavia terrestris	0		
Phaeoacremonium	0	-	
minimum	0	-	
Eutypa lata	0	_	
<i></i>	L ^U		

Species	# L1 hits	Length distribution (bp)	Notes
Pestalotiopsis fici	0	-	
Cryptococcus amylolentus	0	-	
Cryptococcus gattii	0	-	
Cryptococcus neoformans	0		
var. grubii	0	-	
Cryptococcus neoformans	0	_	
var. neoformans JEC21	U	-	
Cryptococcus neoformans	0	_	
var. neoformans B-3501A	0		
$Kockova ella\ imperata e$	0	-	
Kwoniella bestiolae	0	-	
Kwoniella dejecticola	0	-	
Kwoniella mangroviensis	0	-	
Kwoniella pini	0	-	
Tremella mesenterica	0	-	
Tsuchiyaea wingfieldii	0	-	
Cutane otrichosporon	0		
oleaginosus	0	-	
Trichosporon asahii	0	-	
Anthracocystis flocculosa	0	-	
Kalmanozyma brasiliensis	0	-	
Moesziomyces antarcticus	0	-	
Pseudozyma hubeiensis	0	-	
Ustilago maydis	0	-	
Wallemia ichthyophaga	0	-	
Wallemia mellicola	0	-	
Xylona heveae	0	-	
Saitoella complicata	0	-	
Lobosporangium	0		
transversale	0	-	
Phycomyces blakesleeanus	0	-	
Rhizopus microsporus	0	-	
Encephalitozoon cuniculi	0	-	
Encephalitozoon hellem	0	-	
Encephalitozoon	0		
intestinal is	0	-	
$Ence phalitozo on\ romale a e$	0	-	
Enterocytozoon bieneusi	0	-	
Mitosporidium daphniae	0		
Nematocida parisii	0	-	
Nosema ceranae	0	-	
Ordospora colligata	0	-	
Vavraia culicis	0	-	
Vittaforma corneae	0	-	
VIRIDIPLANTAE	I	ı	1
VIRIDIPLANTAE			

Species	# L1 hits	Length distribution (bp)	Notes
Micromonas pusilla	0	-	
CCMP1545	0		
Micromonas sp. RCC299	0	-	
Ostreococcus lucimarinus	0	_	
CCE9901			
Ostreococcus tauri	0	-	
Chlamydomonas reinhardtii	0	-	
Volvox carteri f.			
nagariensis	0	-	
Chlorella variabilis	0	_	
Auxenochlorella			
protothecoides	0	-	
Helicosporidium sp.			
ATCC 50920	0	-	
Coccomyxa subellipsoidea	0		
C-169	U	-	
Klebsormidium flaccidum	0	-	
Physcomitrella patens	0	-	
Selaginella moellendorffii	0	-	
Pinus taeda	0	-	
Amborella trichopoda	0	-	
Spirodela polyrhiza	0	-	
Phoenix dactylifera	0	-	
Elaeis oleifera	0	-	
Ensete ventricosum	0	-	
Musa acuminata subsp.	0	_	
malaccensis	_		
Sorghum bicolor	0	-	
Zea mays	0	-	
Setaria italica	0	-	
Brachypodium distachyon	0	-	
Leersia perrieri	0	-	
Oryza barthii	0	-	
Oryza brachyantha	0	-	
Oryza glumipatula	0	-	
Oryza longistaminata Oryza meridionalis	0	-	
	0	-	
Oryza nivara	0	-	
Oryza punctata Oryza sativa Japonica	U	-	
Group	0	-	
Zizania latifolia	0	_	
Aegilops tauschii	0	_	
Triticum urartu	0	_	
Nelumbo nucifera	0	_	
Treamine macifera			

Species	# L1 hits	Length distribution (bp)	Notes
Lupinus angustifolius	0	-	
Phaseolus vulgaris	0	-	
Cajanus cajan	0	-	
Vigna angularis var.	0	_	
angularis	0	_	
Vigna radiata var. radiata	0	-	
Glycine max	0	-	
Glycine soja	0	-	
Cicer arietinum	0	-	
Medicago truncatula	0	-	
Trifolium pratense	0	-	
Lotus japonicus	0	-	
$Malus\ x\ domestica$	0	-	
Pyrus x bretschneideri	0	-	
Prunus mume	0	-	
Prunus persica	0	-	
Fragaria iinumae	0	-	
Fragaria nubicola	0	-	
Fragaria orientalis	0	-	
Fragaria vesca subsp.	0	_	
vesca	0		
Fragaria x ananassa	0	-	
Morus notabilis	0	-	
Cannabis sativa	0	-	
Castanea mollissima	0	-	
Betula nana	0	-	
Cucumis melo	0	-	
Cucumis sativus	0	-	
Citrullus lanatus	0	-	
Lagenaria siceraria	0	-	
Populus euphratica	0	-	
Populus trichocarpa	0	-	
Jatropha curcas	0	-	
${\it Manihot\ esculenta\ subsp.}$	0	_	
flabellifolia	0		
Ricinus communis	0	-	
Linum usitatissimum	0	-	
Eucalyptus camaldulensis	0	-	
Eucalyptus grandis	0	-	
Carica papaya	0	-	
Arabidopsis halleri subsp.		_	
gemmifera			
Arabidopsis lyrata subsp.	0	_	
lyrata			
Arabidopsis thaliana	0	-	
Camelina sativa	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Capsella rubella	0	-	
Brassica napus	0	-	
Brassica oleracea var.			
oleracea			
Brassica rapa	0	-	
Raphanus raphanistrum	0	_	
subsp. raphanistrum			
Raphanus sativus	0	-	
Aethionema arabicum	0	-	
Arabis alpina	0	-	
Eutrema parvulum	0	-	
Eutrema salsugineum	0	-	
Sisymbrium irio Leavenworthia alabamica	0	-	
Tarenaya hassleriana	0	-	
Gossypium arboreum	0	-	
Gossypium raimondii	0	-	
Theobroma cacao	0	- _	
Aquilaria agallochum	0	- _	
Azadirachta indica	0	- _	
Citrus clementine	0		
Citrus sinensis	0	_	
Vitis vinifera	0	_	
Amaranthus			
hypochondriacus	0	-	
Amaranthus tuberculatus	0	-	
Beta vulgaris subsp.	0		
vulgaris	0	-	
Spinacia oleracea	0	-	
Dianthus caryophyllus	0	-	
Actinidia chinensis	0	-	
Vaccinium macrocarpon	0	-	
Diospyros lotus	0	-	
Primula veris	0	-	
Solanum arcanum	0	-	
Solanum habrochaites	0	-	
Solanum lycopersicum	0	-	
Solanum melongena	0	-	
Solanum pennellii	0	-	
Solanum pimpinellifolium	0	-	
Solanum tuberosum	0	-	
Capsicum annuum	0	-	
Nicotiana sylvestris	0	-	
Nicotiana	0	-	
tomentosiformis			
Fraxinus excelsior	0	-	

Species	# L1 hits	Length distribution (bp)	Notes
Penstemon	0		
centranthifolius	0	-	
Penstemon grinnellii	0	-	
Sesamum indicum	0	-	
Genlisea aurea	0	-	
Mimulus guttatus	0	-	
Conyza canadensis	0	-	

Table S4: Genome coverage of L1 and BovB elements

Table S4: Shows the calculations used to generate the bargraph in Fig 1 of the manuscript. BovB and L1 base counts are primarily based on full-length elements. Species that don't have L1s nor BovBs are not listed.

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
MAMMALIA			
Tachyglossus aculeatus	2020007912	1452458, 0.0719036%	0, 0%
Ornithorhynchus anatinus	1996811212	1830086, 0.0916504%	0, 0%
Monodelphis domestica	3605631728	3273062, 0.0907764%	291203623, 8.07636%
Macropus eugenii	3075184024	1715506, 0.0557855%	77958311, 2.53508%
Sarcophilus harrisii	3174693010	3031341, 0.0954845%	95592375, 3.01107%
Dasypus novemcinctus	3631505655	0, 0%	257879875, 7.10118%
$Choloepus\ hoffmanni$	2458927620	0, 0%	145367124, 5.91181%
$Chrysochloris\ asiatica$	4210093806	108751003, 2.5831%	108660240, 2.58095%
Echinops telfairi	2947007737	20606032,0.699219%	53945548, 1.83052%
Orycteropus afer	4444063711	102512334, 2.30673%	196663330, 4.4253%
Elephantulus edwardii	3843982861	161028145, 4.1891%	161200386, 4.19358%
Trichechus manatus	3103791524	27624301, 0.890018%	198750171, 6.40346%
Procavia capensis	2985258999	19116374, 0.640359%	177090807, 5.93218%
Loxodonta africana	3271792967	34432824, 1.05241%	313797498, 9.59099%
Erinaceus europaeus	2715703478	0, 0%	80293621, 2.95664%
Sorex araneus	2423158183	0, 0%	79834929, 3.29466%
Condylura cristata	1769662895	0, 0%	42147711, 2.38168%
Pteropus alecto	1985958707	112864, 0.0056831%	109229895, 5.50011%
Pteropus vampyrus	1996076410	79090, 0.00396227%	67971403, 3.40525%
Eidolon helvum	1837754460	100637, 0.00547609%	50920531, 2.7708%
Megaderma lyra	1735931796	72504, 0.00417666%	43660935, 2.51513%
Rhinolophus ferrumequinum	1926439238	119310, 0.00619329%	50326653, 2.61242%
Pteronotus parnellii	1960317893	78360, 0.00399731%	56150083, 2.86434%
Eptesicus fuscus	2026629342	58336, 0.00287847%	59441803, 2.93304%
Myotis brandtii	2107242811	84290, 0.00400001%	72446482, 3.43798%
Myotis davidii	2059799708	71276, 0.00346034%	51012406, 2.47657%
Myotis lucifugus	2034575300	87666, 0.00430881%	84847408, 4.17028%
Ceratotherium simum simum	2464350348	292804, 0.0118816%	160676871, 6.52005%
Equus przewalskii	2395937679	247857, 0.0103449%	135134972, 5.64017%
Equus caballus Thoroughbred	2484532062	223242, 0.00898527%	191150416, 7.69362%
Equus caballus Mongolian	2377506909	265688, 0.0111751%	123172165, 5.18073%
Manis pentadactyla	2204732179	0, 0%	112483171, 5.1019%
Felis catus	2455541136	0, 0%	163774030, 6.66957%
Panthera tigris altaica	2391065193	0, 0%	155431501, 6.50051%
Canis lupus familiaris	2410960148	0, 0%	163347315, 6.7752%
Ursus maritimus	2301362327	0, 0%	154988843, 6.73466%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Ailuropoda melanoleuca	2299509015	0, 0%	105301329, 4.5793%
Leptonychotes weddellii	3156886159	0, 0%	112493456, 3.56343%
Odobenus rosmarus divergens	2400133628	0, 0%	137079744, 5.71134%
Mustela putorius furo	2410863155	0, 0%	143960591, 5.97133%
Camelus dromedarius	2004047047	0, 0%	101966754, 5.08804%
Camelus ferus	2009177929	0, 0%	86491041, 4.3048%
Vicugna pacos	2172191320	0, 0%	113049718, 5.20441%
Sus scrofa Duroc	2808509378	0, 0%	176658966, 6.29013%
Sus scrofa Tibetan	2489155924	0, 0%	134715498, 5.4121%
Sus scrofa Ellegaard Gottingen	2358017222	0, 0%	117750484, 4.99362%
Balaenoptera acutorostrata scammoni	2431671281	0, 0%	190619715, 7.83904%
Physeter catodon	2280711356	0, 0%	146560263, 6.42608%
Lipotes vexillifer	2429195737	0, 0%	271942192, 11.1947%
Tursiops truncatus	2551401796	0, 0%	119886176, 4.69884%
Orcinus orca	2372903489	0, 0%	205346717, 8.65382%
Pantholops hodgsonii	2696869832	200623622, 7.43913%	90462265, 3.35434%
Capra hircus	2635832257	225462902, 8.55377%	95239112, 3.61325%
Ovis aries Texel	2619054388	249955158, 9.54372%	108872698, 4.15695%
Ovis aries musimon	2589834840	200496380, 7.74167%	71959650, 2.77854%
Bubalus bubalis	2836150610	286296759, 10.0946%	104875469, 3.69781%
Bison bison bison	2953606000	315448446, 10.6801%	127745325, 4.32506%
Bos mutus	2645145588	217297691, 8.21496%	82289329, 3.11096%
Bos indicus	2673949103	287691777, 10.7591%	110741149, 4.14148%
Bos taurus	2670422299	309871737, 11.6038%	126156398, 4.72421%
Ochotona princeps	2229824103	0, 0%	34195120, 1.53353%
Oryctolagus cuniculus	2737490501	0, 0%	139192850, 5.08469%
Ictidomys tridecemlineatus	2478393770	0, 0%	107499669, 4.33747%
Heterocephalus glaber	2618188253	0, 0%	155993240, 5.95806%
Fukomys damarensis	2333892479	0, 0%	161817287, 6.93337%
Cavia aperea	2716396567	0, 0%	136757020, 5.0345%
Cavia porcellus	2723219641	0, 0%	235803425, 8.65899%
Chinchilla lanigera	2390852391	0, 0%	128385455, 5.36986%
Octodon degus	2995872505	0, 0%	138452612, 4.62145%
Dipodomys ordii	2158502098	0, 0%	34330234, 1.59047%
Jaculus jaculus	2835233679	0, 0%	96017503, 3.38658%
Nannospalax galili	3061408210	0, 0%	136788334, 4.46815%
Mesocricetus auratus	2504908775	0, 0%	80503182, 3.21382%
Cricetulus griseus	2399770464	0, 0%	79279532, 3.30363%
Microtus ochrogaster	2287340943	0, 0%	52224812, 2.28321%

Species	Genome base	BovB base count, percentage of	L1 base count, percentage of
	count	genome	genome
Peromyscus maniculatus bairdii	2630541020	0, 0%	53188010, 2.02194%
Rattus norvegicus	2909682625	0, 0%	207049946, 7.11589%
Mus musculus	2730855475	0, 0%	231145319, 8.46421%
Tupaia belangeri	3660774957	0, 0%	51474914, 1.40612%
Tupaia chinensis	2846580235	0, 0%	89655790, 3.1496%
Galeopterus variegatus	3187643824	0, 0%	139985621, 4.39151%
Otolemur garnettii	2519724550	0, 0%	146546821, 5.81599%
Microcebus murinus	2902270736	0, 0%	68180677, 2.34922%
Tarsius syrichta	3453847770	0, 0%	240202647, 6.95464%
Callithrix jacchus	2914958544	0, 0%	246251310, 8.44785%
Saimiri boliviensis	2608572064	0, 0%	179339572, 6.87501%
Rhinopithecus roxellana	2899535590	0, 0%	207691102, 7.16291%
Nasalis larvatus	3011966170	0, 0%	154710505, 5.13653%
Chlorocebus sabaeus	2789639778	0, 0%	204188513, 7.31953%
Macaca fascicularis	2946827162	0, 0%	224863209, 7.63069%
Macaca mulatta	2969988180	0, 0%	154566974, 5.2043%
Papio anubis	2948380710	0, 0%	223973218, 7.59648%
Nomascus leucogenys	2962077449	0, 0%	230918510, 7.79583%
Pongo abelii	3441227734	0, 0%	263895353, 7.66864%
Gorilla gorilla	3029537234	0, 0%	212654289, 7.01937%
Pan paniscus	2869173508	0, 0%	241958348, 8.43303%
Pan troglodytes	3309577922	0, 0%	243238952, 7.34955%
Homo sapiens	3101788170	0, 0%	247845149, 7.9904%
SAUROPSIDA	1		
Apalone spinifera	1931078847	0, 0%	1378934, 0.0714074%
Pelodiscus sinensis	2202466388	0, 0%	1581495, 0.0718056%
Chelonia mydas	2208393880	0, 0%	4027549, 0.182375%
Chrysemys picta bellii	2365749696	0, 0%	3441306, 0.145464%
Struthio camelus australis	1225025301	0, 0%	23472, 0.00191604%
Tinamus guttatus	1047056493	0, 0%	8938, 0.000853631%
Anas platyrhynchos	1105035747	0, 0%	21072, 0.00190691%
Lyrurus tetrix	657025294	0, 0%	6332, 0.000963738%
Gallus gallus	1046932099	0, 0%	9721, 0.000928522%
Coturnix japonica	531959683	0, 0%	2234, 0.000419957%
Meleagris gallopavo	1061817101	0, 0%	6761, 0.000636739%
Colinus virginianus	1171855925	0, 0%	62926, 0.00536977%
Acanthisitta chloris	1035876403	0, 0%	25733, 0.00248418%
Manacus vitellinus	1145871783	0, 0%	19832, 0.00173073%
Zonotrichia albicollis	1052600561	0, 0%	12478, 0.00118544%
Geospiza fortis	1065292181	0, 0%	16040, 0.00150569%
Serinus canaria	1152083301	0, 0%	59037, 0.00512437%
Taeniopygia guttata	1233186341	0, 0%	15804, 0.00128156%
Ficedula albicollis	1118326800	0, 0%	16340, 0.00146111%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Pseudopodoces humilis	1042980823	0, 0%	18864, 0.00180866%
Corvus brachyrhynchos	1091312783	0, 0%	23878, 0.00218801%
Corvus cornix cornix	1049947905	0, 0%	20517, 0.0019541%
Ara macao	1204683257	0, 0%	18584, 0.00154265%
Amazona vittata	1175404042	0, 0%	23188, 0.00197277%
Melopsittacus undulatus	1117373619	0, 0%	20189, 0.00180683%
Nestor notabilis	1053559886	0, 0%	26182, 0.0024851%
Falco cherrug	1174811715	0, 0%	27430, 0.00233484%
Falco peregrinus	1171955363	0, 0%	26702, 0.00227841%
Cariama cristata	1132245425	0, 0%	34112, 0.00301277%
Merops nubicus	1062961556	0, 0%	23329, 0.00219472%
Picoides pubescens	1167323935	0, 0%	9100, 0.000779561%
Buceros rhinoceros silvestris	1065782791	0, 0%	18845, 0.00176818%
Apaloderma vittatum	1070836417	0, 0%	24052, 0.00224609%
Leptosomus discolor	1136244952	0, 0%	23034, 0.0020272%
Haliaeetus albicilla	1133549865	0, 0%	35410, 0.00312381%
Haliaeetus leucocephalus	1178409481	0, 0%	35701, 0.00302959%
Aquila chrysaetos canadensis	1192725744	0, 0%	33910, 0.00284307%
Cathartes aura	1152571117	0, 0%	38120, 0.00330739%
Tyto alba	1120143088	0, 0%	38958, 0.00347795%
Colius striatus	1075931597	0, 0%	24811, 0.002306%
Charadrius vociferus	1219859583	0, 0%	33056, 0.00270982%
Balearica regulorum gibbericeps	1127605500	0, 0%	35488, 0.0031472%
Chlamydotis macqueenii	1086566339	0, 0%	31476, 0.00289683%
Cuculus canorus	1153894225	0, 0%	19702, 0.00170744%
Fulmarus glacialis	1141395646	0, 0%	35689, 0.00312679%
Aptenodytes forsteri	1254347440	0, 0%	43865, 0.00349704%
Pygoscelis adeliae	1216600033	0, 0%	43236, 0.00355384%
Phalacrocorax carbo	1138967842	0, 0%	29871, 0.00262264%
Pelecanus crispus	1160924693	0, 0%	34119, 0.00293895%
Nipponia nippon	1223846297	0, 0%	37927, 0.003099%
Egretta garzetta	1206484573	0, 0%	36603, 0.00303386%
Gavia stellata	1129677294	0, 0%	38510, 0.00340894%
Tauraco erythrolophus	1155540733	0, 0%	27530, 0.00238243%
Opisthocomus hoazin	1203712246	0, 0%	45662, 0.00379343%
Columba livia	1107971856	0, 0%	28752, 0.00259501%
Pterocles gutturalis	1069324295	0, 0%	32937, 0.00308017%
Phaethon lepturus	1152958507	0, 0%	29672, 0.00257355%
Calypte anna	1105676412	0, 0%	17154, 0.00155145%
Chaetura pelagica	1119188094	0, 0%	16739, 0.00149564%
Caprimulgus carolinensis	1119683066	0, 0%	32635, 0.00291466%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Eurypyga helias	1088019637	0, 0%	20244, 0.00186063%
Mesitornis unicolor	1087290853	0, 0%	22907, 0.0021068%
Podiceps cristatus	1134922578	0, 0%	23144, 0.00203926%
Phoenicopterus ruber	1132184511	0, 0%	38050, 0.00336076%
Alligator mississippiensis	2174259888	0, 0%	5988372, 0.275421%
Alligator sinensis	2270550999	0, 0%	6999721, 0.308283%
Crocodylus porosus	2120573303	0, 0%	4601841, 0.217009%
Gavialis gangeticus	2188353730	0, 0%	4914507, 0.224576%
Pogona vitticeps	1816116151	34892879, 1.92129%	3992505, 0.219838%
Anolis carolinensis	1799143587	10307612, 0.572918%	13231926, 0.735457%
Vipera berus berus	1532390814	5053647, 0.329788%	4980408, 0.325009%
Crotalus mitchellii pyrrhus	1126791715	827313, 0.073422%	1914415, 0.1699%
Ophiophagus hannah	1594074654	1525335, 0.0956878%	6627163, 0.415737%
Python bivittatus	1435034535	3932416, 0.274029%	3913976, 0.272744%
AMPHIBIA		· · · · · · · · · · · · · · · · · · ·	·
Xenopus tropicalis	1437513269	22381, 0.00155692%	10038037, 0.698292%
Xenopus laevis	2718416252	24071, 0.000885479%	23728273, 0.872871%
Nanorana parkeri	2053849526	39534, 0.00192487%	20631712, 1.00454%
NEOPTERYGII	1	<u>'</u>	
Lepisosteus oculatus	945861706	74445, 0.0078706%	805428, 0.0851528%
Anguilla anguilla	1018701900	0, 0%	1178915, 0.115727%
Anguilla japonica	1151120721	0, 0%	1520279, 0.132069%
Danio rerio	1412464843	20681, 0.00146418%	6341494, 0.448967%
Astyanax mexicanus	1191242572	0, 0%	655594, 0.0550345%
Oryzias latipes	869801494	0, 0%	3737740, 0.429723%
Poecilia formosa	748923461	0, 0%	1514195, 0.202183%
Xiphophorus maculatus	729647787	0, 0%	1081259, 0.148189%
Fundulus heteroclitus	1021882034	0, 0%	2463073, 0.241033%
Takifugu flavidus	378032400	0, 0%	587772, 0.155482%
Takifugu rubripes	391484715	0, 0%	683087, 0.174486%
Tetraodon nigroviridis	358618246	0, 0%	224868, 0.062704%
Cynoglossus semilaevis	470182763	6328, 0.00134586%	129721, 0.0275895%
Haplochromis burtoni	831411547	0, 0%	1596803, 0.192059%
Pundamilia nyererei	830133247	0, 0%	1663150, 0.200347%
Maylandia zebra	849595388	0, 0%	1930306, 0.227203%
Neolamprologus brichardi	847893845	0, 0%	1660506, 0.195839%
Oreochromis niloticus	927696114	12320, 0.00132802%	3182269, 0.343029%
Sebastes nigrocinctus	687549873	0, 0%	665754, 0.0968299%
Sebastes rubrivinctus	756296653	0, 0%	636171, 0.0841166%
Gasterosteus aculeatus	463354448	0, 0%	416171, 0.089817%
Gadus morhua	824327835	0, 0%	1086653, 0.131823%
ECDYSOZOA			
Ephemera danica	475911277	6758, 0.00142001%	101494, 0.0213262%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Ladona fulva	1158111285	0, 0%	448102, 0.0386925%
Pediculus humanus corporis	110781312	0, 0%	33247, 0.0300114%
Frankliniella occidentalis	415781860	0, 0%	123702, 0.0297517%
Diaphorina citri	485705082	44563, 0.00917491%	521323, 0.107333%
Pachypsylla venusta	701763251	0, 0%	90121, 0.0128421%
Acyrthosiphon pisum	541675471	0, 0%	125434, 0.0231567%
Nilaparvata lugens	1140786310	150418, 0.0131855%	1477747, 0.129538%
Oncopeltus fasciatus	1098671531	0, 0%	98206, 0.129538%
Rhodnius prolixus	702645054	0, 0%	132347, 0.0188355%
Cimex lectularius	650477627	88661, 0.0136301%	312967, 0.0481134%
Onthophagus taurus	270533845	0, 0%	131103, 0.0484608%
Agrilus planipennis	353546665	0, 0%	102367, 0.0289543%
Tribolium castaneum	210248733	0, 0%	29847, 0.014196%
Anoplophora glabripennis	707712193	0, 0%	89797, 0.0126883%
Leptinotarsa decemlineata	1170241964	0, 0%	381273, 0.0325807%
Dendroctonus ponderosae	252847629	0, 0%	93067, 0.0368075%
Mengenilla moldrzyki	155727465	0, 0%	7178, 0.00460933%
Aedes aegypti	1383957531	0, 0%	5075165, 0.366714%
Culex quinquefasciatus	579042118	0, 0%	1308898, 0.226045%
Anopheles albimanus	170508315	0, 0%	20956, 0.0122903%
Anopheles arabiensis	246567867	0, 0%	100922, 0.0409307%
Anopheles atroparvus	224290125	0, 0%	128395, 0.0572451%
Anopheles christyi	172658580	0, 0%	60272, 0.0349082%
Anopheles culicifacies	202998806	0, 0%	142545, 0.0702196%
Anopheles darlingi	136935538	0, 0%	13318, 0.00972574%
Anopheles dirus	216307690	0, 0%	268454, 0.124107%
Anopheles epiroticus	223486714	0, 0%	123461, 0.0552431%
Anopheles farauti	183103254	0, 0%	275859, 0.150658%
Anopheles funestus	225223604	0, 0%	141113, 0.0626546%
Anopheles gambiae	287805703	0, 0%	259922, 0.0903116%
Anopheles maculatus	141894015	0, 0%	66565, 0.0469118%
Anopheles melas	224162116	0, 0%	66478, 0.0296562%
Anopheles merus	288048996	0, 0%	155301, 0.0539148%
Anopheles minimus	201793324	0, 0%	107274, 0.0531603%
Anopheles quadriannulatus	283828998	0, 0%	96223, 0.0339018%
Anopheles sinensis	220777669	0, 0%	86072, 0.0389858%
Anopheles stephensi	221324304	0, 0%	70137, 0.0316897%
Mayetiola destructor	185827756	0, 0%	25099, 0.0135066%
Lutzomyia longipalpis	154229266	0, 0%	11504, 0.00745903%
Phlebotomus papatasi	363767980	0, 0%	44465, 0.0122235%
Ceratitis capitata	484773492	0, 0%	62638, 0.0129211%
Drosophila albomicans	253560284	0, 0%	12982, 0.00511989%

	G 1	BovB base count,	L1 base count,
Species	Genome base	percentage of	percentage of
	count	genome	genome
Drosophila ananassae	230993012	0, 0%	6612, 0.00286242%
Drosophila biarmipes	169378599	0, 0%	9683, 0.00571678%
Drosophila bipectinata	167263958	0, 0%	10275, 0.00614299%
Drosophila elegans	171267669	0, 0%	7777, 0.00454085%
Drosophila erecta	152712140	0, 0%	6451, 0.00422429%
Drosophila eugracilis	156942009	0, 0%	8434, 0.00537396%
Drosophila ficusphila	152439475	0, 0%	84442, 0.0553938%
Drosophila grimshawi	200467819	0, 0%	13335, 0.00665194%
Drosophila kikkawai	164292578	0, 0%	12034, 0.00732474%
Drosophila melanogaster	143706478	0, 0%	4915, 0.00342017%
Drosophila miranda	136728780	0, 0%	10424, 0.00762385%
Drosophila mojavensis	193826310	0, 0%	35669, 0.0184026%
Drosophila persimilis	188374079	0, 0%	7072, 0.00375423%
Drosophila pseudoobscura	17000001	0.004	
pseudoobscura	152696384	0, 0%	7046, 0.00461439%
Drosophila rhopaloa	197375704	0, 0%	4465, 0.00226218%
Drosophila sechellia	166577145	0, 0%	4293, 0.00257718%
Drosophila simulans	137828247	0, 0%	3689, 0.00267652%
Drosophila suzukii	232923092	0, 0%	18122, 0.00778025%
Drosophila takahashii	182106768	0, 0%	7223, 0.00396635%
Drosophila virilis	206026697	0, 0%	15396, 0.00747282%
Drosophila willistoni	235516348	0, 0%	8718, 0.00370165%
Drosophila yakuba	165693946	0, 0%	7898, 0.00476662%
Musca domestica	750403944	0, 0%	65208, 0.00868972%
Glossina austeni	370264922	0, 0%	47253, 0.0127619%
Glossina brevipalpis	315360362	0, 0%	59919, 0.0190002%
Glossina fuscipes fuscipes	374774708	0, 0%	49182, 0.0131231%
Glossina morsitans	202107212		
morsitans	363107242	0, 0%	48753, 0.0134266%
Glossina pallidipes	357332231	0, 0%	36772, 0.0102907%
Limnephilus lunatus	1345859447	0, 0%	43713, 0.00324796%
Papilio glaucus	374815656	179060, 0.0477728%	68581, 0.0182973%
Papilio polytes	227005758	0, 0%	10239, 0.00451046%
Papilio xuthus	243890167	0, 0%	33700, 0.0138177%
Heliconius melpomene	273786188	10600, 0.00387163%	5968, 0.0021798%
Melitaea cinxia	389892349	0, 0%	13137, 0.00336939%
Danaus plexippus	272853388	20020, 0.00733727%	18718, 0.00686009%
Bombyx mori	481803763	435424, 0.0903737%	1615213, 0.335243%
Manduca sexta	419412261	31594, 0.00753292%	26668, 0.00635842%
Plutella xylostella	393454548	28327, 0.00719956%	209156, 0.0531589%
Athalia rosae	163837890	0, 0%	13934, 0.00850475%
Cephus cinctus	162226239	0, 0%	33326, 0.0205429%
Orussus abietinus	201220334	0, 0%	18324, 0.00910644%

Species	Genome base	BovB base count, percentage of	L1 base count, percentage of genome	
	count	genome		
Ceratosolen solmsi	277059195	0, 0%	68603, 0.0247611%	
marchali Nasonia giraulti	283606953	0, 0%	17238, 0.00607813%	
Nasonia longicornis	285726340	0, 0%	14085, 0.00492954%	
Nasonia vitripennis	295780872	0, 0%	28451, 0.00961895%	
Copidosoma floridanum	555044930	0, 0%	80844, 0.0145653%	
Trichogramma pretiosum	196221301	0, 0%	37097, 0.0189057%	
Microplitis demolitor	250525215	0, 0%	133621, 0.0533363%	
Megachile rotundata	272660569	0, 0%	83736, 0.0307107%	
Apis dorsata	230340171	0, 0%	11849, 0.00514413%	
Apis florea	230467781	0, 0%	11235, 0.00487487%	
Apis mellifera	250270657	0, 0%	12542, 0.00501137%	
Bombus impatiens	249185056	0, 0%	43105, 0.0172984%	
Bombus terrestris	248654244	0, 0%	20613, 0.00828982%	
Linepithema humile	219500750	6510, 0.00296582%	34557, 0.0157435%	
Camponotus floridanus	232685334	0, 0%	27476, 0.0118082%	
Acromyrmex echinatior	295944863	0, 0%	21595, 0.00729697%	
Atta cephalotes	317671980	0, 0%	14002, 0.00440769%	
Solenopsis invicta	396009169	28437, 0.00718089%	31306, 0.00790537%	
Pogonomyrmex barbatus	235645958	4063, 0.0017242%	10237, 0.00434423%	
Harpegnathos saltator	294465601	0, 0%	78553, 0.0266765%	
Cerapachys biroi	212825769	0, 0%	21905, 0.0102925%	
Blattella germanica	2037201033	0, 0%	2091710, 0.102676%	
Zootermopsis nevadensis	485009472	0, 0%	64328, 0.0132632%	
Locusta migratoria	5759798599	2236765, 0.0388341%	7904827, 0.137241%	
Daphnia pulex	197206209	0, 0%	270547, 0.13719%	
Eurytemora affinis	494890867	0, 0%	290790, 0.0587584%	
Lepeophtheirus salmonis	665129626	0, 0%	12393542, 1.86333%	
Hyalella azteca	1178848281	0, 0%	100730, 0.00854478%	
Strigamia maritima	176210797	0, 0%	64283, 0.0364807%	
Stegodyphus mimosarum	2738704917	0, 0%	1142876, 0.0417305%	
Latrodectus hesperus	1137104656	0, 0%	236269, 0.0207781%	
Parasteatoda tepidariorum	1443909906	0, 0%	139984, 0.00969479%	
Tetranychus urticae	90815494	0, 0%	34385, 0.0378625%	
Dermatophagoides farinae	53545338	0, 0%	4466, 0.0083406%	
Sarcoptes scabiei type canis	56262437	0, 0%	16880, 0.0300023%	
Achipteria coleoptrata	88443889	0, 0%	9799, 0.0110793%	
Hypochthonius rufulus	172365132	0, 0%	11855, 0.00687784%	
Platynothrus peltifer	100532934	0, 0%	12889, 0.0128207%	
Steganacarus magnus	113565242	0, 0%	20382, 0.0179474%	
Ixodes ricinus	391986416	0, 0%	914108, 0.233199%	
Ixodes scapularis	1765382190	0, 0%	2014997, 0.114139%	
Rhipicephalus microplus	144692238	0, 0%	181040, 0.125121%	

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Metaseiulus occidentalis	151699350	0, 0%	72727, 0.0479415%
Varroa destructor	294133941	0, 0%	3597, 0.00122291%
Centruroides exilicauda	926399729	184507, 0.0199166%	855306, 0.0923258%
Mesobuthus martensii	925546267	524438, 0.0566625%	396089, 0.0427952%
Limulus polyphemus	1828256766	0, 0%	496277, 0.0271448%
Trichinella spiralis	63525422	0, 0%	8033, 0.0126453%
Ascaris suum	269559681	0, 0%	30473, 0.0113047%
$Steiner nema\ monticolum$	89158954	0, 0%	17504, 0.0196324%
Panagrellus redivivus	65093147	0, 0%	13032,0.0200205%
Haemonchus contortus	319757902	0, 0%	352460, 0.110227%
Necator americanus	244075060	0, 0%	29269, 0.0119918%
$Heterorhab ditis \ bacteriophora$	76974349	0, 0%	244, 0.000316989%
Caenorhabditis angaria	79761545	0, 0%	7885, 0.00988572%
Caenorhabditis brenneri	190369721	0, 0%	38619, 0.0202863%
$Cae nor hab ditis\ briggs a e$	108478526	0, 0%	7158, 0.00659854%
Caenorhabditis elegans	100272607	0, 0%	5988, 0.00597172%
$Cae nor hab ditis\ japonica$	166256191	0, 0%	41298, 0.02484%
Caenorhabditis sp. 11 MAF-2010	79321433	0, 0%	5899, 0.00743683%
Priapulus caudatus	420178403	0, 0%	179152, 0.0426371%
PLATYHELMINTHES	,		-
$Schistosoma\ curassoni$	344202215	0, 0%	63816, 0.0185403%
Schistosoma haematobium	375894156	0, 0%	42415, 0.0112838%
$Schistosoma\ japonicum$	402743189	0, 0%	94449, 0.0234514%
Schistosoma mansoni	364518427	0, 0%	18207, 0.00499481%
Schistosoma margrebowiei	367396528	0, 0%	30287, 0.00824368%
Schistosoma mattheei	340818150	0, 0%	52043, 0.01527%
Schistosoma rodhaini	343294136	0, 0%	29809, 0.00868322%
Clonorchis sinensis	547288241	0, 0%	137669, 0.0251548%
Echinococcus granulosus	112350571	0, 0%	4822, 0.00429192%
$Echinococcus \ multilocularis$	7371474	0, 0%	4135, 0.0560946%
Hymenolepis microstoma	126773784	0, 0%	5297, 0.00417831%
$Protopolystoma\ xenopodis$	617344661	0, 0%	28573, 0.00462837%
OTHER			
Callorhinchus milii	974481817	0, 0%	96001, 0.00985149%
Carcharhinus brachyurus	2832541493	0, 0%	1383347, 0.0488377%
Lytechinus variegatus	951759914	4192, 0.000440447%	1562525, 0.164172%
Strongylocentrotus purpuratus	936564995	55567, 0.00593306%	2699297, 0.288212%
Patiria miniata	811028858	0, 0%	350468, 0.0432128%
Saccoglossus kowalevskii	775840678	0, 0%	2440029, 0.314501%
Ciona intestinalis	115212710	0, 0%	78094, 0.0677825%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome
Ciona savignyi	587352817	29071, 0.0049495%	4044971, 0.688678%
Botryllus schlosseri	579633380	0, 0%	1256055, 0.216698%
Oikopleura dioica	70471451	0, 0%	5276, 0.00748672%
Branchiostoma floridae	521895125	0, 0%	884348, 0.169449%
Lethenteron camtschaticum	1030662718	27180, 0.00263714%	1011092, 0.0981012%
Petromyzon marinus	885550958	0, 0%	680080, 0.0767974%
Latimeria chalumnae	2860591921	113934, 0.00398288%	14770485, 0.516344%
Adineta vaga	217933776	32135, 0.0147453%	44968, 0.0206338%
Capitella teleta	333283208	9147, 0.00274451%	17739, 0.0053225%
Helobdella robusta	235376169	139023, 0.0590642%	400522, 0.170163%
Crassostrea gigas	557717710	0, 0%	1746428, 0.313138%
Lottia gigantea	359505668	0, 0%	628379, 0.17479%
Aplysia californica	927296314	0, 0%	645572, 0.0696187%
Biomphalaria glabrata	916374414	0, 0%	335123, 0.0365705%
Nematostella vectensis	356613585	0, 0%	186002, 0.0521579%
Hydra vulgaris	852155112	0, 0%	1764624, 0.207078%
Mnemiopsis leidyi	155865547	0, 0%	60221, 0.0386365%
Trichoplax adhaerens	105631681	0, 0%	0, 0%
Amphimedon			
queens landica	166679601	0, 0%	7730, 0.00463764%
FUNGI	1		
Coprinopsis cinerea	36192590	0, 0%	7417, 0.0204931%
Agaricus bisporus var. burnettii	32614392	0, 0%	31084, 0.0953076%
Agaricus bisporus var. bisporus	30233745	0, 0%	28062, 0.0928168%
Laccaria bicolor	64877444	0, 0%	4236, 0.00652923%
Schizophyllum commune	38482026	0, 0%	5965, 0.0155007%
Moniliophthora roreri	52204869	0, 0%	4106, 0.00786517%
Serpula lacrymans	42797233	0, 0%	0, 0%
Coniophora puteana	42968544	0, 0%	15013, 0.0349395%
Heterobasidion irregulare	33649967	0, 0%	10227, 0.0303923%
Stereum hirsutum	46511623	0, 0%	11201, 0.0240822%
Dichomitus squalens	42748430	0, 0%	10461, 0.0244711%
Trametes versicolor	44794008	0, 0%	90802, 0.20271%
Fibroporia radiculosa	28378039	0, 0%	770, 0.00271337%
Phanerochaete carnosa	46293325	0, 0%	18096, 0.0390899%
Postia placenta	90891856	0, 0%	8820, 0.00970384%
Gloeophyllum trabeum	37178225	0, 0%	20507, 0.0551586%
Punctularia strigosozonata	34171901	0, 0%	44534, 0.130323%
Fomitiporia mediterranea	63354419	0, 0%	1142, 0.00180256%
Auricularia subglabra	74920202	0, 0%	195051, 0.260345%

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome	
Malassezia sympodialis	7669689	0, 0%	3964, 0.051684%	
Ustilago maydis	19664356	0, 0%	2996, 0.0152357%	
Puccinia graminis	88724376	0, 0%	752, 0.000847569%	
Melampsora				
larici-populina	101129028	0, 0%	10131, 0.0100179%	
Rhodotorula toruloides	20223942	0, 0%	2537, 0.0125445%	
Dactylellina haptotyla	39531920	0, 0%	1802, 0.00455834%	
Tuber melanosporum	124945702	0, 0%	2089, 0.00167193%	
Talaromyces atroroseus	30858562	0, 0%	1589, 0.0051493%	
Talaromyces stipitatus	35685443	0, 0%	6125, 0.0171639%	
Ajellomyces dermatitidis	75404732	0, 0%	24833, 0.0329329%	
Histoplasma capsulatum	33030326	0, 0%	1442, 0.00436569%	
Arthroderma otae	23263091	0, 0%	318, 0.00136697%	
Coccidioides immitis	29016019	0, 0%	3321, 0.0114454%	
Paracoccidioides brasiliensis	29952540	0, 0%	1357, 0.0045305%	
Uncinocarpus reesii	22349738	0, 0%	1552, 0.00694415%	
Endocarpon pusillum	37130611	0, 0%	2963, 0.00797994%	
Pseudogymnoascus destructans	30684937	0, 0%	5229, 0.0170409%	
Beauveria bassiana	33697794	0, 0%	1795, 0.00532676%	
Fusarium oxysporum	61386934	0, 0%	5556, 0.00905079%	
Fusarium verticillioides	41844914	0, 0%	1292, 0.00308759%	
Colletotrichum gloeosporioides	55607143	0, 0%	1235, 0.00222094%	
Colletotrichum higginsianum	50716103	0, 0%	4418, 0.00871124%	
Colletotrichum orchidophilum	48556462	0, 0%	2174, 0.00447726%	
Thermothelomyces thermophila	38744216	0, 0%	1081, 0.00279009%	
Thielavia terrestris	36912256	0, 0%	3957, 0.01072%	
Sordaria macrospora	39955017	0, 0%	1025, 0.00256538%	
Pseudocercospora fijiensis	74141167	0, 0%	18239, 0.0246004%	
Sphaerulina musiva	29352103	0, 0%	1589, 0.00541358%	
Zymoseptoria tritici	39686251	0, 0%	7312, 0.0184245%	
Parastagonospora nodorum	37213987	0, 0%	3811, 0.0102408%	
Leptosphaeria maculans	45124619	0, 0%	20091, 0.0445234%	
Metschnikowia bicuspidata	16055203	0, 0%	1926, 0.0119961%	
Scheffersomyces stipitis	15441179	0, 0%	70712, 0.457944%	
Candida albicans	14282666	0, 0%	10100, 0.0707151%	
Candida auris	12498763	0, 0%	2327, 0.0186178%	
Candida dubliniensis	14618422	0, 0%	33605, 0.229881%	

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome	
Candida tanzawaensis	13136204	0, 0%	1844, 0.0140375%	
Wickerhamomyces anomalus	14145566	0, 0%	5054, 0.0357285%	
Wickerhamomyces ciferrii	15901152	0, 0%	13860, 0.0871635%	
Yarrowia lipolytica	20550897	0, 0%	84838, 0.412819%	
Saitoella complicata	14136186	0, 0%	2291, 0.0162066%	
Phycomyces blakesleeanus	53939167	0, 0%	335552, 0.622093%	
Rhizopus microsporus	25972395	0, 0%	45192, 0.174%	
$Lobos por angium \\ transversale$	42768949	0, 0%	35232, 0.0823775%	
Nosema ceranae	7860219	0, 0%	912, 0.0116027%	
VIRIDIPLANTAE		1	•	
Chlamydomonas reinhardtii	120185366	0, 0%	606792, 0.50488%	
Volvox carteri f. nagariensis	137684403	0, 0%	396743, 0.288154%	
Chlorella variabilis	46159512	0, 0%	12154, 0.0263304%	
Coccomyxa subellipsoidea C-169	48826616	0, 0%	342720, 0.701912%	
Klebsormidium flaccidum	103921766	0, 0%	14535, 0.0139865%	
Physcomitrella patens	479985347	0, 0%	209444, 0.0436355%	
$Se la ginella\ moellendorf fii$	212315224	0, 0%	432326, 0.203625%	
Pinus taeda	265480119	0, 0%	3355235, 1.26384%	
$Amborella\ trichopoda$	706332640	0, 0%	10079924, 1.42708%	
$Spirodela\ polyrhiza$	132009443	0, 0%	217054, 0.164423%	
Phoenix dactylifera	555607186	0, 0%	4794765, 0.862977%	
Elaeis oleifera	1402725009	0, 0%	4644120, 0.331078%	
Ensete ventricosum	172241963	0, 0%	45089, 0.0261777%	
Musa acuminata subsp. malaccensis	472235617	0, 0%	861006, 0.182326%	
Sorghum bicolor	738540932	0, 0%	6065256, 0.821248%	
Zea mays	2066912289	0, 0%	9490541, 0.459165%	
Setaria italica	405737341	0, 0%	4216652, 1.03926%	
Brachypodium distachyon	271923306	0, 0%	4154965, 1.52799%	
Leersia perrieri	266687832	0, 0%	2368362, 0.888065%	
Oryza barthii	308272304	0, 0%	2043982, 0.663044%	
Oryza brachyantha	259907595	0, 0%	570749, 0.219597%	
Oryza glumipatula	372860283	0, 0%	1891897, 0.507401%	
Oryza longistaminata	326442508	0, 0%	1729078, 0.529673%	
Oryza meridionalis	335668232	0, 0%	1621453, 0.483052%	
Oryza nivara	337950324	0, 0%	2024556, 0.599069%	
Oryza punctata	393816603	0, 0%	1970705, 0.500412%	
Oryza sativa Japonica group	382150945	0, 0%	2353016, 0.615729%	

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome	
Zizania latifolia	603989347	0, 0%	2151532, 0.35622%	
Aegilops tauschii	3313650219	0, 0%	21648619, 0.653316%	
Triticum urartu	3747047519	0, 0%	21997415, 0.58706%	
Nelumbo nucifera	804484421	0, 0%	19049323, 2.36789%	
Lupinus angustifolius	523297923	0, 0%	3311489, 0.632811%	
Phaseolus vulgaris	521076696	0, 0%	5674591, 1.08901%	
Cajanus cajan	510809477	0, 0%	1658557, 0.324692%	
Vigna angularis var. angularis	291823841	0, 0%	58656, 0.0200998%	
Vigna radiata var. radiata	463085359	0, 0%	91202, 0.0196944%	
Glycine max	973224514	0, 0%	7291899, 0.749251%	
Glycine soja	863568428	0, 0%	5855382, 0.678045%	
Cicer arietinum	530768543	0, 0%	864712, 0.162917%	
Medicago truncatula	314353944	0, 0%	2757877, 0.877316%	
Trifolium pratense	304979311	0, 0%	1723289, 0.565051%	
Lotus japonicus	147812252	0, 0%	1521949, 1.02965%	
Malus x domestica	526197889	0, 0%	2239129, 0.42553%	
Pyrus x bretschneideri	508550595	0, 0%	2367713, 0.465581%	
Prunus mume	233872527	0, 0%	1080390, 0.461957%	
Prunus persica	227251827	0, 0%	977650, 0.430206%	
Fragaria iinumae	199627509	0, 0%	848595, 0.425089%	
Fragaria nubicola	203686407	0, 0%	852989, 0.418776%	
Fragaria orientalis	214184023	0, 0%	861282, 0.402122%	
Fragaria vesca subsp. vesca	214217322	0, 0%	1330049, 0.620888%	
Fragaria x ananassa	173229572	0, 0%	576965, 0.333064%	
Morus notabilis	320378613	0, 0%	540366, 0.168665%	
Cannabis sativa	757438891	0, 0%	7007555, 0.925164%	
Castanea mollissima	833240550	0, 0%	7968700, 0.95635%	
Betula nana	564011153	0, 0%	4178216, 0.740804%	
Cucumis melo	374772472	0, 0%	1244169, 0.33198%	
Cucumis sativus	242977439	0, 0%	799120, 0.328887%	
Citrullus lanatus	321046825	0, 0%	1165484, 0.363026%	
Lagenaria siceraria	176727258	0, 0%	507954, 0.287423%	
Populus euphratica	495875768	0, 0%	1763571, 0.355648%	
Populus trichocarpa	417129638	0, 0%	1895269, 0.45436%	
Jatropha curcas	318363250	0, 0%	1992515, 0.625862%	
Manihot esculenta subsp. flabellifolia	390835892	0, 0%	1771302, 0.453209%	
Ricinus communis	350458699	0, 0%	664578, 0.189631%	
Linum usitatissimum	282201865	0, 0%	2053058, 0.727514%	
Eucalyptus camaldulensis	654922307	0, 0%	5906037, 0.901792%	
Eucalyptus grandis	691269672	0, 0%	10125615, 1.46479%	
Carica papaya	369781828	0, 0%	2516437, 0.680519%	

Species	Genome base count	BovB base count, percentage of genome	L1 base count, percentage of genome	
Arabidopsis halleri subsp. gemmifera	221139660	0, 0%	2629722, 1.18917%	
Arabidopsis lyrata subsp. lyrata	206667935	0, 0%	3211589, 1.55399%	
Arabidopsis thaliana	119146348	0, 0%	907867, 0.761976%	
Camelina sativa	641356059	0, 0%	13704182, 2.13675%	
Capsella rubella	133063876	0, 0%	1196138, 0.89892%	
Brassica napus	930121500	0, 0%	19061867, 2.0494%	
Brassica rapa	283975909	0, 0%	5186525, 1.8264%	
Brassica oleracea var. oleracea	488593889	0, 0%	10794431, 2.20928%	
Raphanus raphanistrum subsp. raphanistrum	253833977	0, 0%	3953706, 1.5576%	
Raphanus sativus	341476849	0, 0%	6558491, 1.92063%	
Aethionema arabicum	192487774	0, 0%	2497220, 1.29734%	
Arabis alpina	308032609	0, 0%	6413649, 2.08213%	
Eutrema parvulum	137073209	0, 0%	1218003, 0.888578%	
Eutrema salsugineum	243110105	0, 0%	3730545, 1.53451%	
Sisymbrium irio	245550082	0, 0%	3420058, 1.39281%	
Leavenworthia alabamica	173431618	0, 0%	1145977, 0.660766%	
Tarenaya hassleriana	249929577	0, 0%	898531, 0.359514%	
Gossypium arboreum	1560831891	0, 0%	5673504, 0.363492%	
Gossypium raimondii	761405269	0, 0%	6287854, 0.825822%	
Theobroma cacao	345993675	0, 0%	2489010, 0.71938%	
Aquilaria agallochum	726710453	0, 0%	2696090, 0.370999%	
Azadirachta indica	261457759	0, 0%	450277, 0.172218%	
Citrus clementina	301364702	0, 0%	2772560, 0.920002%	
Citrus sinensis	327669411	0, 0%	2960816, 0.903599%	
Vitis vinifera	485326422	0, 0%	10020983, 2.06479%	
Amaranthus hypochondriacus	502147592	0, 0%	1858411, 0.370093%	
Amaranthus tuberculatus	4347977	0, 0%	47856, 1.10065%	
Beta vulgaris subsp. vulgaris	566198563	0, 0%	14816651, 2.61686%	
Spinacia oleracea	474077292	0, 0%	4811255, 1.01487%	
Dianthus caryophyllus	567661845	0, 0%	3994415, 0.703661%	
Actinidia chinensis	604217145	0, 0%	1447675, 0.239595%	
Vaccinium macrocarpon	414621889	0, 0%	2174742, 0.524512%	
Diospyros lotus	1104189	0, 0%	3332, 0.30176%	
Primula veris	309692940	0, 0%	1089758, 0.351883%	
Solanum arcanum	665186956	0, 0%	5259355, 0.790658%	
Solanum habrochaites	724284658	0, 0%	5928289, 0.818503%	
Solanum lycopersicum	781353311	0, 0%	5086040, 0.650927%	
Solanum melongena	833080760	0, 0%	5215063, 0.625997%	

Species	Genome base count	BovB base count, percentage of	L1 base count, percentage of	
Q 1 11	700 45 0000	genome	genome	
Solanum pennellii	720458090	0, 0%	5173838, 0.718132%	
Solanum pimpinellifolium	688247059	0, 0%	5291330, 0.768813%	
Solanum tuberosum	705779115	0, 0%	7014366, 0.993847%	
Capsicum annuum	3063642317	0, 0%	18450182, 0.60223%	
Nicotiana sylvestris	2221831232	0, 0%	12836977, 0.577766%	
Nicotiana	1688312294	0, 0%	9735272, 0.576627%	
tomentosi form is	1000012201	0, 070	0.00212, 0.01002170	
Fraxinus excelsior	875243685	0, 0%	2738111, 0.31284%	
Penstemon	4471593	0, 0%	24561, 0.549267%	
centranthifolius	4471090	0, 070	24501, 0.54520770	
Penstemon grinnellii	3663524	0, 0%	14843, 0.405156%	
Sesamum indicum	274906174	0, 0%	4526917, 1.64671%	
Genlisea aurea	43357795	0, 0%	124160, 0.286361%	
Mimulus guttatus	321641293	0, 0%	2116247, 0.657953%	
Conyza canadensis	326165195	0, 0%	1471338, 0.451102%	

Table S5: BovB HT candidate clusters

Table S5: BLASTALL and VSEARCH were used to find BovB HT candidates. Clusters were kept if they contained L1s from two or more different Eukaryotic Classes and passed the *in silico* validation tests. The clustering was run three times: first, using nucleotide BovB sequences between 2.4-4kb in length; second, using nucleotide open reading frames found within BovBs; and third, using amino acid reverse-transcriptase domains only. See Methods for details.

Family	Number of BovBs from each species	Eukaryotic Classes	Eukaryotic Phyla			
Nucleotide BovB sequences						
CROSS-PHYLUM clusters						
c_0	135 Anolis carolinensis, 14504 Bison bison, 1 Bombyx mori, 18932 Bos indicus, 5335 Bos mutus, 20798 Bos taurus, 11603 Bubalus bubalis, 5827 Capra hircus, 2 Centruroides exilicauda, 1 Cimex lectularius, 1 Ciona savignyi, 1 Cynoglossus semilaevis, 1 Helobdella robusta, 1 Latimeria chalumnae, 10 Locusta migratoria, 19 Macropus eugenii, 8 Mesobuthus martensii, 20 Monodelphis domestica, 7 Ophiophagus hannah, 8178 Ovis aries Texel, 6315 Ovis aries musimon, 3026 Pantholops hodgsonii, 308 Pogona vitticeps, 5 Python bivittatus, 36 Sarcophilus harrisii, 21 Vipera berus	Actinopterygii, Arachnida, Ascidiacea, Clitellata, Insecta, Mammalia, Reptilia, Sarcopterygii	Annelida, Arthropoda, Chordata			
c_1	197 Chrysochloris asiatica, 86 Echinops telfairi, 478 Elephantulus edwardii, 136 Loxodonta africana, 1 Mesobuthus martensii, 7724 Orycteropus afer, 576 Procavia capensis, 79 Trichechus manatus	Arachnida, Mammalia	Arthropoda, Chordata			
c_21	2912 Chrysochloris asiatica, 43 Echinops telfairi, 41 Elephantulus edwardii, 3 Helobdella robusta, 30 Loxodonta africana, 2 Mesobuthus martensii, 40 Orycteropus afer, 65 Procavia capensis, 25 Trichechus manatus	Arachnida, Clitellata, Mammalia	Annelida, Arthropoda, Chordata			
c_23	3 Crotalus mitchellii, 1 Danio rerio, 2 Helobdella robusta, 3 Lepisosteus oculatus, 1 Mesobuthus martensii, 4 Ophiophagus hannah, 29 Python bivittatus	Actinopterygii, Arachnida, Clitellata, Reptilia	Annelida, Arthropoda, Chordata			
c_33	2 Adineta vaga, 6 Python bivittatus	Bdelloidea, Reptilia	Chordata, Rotifera			
c_4	7 Chrysochloris asiatica, 443 Elephantulus edwardii, 1 Mesobuthus martensii, 3 Orycteropus afer	Arachnida, Mammalia	Arthropoda, Chordata			
c_41	2 Centruroides exilicauda, 1 Locusta migratoria, 54 Macropus eugenii, 51 Monodelphis domestica, 1 Pogona vitticeps, 96 Sarcophilus harrisii	Arachnida, Insecta, Mammalia, Reptilia	Arthropoda, Chordata			
c_46	3 Ciona savignyi, 4 Strongylocentrotus purpuratus	Ascidiacea, Echinoidea	Chordata, Echinodermata			
c_53	6 Centruroides exilicauda, 1 Crotalus mitchellii, 2 Ophiophagus hannah	Arachnida, Reptilia	Arthropoda, Chordata			
c_55	1 Adineta vaga, 1 Helobdella robusta	Bdelloidea, Clitellata	Annelida, Rotifera			

Family	Number of BovBs from each species	Eukaryotic	Eukaryotic
	Number of boyds from each species	Classes	Phyla
	61 Anolis carolinensis, 1593 Bison bison, 1151 Bos		
	indicus, 1301 Bos mutus, 1192 Bos taurus, 1488		
	Bubalus bubalis, 1117 Capra hircus, 2 Locusta	Insecta,	Anthropodo
c_7	migratoria, 1 Macropus eugenii, 1021 Ovis aries Texel,	Mammalia,	Arthropoda, Chordata
	1040 Ovis aries musimon, 800 Pantholops hodgsonii,	Reptilia	Chordata
	100 Pogona vitticeps, 1 Sarcophilus harrisii, 11 Vipera		
	berus		

CROSS-CLASS clusters

c_106	36 Bison bison, 8 Bos indicus, 28 Bos mutus, 15 Bos taurus, 44 Bubalus bubalis, 18 Capra hircus, 19 Ovis aries Texel, 14 Ovis aries musimon, 20 Pantholops hodgsonii, 2 Pogona vitticeps	Mammalia, Reptilia	Chordata
c_14	5 Anolis carolinensis, 1425 Bison bison, 1373 Bos indicus, 1566 Bos mutus, 1553 Bos taurus, 1519 Bubalus bubalis, 1390 Capra hircus, 11 Ophiophagus hannah, 1440 Ovis aries Texel, 1343 Ovis aries musimon, 1319 Pantholops hodgsonii, 398 Pogona vitticeps, 1 Sarcophilus harrisii, 53 Vipera berus	Mammalia, Reptilia	Chordata
c_15	22 Ceratotherium simum, 22 Equus caballus Mongolian, 22 Equus caballus Thoroughbred, 24 Equus przewalskii, 1 Megaderma lyra, 4 Pogona vitticeps, 2 Rhinolophus ferrumequinum	Mammalia, Reptilia	Chordata
c_19	1332 Bison bison, 1321 Bos indicus, 700 Bos mutus, 1371 Bos taurus, 1285 Bubalus bubalis, 830 Capra hircus, 810 Ovis aries Texel, 603 Ovis aries musimon, 272 Pantholops hodgsonii, 1 Vipera berus	Mammalia, Reptilia	Chordata
c_2	2 Anolis carolinensis, 2674 Bison bison, 2088 Bos indicus, 1778 Bos mutus, 2061 Bos taurus, 2380 Bubalus bubalis, 1424 Capra hircus, 4 Macropus eugenii, 1 Monodelphis domestica, 10 Ophiophagus hannah, 1250 Ovis aries Texel, 1573 Ovis aries musimon, 1194 Pantholops hodgsonii, 154 Pogona vitticeps, 1 Sarcophilus harrisii, 6 Vipera berus	Mammalia, Reptilia	Chordata
c_49	6 Diaphorina citri, 1 Mesobuthus martensii, 1 Nilaparvata lugens	Arachnida, Insecta	Arthropoda
c_5	354 Bison bison, 78 Bos indicus, 287 Bos mutus, 65 Bos taurus, 343 Bubalus bubalis, 143 Capra hircus, 80 Ovis aries Texel, 265 Ovis aries musimon, 134 Pantholops hodgsonii, 1 Pogona vitticeps	Mammalia, Reptilia	Chordata
c_80	1 Centruroides exilicauda, 1 Mesobuthus martensii, 2 Nilaparvata lugens	Arachnida, Insecta	Arthropoda

Nucleotide ORFs

CROSS-PHYLUM clusters

Family	Number of BovBs from each species	Eukaryotic Classes	Eukaryotic Phyla
o_0	11 Adineta vaga, 245 Anolis carolinensis, 59268 Bos indicus, 15219 Bos mutus, 63518 Bos taurus, 29581 Bubalus bubalis, 8688 Capra hircus, 6 Centruroides exilicauda, 1 Chrysochloris asiatica, 5 Cimex lectularius, 2 Helobdella robusta, 1 Lepisosteus oculatus, 53 Locusta migratoria, 1 Loxodonta africana, 8 Macropus eugenii, 6 Mesobuthus martensii, 3 Monodelphis domestica, 17 Ophiophagus hannah, 24910 Ovis aries Texel, 15373 Ovis aries musimon, 7554 Pantholops hodgsonii, 1177 Pogona vitticeps, 2 Procavia capensis, 34 Python bivittatus, 1 Sarcophilus harrisii, 1 Trichechus manatus, 424 Vipera berus	Actinopterygii, Arachnida, Bdelloidea, Clitellata, Insecta, Mammalia, Reptilia	Annelida, Arthropoda, Chordata, Rotifera
o_106	2 Centruroides exilicauda, 5 Lethenteron camtschaticum	Arachnida, Hyperoartia	Arthropoda, Chordata
o_120	1 Bison bison, 2 Bos indicus, 2 Bos taurus, 1 Bubalus bubalis, 2 Capra hircus, 5 Cimex lectularius, 2 Locusta migratoria, 6 Ophiophagus hannah, 1 Ovis aries Texel, 2 Pantholops hodgsonii, 3825 Pogona vitticeps, 257 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
o_122	1 Anolis carolinensis, 275 Bison bison, 260 Bos indicus, 282 Bos mutus, 251 Bos taurus, 297 Bubalus bubalis, 239 Capra hircus, 2 Cimex lectularius, 9 Ophiophagus hannah, 223 Ovis aries Texel, 246 Ovis aries musimon, 214 Pantholops hodgsonii, 1 Python bivittatus, 61 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
o_16	4 Ephemera danica, 1 Myotis brandtii	Insecta, Mammalia	Arthropoda, Chordata
0_326	1 Bos indicus, 1 Cimex lectularius, 18 Ophiophagus hannah, 2 Pogona vitticeps, 1 Python bivittatus, 348 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
0_33	4 Danio rerio, 13 Helobdella robusta, 1 Lepisosteus oculatus, 16 Mesobuthus martensii	Actinopterygii, Arachnida, Clitellata	Annelida, Arthropoda, Chordata
o_38	6 Anolis carolinensis, 2 Bos indicus, 2 Bos mutus, 3 Bos taurus, 2 Capra hircus, 3 Locusta migratoria, 2 Ophiophagus hannah, 5 Pantholops hodgsonii, 3305 Pogona vitticeps, 6 Python bivittatus, 14 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
o_43	198 Chrysochloris asiatica, 18 Echinops telfairi, 71 Elephantulus edwardii, 399 Loxodonta africana, 1 Mesobuthus martensii, 1981 Orycteropus afer, 129 Procavia capensis, 410 Trichechus manatus	Arachnida, Mammalia	Arthropoda, Chordata
o_47	1 Bison bison, 1 Capra hircus, 10 Cimex lectularius, 1 Crotalus mitchellii, 49 Ophiophagus hannah, 1 Ovis aries musimon, 1 Pantholops hodgsonii, 24 Pogona vitticeps, 8 Python bivittatus, 813 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
o_609	1 Lepisosteus oculatus, 4 Mesobuthus martensii	Actinopterygii, Arachnida	Arthropoda, Chordata

Family	Number of BovBs from each species	Eukaryotic Classes	Eukaryotic Phyla
o_95	2 Anolis carolinensis, 2944 Bison bison, 1982 Bos indicus, 974 Bos mutus, 2002 Bos taurus, 1685 Bubalus bubalis, 883 Capra hircus, 1 Cimex lectularius, 1 Monodelphis domestica, 1 Ophiophagus hannah, 1535 Ovis aries Texel, 1150 Ovis aries musimon, 623 Pantholops hodgsonii, 1 Pogona vitticeps, 8 Vipera berus	Insecta, Mammalia, Reptilia	Arthropoda, Chordata
CROSS-C	CLASS clusters		
o_112	72 Bison bison, 52 Bos indicus, 56 Bos mutus, 52 Bos taurus, 51 Bubalus bubalis, 63 Capra hircus, 2 Macropus eugenii, 69 Ovis aries Texel, 54 Ovis aries	Mammalia, Reptilia	Chordata

o_112	72 Bison bison, 52 Bos indicus, 56 Bos mutus, 52 Bos taurus, 51 Bubalus bubalis, 63 Capra hircus, 2 Macropus eugenii, 69 Ovis aries Texel, 54 Ovis aries musimon, 49 Pantholops hodgsonii, 1 Pogona vitticeps	Mammalia, Reptilia	Chordata
o_118	81 Bison bison, 32 Bos indicus, 19 Bos mutus, 29 Bos taurus, 63 Bubalus bubalis, 19 Capra hircus, 12 Ovis aries Texel, 9 Ovis aries musimon, 11 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_123	151 Bison bison, 61 Bos indicus, 37 Bos mutus, 61 Bos taurus, 124 Bubalus bubalis, 27 Capra hircus, 28 Ovis aries Texel, 12 Ovis aries musimon, 16 Pantholops hodgsonii, 2 Python bivittatus	Mammalia, Reptilia	Chordata
o_132	1298 Bison bison, 1319 Bos indicus, 860 Bos mutus, 1325 Bos taurus, 1233 Bubalus bubalis, 673 Capra hircus, 3 Ophiophagus hannah, 800 Ovis aries Texel, 762 Ovis aries musimon, 465 Pantholops hodgsonii, 40 Vipera berus	Mammalia, Reptilia	Chordata
o_134	20 Bison bison, 6 Bos indicus, 24 Bos mutus, 13 Bos taurus, 27 Bubalus bubalis, 18 Capra hircus, 12 Ovis aries Texel, 9 Ovis aries musimon, 14 Pantholops hodgsonii, 1 Pogona vitticeps	Mammalia, Reptilia	Chordata
o_139	38 Bison bison, 4 Bos indicus, 20 Bos mutus, 7 Bos taurus, 33 Bubalus bubalis, 26 Capra hircus, 15 Ovis aries Texel, 3 Ovis aries musimon, 14 Pantholops hodgsonii, 1 Pogona vitticeps, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_142	6 Bison bison, 4 Bos mutus, 9 Bubalus bubalis, 5 Capra hircus, 2 Ovis aries Texel, 1 Ovis aries musimon, 6 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_146	11 Bison bison, 1 Bos indicus, 7 Bos mutus, 1 Bos taurus, 13 Bubalus bubalis, 3 Capra hircus, 3 Ovis aries Texel, 7 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_156	2 Lethenteron camtschaticum, 1 Oreochromis niloticus	Actinopterygii, Hyperoartia	Chordata
o_168	10 Bison bison, 1 Bos indicus, 3 Bos mutus, 1 Bos taurus, 8 Bubalus bubalis, 5 Capra hircus, 4 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata

Family	Number of BovBs from each species	Eukaryotic Classes	Eukaryotic Phyla
o_194	130 Bison bison, 100 Bos indicus, 108 Bos mutus, 94 Bos taurus, 122 Bubalus bubalis, 85 Capra hircus, 1 Ophiophagus hannah, 75 Ovis aries Texel, 88 Ovis aries musimon, 91 Pantholops hodgsonii, 7 Vipera berus	Mammalia, Reptilia	Chordata
o_201	316 Bison bison, 250 Bos indicus, 69 Bos mutus, 267 Bos taurus, 206 Bubalus bubalis, 48 Capra hircus, 104 Ovis aries Texel, 94 Ovis aries musimon, 32 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_226	12 Bison bison, 2 Bos indicus, 3 Bos mutus, 3 Bos taurus, 15 Bubalus bubalis, 6 Capra hircus, 3 Ovis aries Texel, 1 Ovis aries musimon, 9 Pantholops hodgsonii, 1 Pogona vitticeps	Mammalia, Reptilia	Chordata
o_258	40 Bison bison, 26 Bos indicus, 10 Bos mutus, 25 Bos taurus, 31 Bubalus bubalis, 5 Capra hircus, 10 Ovis aries Texel, 19 Ovis aries musimon, 7 Pantholops hodgsonii, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_293	2 Macropus eugenii, 1 Ophiophagus hannah, 81 Pogona vitticeps, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_316	1 Bubalus bubalis, 354 Pogona vitticeps, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_397	8 Ceratotherium simum, 6 Equus caballus Mongolian, 4 Equus caballus Thoroughbred, 5 Equus przewalskii, 1 Megaderma lyra, 1 Myotis davidii, 2 Pogona vitticeps, 2 Rhinolophus ferrumequinum	Mammalia, Reptilia	Chordata
o_492	2 Anolis carolinensis, 1 Bos mutus, 3 Bubalus bubalis, 1 Capra hircus, 1 Ovis aries Texel, 1 Pantholops hodgsonii, 89 Pogona vitticeps, 3 Python bivittatus, 3 Vipera berus	Mammalia, Reptilia	Chordata
o_570	1 Bos taurus, 2 Bubalus bubalis, 2 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_576	4 Bison bison, 3 Bos indicus, 2 Bos mutus, 3 Bos taurus, 6 Bubalus bubalis, 2 Capra hircus, 4 Ovis aries Texel, 4 Ovis aries musimon, 1 Pantholops hodgsonii, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_74	46 Bison bison, 4 Bos indicus, 5 Bos mutus, 3 Bos taurus, 34 Bubalus bubalis, 22 Capra hircus, 17 Ovis aries Texel, 3 Ovis aries musimon, 12 Pantholops hodgsonii, 1 Vipera berus	Mammalia, Reptilia	Chordata
o_804	6 Capra hircus, 4 Ovis aries Texel, 2 Ovis aries musimon, 4 Pantholops hodgsonii, 1 Python bivittatus	Mammalia, Reptilia	Chordata
o_83	883 Bison bison, 1133 Bos indicus, 478 Bos mutus, 1207 Bos taurus, 643 Bubalus bubalis, 255 Capra hircus, 517 Ovis aries Texel, 477 Ovis aries musimon, 246 Pantholops hodgsonii, 2 Pogona vitticeps	Mammalia, Reptilia	Chordata

Family	Number of BovBs from each species	Eukaryotic	Eukaryotic
		Classes	Phyla
o_99	662 Bison bison, 632 Bos indicus, 204 Bos mutus, 680		
	Bos taurus, 547 Bubalus bubalis, 151 Capra hircus, 297	Mammalia,	Chordata
	Ovis aries Texel, 230 Ovis aries musimon, 143	Reptilia	Chordata
	Pantholops hodgsonii, 1 Python bivittatus		

Amino acid RT domains

CROSS-PHYLUM clusters

r_0	1 Adineta vaga, 29 Chrysochloris asiatica, 365		
	Elephantulus edwardii, 99 Loxodonta africana, 3	Arachnida,	Arthropoda,
	Mesobuthus martensii, 1 Ornithorhynchus anatinus,	Bdelloidea,	Chordata,
	163 Orycteropus afer, 6 Procavia capensis, 81	Mammalia	Rotifera
	Trichechus manatus		
	359 Anolis carolinensis, 2 Bos indicus, 1 Bos mutus, 6	Actinoptopycii	
	Bos taurus, 1 Bubalus bubalis, 1 Capra hircus, 1	Actinopterygii,	Anthonomodo
r_10	Lepisosteus oculatus, 1 Locusta migratoria, 3 Ovis	Insecta,	Arthropoda,
	aries Texel, 3 Ovis aries musimon, 3 Pantholops	Mammalia,	Chordata
	hodgsonii, 8 Pogona vitticeps, 3 Vipera berus	Reptilia	
r_12	1 Centruroides exilicauda, 3 Helobdella robusta, 14	Arachnida,	Annelida,
1_12	Mesobuthus martensii	Clitellata	Arthropoda
	5919 Bison bison, 13181 Bos indicus, 1463 Bos mutus,		
	14379 Bos taurus, 3150 Bubalus bubalis, 336 Capra	Insecta,	
r_2	hircus, 1 Cimex lectularius, 2 Ophiophagus hannah,	Mammalia,	Arthropoda,
1_2	6467 Ovis aries Texel, 2092 Ovis aries musimon, 1437		Chordata
	Pantholops hodgsonii, 38 Pogona vitticeps, 31 Vipera	Reptilia	
	berus		
r_80	330 Bison bison, 498 Bos indicus, 54 Bos mutus, 525		
	Bos taurus, 177 Bubalus bubalis, 26 Capra hircus, 3	Insecta,	Arthropoda,
	Cimex lectularius, 5 Ophiophagus hannah, 97 Ovis	Mammalia.	Chordata
	aries Texel, 69 Ovis aries musimon, 18 Pantholops	Reptilia	Chordata
	hodgsonii, 682 Pogona vitticeps, 221 Vipera berus		

CROSS-CLASS clusters

r_141	1 Lepisosteus oculatus, 1 Pogona vitticeps	Actinopterygii, Reptilia	Chordata
r_153	1 Macropus eugenii, 1 Ophiophagus hannah, 3 Pogona	Mammalia,	Chordata
	vitticeps, 2 Vipera berus	Reptilia	
r_161	1 Bison bison, 2 Bos indicus, 1 Capra hircus, 1 Ovis	Mammalia,	Chordata
	aries Texel, 1 Vipera berus	Reptilia	
	296 Bison bison, 518 Bos indicus, 65 Bos mutus, 509		
r_21	Bos taurus, 144 Bubalus bubalis, 14 Capra hircus, 277	Mammalia,	Chordata
1_21	Ovis aries Texel, 102 Ovis aries musimon, 90	Reptilia	Chordata
	Pantholops hodgsonii, 1 Vipera berus		
	22 Bison bison, 29 Bos indicus, 16 Bos mutus, 19 Bos		
r_25	taurus, 21 Bubalus bubalis, 6 Capra hircus, 16 Ovis	Mammalia,	Cl 1 - 4 -
	aries Texel, 16 Ovis aries musimon, 4 Pantholops	Reptilia	Chordata
	hodgsonii, 2 Pogona vitticeps		

Family	Number of BovBs from each species	Eukaryotic Classes	Eukaryotic Phyla
r_36	1 Bison bison, 1 Bos mutus, 3 Bos taurus, 1 Capra hircus, 1 Ovis aries Texel, 2 Ovis aries musimon, 1 Pantholops hodgsonii, 159 Pogona vitticeps, 1 Python bivittatus, 14 Vipera berus	Mammalia, Reptilia	Chordata
r_58	44 Bison bison, 39 Bos indicus, 14 Bos mutus, 40 Bos taurus, 17 Bubalus bubalis, 13 Capra hircus, 22 Ovis aries Texel, 28 Ovis aries musimon, 5 Pantholops hodgsonii, 1 Vipera berus	Mammalia, Reptilia	Chordata

Table S6: L1 HT candidate clusters

Table S6: The same method was used to perform all-against-all clustering of L1 elements and find discordant groupings. Clusters were kept if they contained L1s from two or more different Eukaryotic Classes and passed the *in silico* validation tests. The clustering was run three times: first, using nucleotide L1 sequences between 3-9kb in length; second, using nucleotide open reading frames found within the L1s; and third, using amino acid reverse-transcriptase domains only. Some clusters looked interesting but were dismissed either because the L1s were located on short scaffolds (marked as likely contamination), or because the ORFs did not contain any known functional domains (marked as likely artifacts).

Family	Number of L1s from each species	Eukaryotic Classes	Eukaryotic Phyla
Nucleotid	e L1 sequences		·
CROSS-P	HYLUM clusters		
c_220	52 Crassostrea gigas, 2 Lottia gigantea, 1 Saccoglossus kowalevskii, 14 Strongylocentrotus purpuratus	Bivalvia, Gastropoda, Enteropneusta, Echinoida	Mollusca, Hemichordata, Echinodermata
c_25	2 Anguilla anguilla, 8 Crassostrea gigas, 129 Danio rerio	Actinopterygii, Bivalvia	Chordata, Mollusca
CROSS-C	CLASS clusters		_
c_26	6 Alligator mississippiensis, 3 Alligator sinensis, 11 Apalone spinifera, 7 Carcharhinus brachyurus, 159 Chelonia mydas, 184 Chrysemys picta, 3 Crocodylus porosus, 3 Gavialis gangeticus, 8 Latimeria chalumnae, 2 Lethenteron camtschaticum, 49 Pelodiscus sinensis, 1 Petromyzon marinus	Sauropsida, Chon- drichthyes, Sarcopterygii, Hyperoartia	Chordata
c_41	40 Latimeria chalumnae, 1 Oryzias latipes	Sarcopterygii, Actinopterygii	Chordata
c_65	105 Anolis carolinensis, 11 Ophiophagus hannah, 9 Pogona vitticeps, 4 Vipera berus, 2 Xenopus laevis	Sauropsida, Amphibia	Chordata
Interestin	g but likely contamination (short scaffolds)		
c_14096	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
c_162	1 Protopolystoma xenopodis, 41 Xenopus laevis, 35 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes
c_2488	1 Drosophila ficusphila, 2 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
c_257	1 Cricetulus griseus, 16514 Mus musculus, 18274 Rattus norvegicus, 1 Schistosoma japonicum	Mammalia, Trematoda	Chordata, Platy- helminthes
c_5994	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
c_8560	1 Drosophila ficusphila, 5 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata

Nucleotide ORFs

 ${\bf CROSS\text{-}PHYLUM\ clusters}$

Family	Number of L1s from each species	Eukaryotic Classes	Eukaryotic Phyla
o_374	99 Crassostrea gigas, 1 Lottia gigantea, 2 Priapulus caudatus	Bivalvia, Gastropoda, Priapulimor- pha	Mollusca, Priapulida
0_666	26 Crassostrea gigas, 1 Priapulus caudatus	Bivalvia, Pria- pulimorpha	Mollusca, Priapulida
CROSS-C	CLASS clusters		
o_295	69 Alligator mississippiensis, 97 Alligator sinensis, 168 Apalone spinifera, 1098 Chelonia mydas, 1210 Chrysemys picta, 50 Crocodylus porosus, 70 Gavialis gangeticus, 17 Latimeria chalumnae, 338 Pelodiscus sinensis	Sauropsida, Sarcopterygii	Chordata
o_353	125 Crassostrea gigas, 2 Lottia gigantea	Bivalvia, Gastropoda	Mollusca
o_520	2 Lytechinus variegatus, 3 Patiria miniata, 7 Strongylocentrotus purpuratus	Echinoidea, Asteroidea	Echinodermata
o_559	1 Lytechinus variegatus, 2 Patiria miniata	Echinoidea, Asteroidea	Echinodermata
o_757	10 Crassostrea gigas, 1 Lottia gigantea	Bivalvia, Gastropoda	Mollusca
Interestin	g but likely artifacts (no functional domains)		
o_13226	1 Anopheles minimus, 1 Blattella germanica, 2	Insecta,	Arthropoda,
0_13220	Caenorhabditis elegans	Chromadorea	Nematoda
o_13299	3 Anopheles arabiensis, 1 Anopheles merus, 1	Insecta,	Arthropoda,
0_13299	Anopheles quadriannulatus, 1 Caenorhabditis 11	Chromadorea	Nematoda
o_15486	1 Anopheles albimanus, 1 Anopheles atroparvus, 2 Anopheles darlingi, 1 Anopheles funestus, 1 Anopheles sinensis, 1 Haemonchus contortus	Insecta, Chromadorea	Arthropoda, Nematoda
o_18254	1 Aedes aegypti, 1 Anopheles albimanus, 1 Caenorhabditis brenneri, 1 Caenorhabditis japonica, 1 Drosophila takahashii, 1 Drosophila virilis, 1 Manduca sexta, 1 Mesobuthus martensii, 1 Steinernema monticolum, 1 Trichogramma pretiosum	Insecta, Chromadorea, Arachnida	Arthropoda, Nematoda
o_21039	1 Caenorhabditis elegans, 2 Centruroides exilicauda	Chromadorea, Arachnida	Arthropoda, Nematoda
o_22604	2 Anopheles culicifacies, 2 Anopheles dirus, 1 Anopheles farauti, 1 Anopheles sinensis, 3 Caenorhabditis 11, 1 Caenorhabditis angaria, 1 Caenorhabditis brenneri, 1 Daphnia pulex, 1 Drosophila bipectinata, 1 Drosophila grimshawi, 1 Drosophila rhopaloa, 1 Melitaea cinxia	Insecta, Chromadorea, Branchiopoda	Arthropoda, Nematoda
o_27328	1 Anopheles arabiensis, 1 Anopheles farauti, 1 Caenorhabditis elegans, 1 Cephus cinctus	Insecta, Chromadorea	Arthropoda, Nematoda
o_4989	3 Drosophila biarmipes, 1 Necator americanus, 1 Strigamia maritima	Insecta, Chromadorea, Chilopoda	Arthropoda, Nematoda

Family	Number of L1s from each species	Eukaryotic Classes	Eukaryotic Phyla
o_18911	1 Anopheles arabiensis, 1 Anopheles epiroticus, 1 Anopheles gambiae, 1 Anopheles melas, 1 Anopheles merus, 1 Anopheles quadriannulatus, 1 Mesobuthus martensii	Insecta, Arachnida	Arthropoda
Interestin	g but likely contamination (short scaffolds)		•
o_294	1 Alligator mississippiensis, 6 Latimeria chalumnae, 1 Lethenteron camtschaticum, 2 Protopolystoma xenopodis, 130 Xenopus laevis, 59 Xenopus tropicalis	Sauropsida, Sarcopterygii, Hyperoartia, Amphibia, Monogenea	Chordata, Platy- helminthes
o_1103	2 Drosophila ficusphila, 1 Lytechinus variegatus, 3 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_11511	1 Drosophila ficusphila, 6 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_11634	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_12034	1 Drosophila ficusphila, 3 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_12376	1 Drosophila ficusphila, 2 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_12900	1 Protopolystoma xenopodis, 1 Xenopus laevis	Amphibia, Monogenea	Chordata, Platy- helminthes
o_13327	1 Fusarium oxysporum, 1 Pteronotus parnellii	Sordari- omycetes, Mammalia	Ascomycota, Chordata
o_15461	1 Drosophila ficusphila, 3 Lytechinus variegatus, 8 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_1822	2 Drosophila ficusphila, 1 Lytechinus variegatus, 25 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_1886	1 Drosophila ficusphila, 6 Lytechinus variegatus, 3 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_19358	1 Drosophila ficusphila, 3 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_19697	1 Protopolystoma xenopodis, 6 Xenopus laevis	Amphibia, Monogenea	Chordata, Platy- helminthes
o_20044	1 Drosophila ficusphila, 3 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_2101	2 Drosophila ficusphila, 2 Lytechinus variegatus, 12 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
o_2734	2 Protopolystoma xenopodis, 80 Xenopus laevis, 34 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes
0_29	1 Protopolystoma xenopodis, 69 Xenopus laevis, 121 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes

Family	Number of L1s from each species	Eukaryotic	Eukaryotic
raininy		Classes	Phyla
o_3056	2 Drosophila ficusphila, 2 Lytechinus variegatus, 25	Insecta,	Arthropoda,
0_3030	Strongylocentrotus purpuratus	Echinoidea	Echinodermata
	0 D 4 1 4 1 1 14 V 1 1 1 04	A 1-:1-:-	Chordata,
o_423	2 Protopolystoma xenopodis, 14 Xenopus laevis, 64	Amphibia,	Platy-
	Xenopus tropicalis	Monogenea	helminthes
o_488	1 Drosophila ficusphila, 5 Lytechinus variegatus, 35	Insecta,	Arthropoda,
0_400	Strongylocentrotus purpuratus	Echinoidea	Echinodermata
o_504	7 Drosophila ficusphila, 8 Lytechinus variegatus, 69	Insecta,	Arthropoda,
0_504	Strongylocentrotus purpuratus	Echinoidea	Echinodermata
	5 Protopolystoma xenopodis, 36 Xenopus laevis, 1 Xenopus tropicalis	Amphibia, Monogenea	Chordata,
o_575			Platy-
			helminthes
o_651	1 Drosophila ficusphila, 10 Lytechinus variegatus, 13	Insecta,	Arthropoda,
0_031	Strongylocentrotus purpuratus	Echinoidea	Echinodermata
o_691	2 Drosophila ficusphila, 8 Lytechinus variegatus, 57	Insecta,	Arthropoda,
0_091	Strongylocentrotus purpuratus	Echinoidea	Echinodermata
	2 Fusarium oxysporum, 1 Pteronotus parnellii	Sordari-	Aggomygota
o_7039		omycetes,	Ascomycota,
		Mammalia	Chordata

Amino acid RT domains

CROSS-PHYLUM clusters

r_1348	3 Branchiostoma floridae, 2 Mnemiopsis leidyi	Cephalochor- data, Tentaculata	Chordata, Ctenophora
r_2916	1 Branchiostoma floridae, 4 Saccoglossus kowalevskii	Cephalochor- data, Enteropneusta	Chordata, Hemichordata

CROSS-CLASS clusters

	1 Fraxinus excelsior, 4 Phoenix dactylifera	Mesangiosper-	
r_1111		mae,	Streptophyta
		Liliopsida	
	4 Carcharhinus brachyurus, 1 Latimeria chalumnae	Chon-	
r_1410		drichthyes,	Chordata
		Sarcopterygii	
r_609	2 Lytechinus variegatus, 3 Patiria miniata, 3	Echinoidea,	Echinodermata
r_009	Strongylocentrotus purpuratus	Asteroidea	Echinodermata
	10 Alligator mississippiensis, 14 Alligator sinensis, 9		
	Apalone spinifera, 60 Chelonia mydas, 141 Chrysemys	Sauropsida,	
r_67	picta, 4 Crocodylus porosus, 10 Gavialis gangeticus, 3	Sarcopterygii,	Chordata
	Latimeria chalumnae, 17 Pelodiscus sinensis, 1	Amphibia	
	Xenopus tropicalis		

Interesting but likely contamination (short scaffolds)

n 1012	1 Drosophila ficusphila, 2 Lytechinus variegatus, 4	Insecta,	Arthropoda,		
	r_1013	Strongylocentrotus purpuratus	Echinoidea	Echinodermata	1

Family	Number of L1s from each species	Eukaryotic Classes	Eukaryotic Phyla
r_1179	2 Protopolystoma xenopodis, 11 Xenopus laevis, 20 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes
r_1417	4 Drosophila ficusphila, 32 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_1779	1 Drosophila ficusphila, 1 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_1979	1 Colletotrichum higginsianum, 1 Colletotrichum orchidophilum, 1 Fusarium oxysporum, 1 Parastagonospora nodorum, 1 Pteronotus parnellii	Sordariomycetes, Dothideomycetes, Mammalia	Ascomycota, Chordata
r_2368	1 Drosophila ficusphila, 2 Lytechinus variegatus, 1 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_3622	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_3890	1 Fusarium oxysporum, 1 Pteronotus parnellii	Sordari- omycetes, Mammalia	Ascomycota, Chordata
r_4047	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_430	1 Drosophila ficusphila, 3 Lytechinus variegatus, 11 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_4915	1 Drosophila ficusphila, 1 Lytechinus variegatus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_498	1 Protopolystoma xenopodis, 1 Xenopus laevis, 23 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes
r_500	2 Protopolystoma xenopodis, 8 Xenopus laevis, 2 Xenopus tropicalis	Amphibia, Monogenea	Chordata, Platy- helminthes
r_58	46 Cricetulus griseus, 35 Mesocricetus auratus, 9 Microtus ochrogaster, 11274 Mus musculus, 1 Pan troglodytes, 16 Peromyscus maniculatus, 6522 Rattus norvegicus, 1 Schistosoma mansoni, 1 Schistosoma rodhaini, 2 Tetraodon nigroviridis	Mammalia, Trematoda, Actinopterygii	Chordata, Platy- helminthes
r_681	1 Drosophila ficusphila, 17 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata
r_917	1 Drosophila ficusphila, 1 Lytechinus variegatus, 13 Strongylocentrotus purpuratus	Insecta, Echinoidea	Arthropoda, Echinodermata