

Table S1 : Comprehensive list of species searched for MIF protein sequences. The table shows the number of typical MIF sequences identified, the general environment (terrestrial, freshwater or marine), the life-style (free-living autotrophs, heterotrophs, and animal- or plant-parasites), as well as a short description (e.g. brown algae, fungi parasite, etc.). The presence/absence of a sequenced genome at the time of the search is indicated. The MIF sequences selected for the phylogenic reconstructions are indicated. Finally, the number of ESTs available at the time of the study are shown for species that did not possess a sequenced genome.

Phyla	Species	MIF number	Environment	Life-style	Description	Sequenced Genome	Selected for phylogeny reconstruction	ESTs (Number)
<b>Cryptophyta</b>								
	<i>Chroomonas mesostigmatica</i>	0	marine	autotrophic species	algae	present	absent	
	<i>Cryptomonas paramecium</i>	0	marine	autotrophic species	algae	present	absent	
	<i>Guillardia theta</i>	2	marine	autotrophic species	algae	present	yes	
<b>Apusozoa</b>								
	<i>Thecamonas trahens</i>	0	marine	heterotrophic species	free living, biflagellate	present	absent	
<b>Parabasalia</b>								
	<i>Trichomonas vaginalis</i>	1	terrestrial	animal parasites	causes uro genital trichomonoze	present	yes	
<b>Haptophyta</b>								
	<i>Emiliania huxleyi</i>	1	marine	autotrophic species	algae, phytoplankton, causes blooms	present	yes	
<b>Rhizaria --&gt; Cercomonads</b>								
	<i>Bigelowiella natans</i>	0	marine	autotrophic species	model organisms, algae	present	absent	
<b>Rhizaria --&gt; Cercozoa</b>								
	<i>Lotharella oceanica</i>	0	marine	autotrophic species	chlorarachniophyte algae, plankton	present	absent	
	<i>Paulinella chromatophora</i>	0	freshwater	heterotrophic species	amoeba - free living - photosynthetic	present	absent	
	<i>Plasmodiophora brassicae</i>	0	terrestrial	plant parasites	causes clubroot	present	absent	
<b>Rhizaria --&gt; Foraminifera</b>								
	<i>Reticulomyxa filosa</i>	0	freshwater	heterotrophic species	foraminifers	present	absent	
<b>Excavates --&gt; Diplomonads</b>								
	<i>Giardia intestinalis</i>	2	terrestrial	animal parasites	causes giardiasis, flagellated parasite	present	yes	
	<i>Giardia lamblia</i>	2	terrestrial	animal parasites	causes giardiasis, flagellated parasite	present	yes	
	<i>Spironucleus salmonicida</i>	2	terrestrial	animal parasites	fish parasite, systemic infection in salmonid fish	present	yes	
<b>Excavates --&gt; Kinetoplastids</b>								
	<i>Leishmania braziliensis</i>	1	terrestrial	animal parasites	causes leishmaniasis	present	no	
	<i>Leishmania donovani</i>	2	terrestrial	animal parasites	causes leishmaniasis	present	yes	
	<i>Leishmania infantum</i>	2	terrestrial	animal parasites	causes leishmaniasis	present	yes	
	<i>Leishmania major</i>	2	terrestrial	animal parasites	causes leishmaniasis	present	yes	
	<i>Leishmania mexicana</i>	2	terrestrial	animal parasites	causes leishmaniasis	present	yes	
	<i>Leishmania panamensis</i>	1	terrestrial	animal parasites	causes leishmaniasis	present	no	
	<i>Phytomonas sp</i>	0	terrestrial	plant parasites	conveyed by bugs	present	absent	
	<i>Strigomonas culicis</i>	1	terrestrial	animal parasites	infects and colonizes the <i>Aedes aegypti</i>	present	yes	
	<i>Trypanosoma brucei</i>	0	terrestrial	animal parasites	causes trypanosomiasis, flagellate parasite	present	absent	
	<i>Trypanosoma cruzi</i>	0	terrestrial	animal parasites	causes trypanosomiasis, flagellate parasite	present	absent	
	<i>Trypanosoma rangeli</i>	0	terrestrial	animal parasites	causes trypanosomiasis, flagellate parasite	present	absent	

<b>Excavates --&gt; Heterolobozoa</b>								
	<i>Naegleria gruberi</i>	0	fresh water	heterorophic species	amoeba, free - living organism	present	absent	
<b>Amoebozoa --&gt; Mycetozoa</b>								
	<i>Dictyostelium discoideum</i>	0	terrestrial	heterorophic species	soil - living amoeba	present	absent	
	<i>Dictyostelium fasciculatum</i>	0	terrestrial	heterorophic species	soil - living amoeba	present	absent	
	<i>Dictyostelium purpureum</i>	0	terrestrial	heterorophic species	soil - living amoeba	present	absent	
	<i>Polysphondylium pallidum</i>	0	terrestrial	heterorophic species	amoeba	present	absent	
<b>Amoebozoa --&gt; Archamoebae</b>								
	<i>Entamoeba dispar</i>	0	terrestrial	animal parasites	pathogenic amoeba, causes amoebiasis, dysentery	present	absent	
	<i>Entamoeba histolytica</i>	1	terrestrial	animal parasites	pathogenic amoeba, causes amoebiasis, dysentery	present	yes	
	<i>Entamoeba invadens</i>	2	terrestrial	animal parasites	pathogenic amoeba, causes amoebiasis, dysentery	present	yes	
	<i>Entamoeba nuttalli</i>	0	terrestrial	animal parasites	pathogenic amoeba, causes amoebiasis, dysentery	present	absent	
<b>Amoebozoa --&gt; Discosea</b>								
	<i>Acanthamoeba castellanii</i>	0	fresh water	animal parasites	amoeba, bacterivores, cause acanthamebiasis	present	absent	
<b>Straminipila</b>								
	<i>Blastocystis hominis</i>	0	terrestrial	animal parasites	cause stomach problem in humans	present	absent	
<b>Straminipila --&gt; Synurophyceae</b>								
	<i>Poteroiochromonas</i> sp.	1	freshwater	autotrophic species	heterokont algae, photosynthetic	absent	yes	0
	<i>Synura</i> sp.	1	freshwater	autotrophic species	heterokont algae, photosynthetic	absent	no	0
<b>Straminipila --&gt; Bacillariophyta</b>								
	<i>Chaetoceros affinis</i>	1	marine	autotrophic species	diatom (brown algae), phytoplankton	absent	no	0
	<i>Leptocylindrus danicus</i>	1	marine	autotrophic species	diatom (brown algae), phytoplankton	absent	no	0
	<i>Nitzschia</i> sp.	1	marine	autotrophic species	diatom (brown algae), phytoplankton, produces neurotoxin, grow at cold temperature	absent	yes	0
	<i>Phaeodactylum tricornutum</i>	1	marine	autotrophic species	diatom (brown algae) phytoplankton	present	yes	
	<i>Thalassiosira oceanica</i>	1	marine	autotrophic species	phytoplankton, diatom (brown algae), symbiosis with bacteria	present	yes	
<b>Straminipila --&gt; Oomycetes</b>								
	<i>Albugo candida</i>	0	terrestrial	plant parasites	obligatory biotrophic plant parasite, cause white blister rust	present	absent	
	<i>Aphanomyces astaci</i>	0	terrestrial	animal parasites	crayfish parasites,	present	absent	
	<i>Aphanomyces invadans</i>	0	terrestrial	animal parasites	fish parasite	present	absent	
	<i>Hyaloperonospora arabidopsidis</i>	0	terrestrial	plant parasites	causes mildew	present	absent	
	<i>Phytophthora capsici</i>	4	terrestrial	plant parasites	mildew	absent	yes	58.277
	<i>Phytophthora cinamoni</i>	4	terrestrial	plant parasites	mildew	absent	yes	330.482
	<i>Phytophthora infestans</i>	2	terrestrial	plant parasites	mildew	present	yes	
	<i>Phytophthora kernoviae</i>	2	terrestrial	plant parasites	mildew	present	yes	
	<i>Phytophthora lateralis</i>	3	terrestrial	plant parasites	mildew	present	yes	

	<i>Phytophthora nicotianae</i>	3	terrestrial	plant parasites	cause root rot, crown rot, leaf infection	present	yes	
	<i>Phytophthora parasitica</i>	3	terrestrial	plant parasites	soilborne pathogen	present	yes	
	<i>Phytophthora ramorum</i>	4	terrestrial	plant parasites	causes the disease sudden oak death (SOD)	present	yes	
	<i>Phytophthora sojae</i>	5	terrestrial	plant parasites	causes damping - off	present	yes	
	<i>Plasmopara halstedii</i>	1	terrestrial	plant parasites	causes sunflowers mildew	present	yes	
	<i>Pythium aphanidermatum</i>	4	terrestrial	plant parasites	mildew	present	yes	
	<i>Pythium arrhenomanes</i>	2	terrestrial	plant parasites	mildew	present	yes	
	<i>Pythium irregulare</i>	2	terrestrial	plant parasites	mildew	present	yes	
	<i>Pythium iwayamai</i>	4	terrestrial	plant parasites	mildew	present	yes	
	<i>Pythium ultimum</i>	4	terrestrial	plant parasites	mildew	present	yes	
	<i>Pythium vexans</i>	4	terrestrial	plant parasites	mildew	present	yes	
	<i>Saprolegnia diclina</i>	0	terrestrial	animal parasites	amphibian and fish parasites, causes oomycosis, secondary pathogen	present	absent	
<b>Straminipila --&gt; Phaeophyceae</b>								
	<i>Ectocarpus siliculosus</i>	0	marine	autotrophic species	brown algae	present	absent	
	<i>Sargassum vulgare</i>	1	marine	autotrophic species	brown algae	absent	no	0
<b>Straminipila --&gt; Pelagophyceae</b>								
	<i>Aureococcus anophagefferens</i>	1	marine	autotrophic species	algae, causes algal blooms	present	yes	
	<i>Aureoumbra lagunensis</i>	1	marine	heterotrophic species	picoplankton	absent	yes	0
<b>Straminipila --&gt; Eustigmatophyceae</b>								
	<i>Nannochloropsis gaditana</i>	2	fresh water	autotrophic species	microalgae, phytoplankton	present	yes	
<b>Alveolata --&gt; Dinophyceae</b>								
	<i>Alexandrium tamarense</i>	1	marine	autotrophic species	phytoplankton, algae	absent	no	10.887
	<i>Gambierdiscus excentricus</i>	1	marine	autotrophic species	brown macroalgae, produce toxins, algae	absent	no	0
	<i>Lingulodinium polyedrum</i>	1	marine	autotrophic species	algae, motile dinoflagellates, production of Yessotoxins (YTXs)	absent	no	3.640
	<i>Perkinsus marinus</i>	0	marine	animal parasites	pathogen of oysters, , algae	present	absent	
	<i>Symbiodinium minutum</i>	2	marine	autotrophic species	endosymbiotic dinoflagellates, algae	present	yes	
<b>Alveolata --&gt; Apicomplexa</b>								
	<i>Babesia bigemina</i>	0	terrestrial	animal parasites	causes babesiosis	present	absent	
	<i>Babesia bovis</i>	0	terrestrial	animal parasites	causes babesiosis	present	absent	
	<i>Cryptosporidium hominis</i>	0	terrestrial	animal parasites	obligate humans parasite, causes cryptosporidiosis	present	absent	
	<i>Eimeria acervulina</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria brunetti</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria maxima</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria mitis</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria necatrix</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria praecox</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Eimeria tenella</i>	1	terrestrial	animal parasites	causes coccidiosis	present	yes	
	<i>Gregarina niphandrodes</i>	1	terrestrial	animal parasites	invertebrate parasite	present	yes	
	<i>Hammondia hammondi</i>	1	terrestrial	animal parasites	dogs parasite	present	yes	
	<i>Neospora caninum</i>	1	terrestrial	animal parasites	causes neosporosis	present	yes	
	<i>Plasmodium berghei</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium chabaudi</i>	1	terrestrial	animal parasites	causes malaria	present	yes	

	<i>Plasmodium cynomolgi</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium falciparum</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium fragile</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium inui</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium knowlesi</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium reichenowi</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium vinckei</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium vivax</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Plasmodium yoelii</i>	1	terrestrial	animal parasites	causes malaria	present	yes	
	<i>Theileria annulata</i>	0	terrestrial	animal parasites	causes theileriosis (east coast fever)	present	absent	
	<i>Theileria orientalis</i>	0	terrestrial	animal parasites	causes theileriosis (east coast fever)	present	absent	
	<i>Theileria parva</i>	0	terrestrial	animal parasites	causes theileriosis (east coast fever)	present	absent	
	<i>Toxoplasma gondii</i>	1	terrestrial	animal parasites	causes toxoplasmosis	present	yes	
<b>Alveolata --&gt; Chromerida</b>								
	<i>Vitrella brassicaformis</i>	2	marine	autotrophic species	isolated from the Great Barrier Reef, mixotrophe	present	yes	
<b>Alveolata --&gt; Ciliophora</b>								
	<i>Ichthyophthirius multifiliis</i>	0	fresh water	animal parasites	fish parasite (causes ichthyophthiriosis)	present	absent	
	<i>Oxytricha trifallax</i>	0	fresh water	heterorophic species	free living, very mobile	present	absent	
	<i>Paramecium tetraurelia</i>	0	fresh water	heterorophic species	phagocytose bacteria	present	absent	
	<i>Stylonichia lemnae</i>	0	fresh water	heterorophic species	free living, carnivorous (eat other protozoans and bacteria)	present	absent	
	<i>Tetrahymena thermophila</i>	0	fresh water	heterorophic species	commensalistic	present	absent	
<b>Opisthokonts --&gt; Ichthyospora</b>								
	<i>Capsaspora owczarzaki</i>	0	fresh water	animal parasites	amoeboid, snail parasite and kill the sporocysts of flatworm	present	absent	
<b>Opisthokonts --&gt; Nucleariids</b>								
	<i>Fonticula alba</i>	0	terrestrial	heterorophic species	amoeboid - free living	present	absent	
<b>Opisthokonts --&gt; Choanoflagellata</b>								
	<i>Monosiga brevicollis</i>	0	marine	heterorophic species	free living, nanoplankton	present	absent	
	<i>Salpingoeca rosetta</i>	1	fresh water	heterorophic species	free living	present	yes	
<b>Opisthokonts --&gt; Dikarya --&gt; Basidiomycota --&gt; Pucciniomycotina</b>								
	<i>Agaricostilbum hyphaenes</i>	0	terrestrial	heterorophic species	occurs commonly on palm litter, saprophytic fungi	present	absent	
	<i>Chionosphaera apobasidialis</i>	0	terrestrial	plant parasites	parasite of lichens	present	absent	
	<i>Cronartium quercuum</i>	0	terrestrial	plant parasites	causes plant diseases of pinus	present	absent	
	<i>Erythrobasidium hasegawianum</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Heterogastridium pycnidioideum</i>	0	terrestrial	animal parasites	fungi parasites	present	absent	
	<i>Hyalopycnis blepharistoma</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Leucosporidiella creatinivora</i>	0	terrestrial	heterorophic species	saprophytic fungi, isolated from permafrost soil	present	absent	
	<i>Melampsora laricis</i>	0	terrestrial	plant parasites	most devastating and widespread pathogen of poplars	present	absent	
	<i>Meredithblackwellia eburnea</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	

	<i>Mixia osmundae</i>	0	terrestrial	plant parasites	intracellular parasite of ferns, obligatory plant pathogens	present	absent	
	<i>Naiadella fluitans</i>	0	fresh water	animal parasites	mycoparasitic	present	absent	
	<i>Naohidea sebacea</i>	0	terrestrial	animal parasites	mycoparasitic	present	absent	
	<i>Puccinia graminis</i>	0	terrestrial	plant parasites	causes stem rusts, obligatory plant pathogens	present	absent	
	<i>Puccinia triticina</i>	0	terrestrial	plant parasites	causes wheat leaf rust, obligatory plant pathogens	present	absent	
	<i>Rhodospodium toruloides</i>	0	terrestrial	animal parasites	isolated from wood pulp from conifers, link to bovine mastitis	present	absent	
	<i>Rhodotorula graminis</i>	0	terrestrial	animal parasites	causes infections in animals	present	absent	
	<i>Rhodotorula minuta</i>	0	terrestrial	animal parasites	human parasite	present	absent	
	<i>Septobasidium sp.</i>	0	terrestrial	animal parasites	entomopathogens	present	absent	
	<i>Sporobolomyces pararoseus</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
<b>Dikarya --&gt; Basidiomycota --&gt; Ustilaginomycotina</b>								
	<i>Acaromyces ingoldii</i>	0	terrestrial	heterorophic species	causes mites mortality, saprophytic fungi	present	absent	
	<i>Ceraceosorus guamensis</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Exobasidium vaccinii</i>	0	terrestrial	plant parasites	plant pathogen that grow on Ericaceae	present	absent	
	<i>Jaminalia sp.</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Malassezia globosa</i>	0	terrestrial	animal parasites	opportunistic pathogens of humans, causes skin disorders	present	absent	
	<i>Malassezia sympodialis</i>	0	terrestrial	animal parasites	opportunistic pathogens of humans, causes skin disorders	present	absent	
	<i>Meira mitonrushii</i>	0	terrestrial	heterorophic species	saprophytic fungi, endophyte	present	absent	
	<i>Melanotaenium endogenum</i>	0	terrestrial	plant parasites	Bedstraw smut, pathogen of Galium mollugo	present	absent	
	<i>Pseudozyma antarctica</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Pseudozyma hubeiensis</i>	0	terrestrial	plant parasites	epiphytic fungus	present	absent	
	<i>Sporisorium reilianum</i>	0	terrestrial	plant parasites	Head Smut pathogen of Sorghum	present	absent	
	<i>Testicularia cyperi</i>	0	terrestrial	plant parasites	colonizes Rhynchospora sp, plant pathogens	present	absent	
	<i>Tilletiaria anomala</i>	0	terrestrial	heterorophic species	saprophytic fungi - decayed wood	present	absent	
	<i>Tilletiopsis washingtonensis</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Ustilago maydis</i>	0	terrestrial	plant parasites	plant pathogen, causes corn smut	present	absent	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Agaricales</b>								
	<i>Agaricus bisporus</i>	1	terrestrial	heterorophic species	portobello mushroom, saprophytic fungi	present	yes	
	<i>Amanita muscaria</i>	1	terrestrial	heterorophic species	fly agaric or fly amanita, mycorrhizal	present	yes	
	<i>Armillaria mellea</i>	1	terrestrial	plant parasites	honney fungus, plant pathogen	absent	yes	30
	<i>Coprinopsis cinerea</i>	1	terrestrial	heterorophic species	saprophytic fungi, gray shap	present	yes	
	<i>Cortinarius glaucopus</i>	0	terrestrial	plant parasites	saprophytic fungi, blue-foot webcap, ectomycorrhizal	present	absent	
	<i>Fistulina hepatica</i>	1	terrestrial	plant parasites	beefsteack fungus, parasitic	present	yes	

	<i>Galerina marginata</i>	1	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal - produces amatoxins	present	yes	
	<i>Gymnopus luxurians</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Hebeloma cylindrosporum</i>	1	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal	present	yes	
	<i>Hypholoma sublateritium</i>	1	terrestrial	heterorophic species	saprophytic fungi, brick cap	present	yes	
	<i>Hypsizygus marmoreus</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Laccaria amethystina</i>	1	terrestrial	plant parasites	amethyst deceiver, mycorrhizal	present	yes	
	<i>Laccaria bicolor</i>	1	terrestrial	plant parasites	ectomycorrhizal	present	yes	
	<i>Leucoagaricus gongylophorus</i>	1	terrestrial	heterorophic species	saprophytic fungi - associates with ants	present	yes	
	<i>Panellus stipticus</i>	0	terrestrial	heterorophic species	saprophytic fungi, bitter oyster	present	absent	
	<i>Pleurotus ostreatus</i>	1	terrestrial	heterorophic species	saprophytic fungi - white -rot wood decay fungus	present	yes	
	<i>Rhodocollybia butyracea</i>	0	terrestrial	heterorophic species	saprophytic fungi, butterfly collybia	present	absent	
	<i>Schizophyllum commune</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Termitomyces sp. J132</i>	1	terrestrial	heterorophic species	saprophytic fungi - food source for termites	present	no	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Atheliales</b>								
	<i>Piloderma croceum</i>	1	terrestrial	plant parasites	ectomycorrhizal	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Auriculariales</b>								
	<i>Auricularia subglabra</i>	1	terrestrial	heterorophic species	saprophytic fungi, produce a white rot on dead wood	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Polyporales</b>								
	<i>Bjerkandera adusta</i>	1	terrestrial	plant parasites	saprophytic fungi, smoky polypore, plant pathogen, cause white rot in live trees	present	yes	
	<i>Ceriporiopsis subvermispora</i>	1	terrestrial	heterorophic species	saprophytic fungi, crust fungi that cause a white rot	present	yes	
	<i>Daedalea quercina</i>	1	terrestrial	heterorophic species	saprophytic fungi, oak mazelgill, causes brown rot	present	yes	
	<i>Dichomitus squalens</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Exidia glandulosa</i>	1	terrestrial	heterorophic species	black jelly roll, saprophytic fungi	present	yes	
	<i>Fibroporia radiculosa</i>	0	terrestrial	heterorophic species	saprophytic fungi - brown rot fungus	present	absent	
	<i>Fibulorhizoctonia sp.</i>	0	terrestrial	heterorophic species	cuckoo fungus, saprophytic fungi, use by termite	present	absent	
	<i>Fomitopsis pinicola</i>	1	terrestrial	heterorophic species	stem decay fungus, red belt conk, saprophytic fungi	present	yes	
	<i>Ganoderma lucidum</i>	1	terrestrial	heterorophic species	saprophytic fungi, grow on both coniferous and hardwood species	present	yes	
	<i>Gelatoporia subvermispora</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Laetiporus sulphureus</i>	1	terrestrial	heterorophic species	sulphur polypore, saprophytic fungi	present	yes	
	<i>Lentinus tigrinus</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Phanerochaete carmosa</i>	1	terrestrial	plant parasites	plant pathogen that infects plane trees	present	yes	
	<i>Phlebiopsis gigantea</i>	1	terrestrial	heterorophic species	saprophytic fungi, causes white rot on conifer	present	yes	



	<i>Heterobasidion irregulare</i>	1	terrestrial	plant parasites	tree root rotting pathogenic fungus	present	yes	
	<i>Peniophora sp.</i>	1	terrestrial	plant parasites	plant pathogens	present	yes	
	<i>Stereum hirsutum</i>	1	terrestrial	plant parasites	false turkey tail, plant pathogen infecting peach trees	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Jaapiales</b>								
	<i>Jaapia argillacea</i>	2	terrestrial	heterorophic species	saprophytic fungi, produces a type of brown rot	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Gomphales</b>								
	<i>Ramaria rubella</i>	1	terrestrial	plant parasites	mycorrhizal, red coral	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Geastrales</b>								
	<i>Sphaerobolus stellatus</i>	1	terrestrial	heterorophic species	saprophytic fungi, shotgun or cannonball fungus	present	yes	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Tremellomycetes</b>								
	<i>Cryptococcus gattii</i>	0	terrestrial	animal parasites	cause cryptococcosis	present	absent	
	<i>Cryptococcus neoformans</i>	0	terrestrial	animal parasites	cause cryptococcosis	present	absent	
	<i>Dioszegia cryoxerica</i>	0	terrestrial	heterorophic species	psychrophilic yeasts from polar desert soils	present	absent	
	<i>Fellomyces penicillatus</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Fibulobasidium inconspicuum</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Sistotremastrum suecicum</i>	0	terrestrial	heterorophic species	saprophytic fungi, cause a brown rot of various tree species	present	absent	
	<i>Tremella enphala</i>	0	terrestrial	animal parasites	parasitic on another species of fungus	present	absent	
	<i>Tremella mesenterica</i>	0	terrestrial	animal parasites	yellow brain, parasite of wood decay fungi	present	absent	
	<i>Trichosporon oleaginosus</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Cantharellales</b>								
	<i>Botryobasidium botryosum</i>	0	terrestrial	heterorophic species	saprophytic fungis	present	absent	
	<i>Cantharellus anzutake</i>	0	terrestrial	plant parasites	golden chanterelle, ectomycorrhizal	present	absent	
	<i>Clavulina sp.</i>	0	terrestrial	plant parasites	saprophytic fungis - ectomycorrhizal	present	absent	
	<i>Hydnum rufescens</i>	0	terrestrial	plant parasites	symbiotic fungi identified in orchids	present	absent	
	<i>Rhizoctonia solani</i>	1	terrestrial	plant parasites	plant pathogenus fungi, causes collar and root rot	present	yes	
	<i>Tulasnella calospora</i>	0	terrestrial	plant parasites	mychorhizien	present	absent	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Wallemiomycetes</b>								
	<i>Wallemia ichthyophaga</i>	0	terrestrial	heterorophic species	halophilic - saprophytic fungi	present	absent	
	<i>Wallemia sebi</i>	0	terrestrial	heterorophic species	xerophilic - saprophytic fungi	present	absent	
<b>Dikarya --&gt; Basidiomycota --&gt; Agaricomycotina --&gt; Dacrymycetales</b>								
	<i>Calocera cornea</i>	0	terrestrial	heterorophic species	saprophytic fungi - grows on decaying wood	present	absent	
	<i>Calocera viscosa</i>	0	terrestrial	heterorophic species	saprophytic fungi - yellow stagshorn	present	absent	
	<i>Dacryopinax primogenitus</i>	0	terrestrial	heterorophic species	saprophytic fungi - causes extensive decay in dead wood	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Pezizomycetes</b>								
	<i>Ascobolus immersus</i>	0	terrestrial	heterorophic species	coprophilous	present	absent	
	<i>Ascodesmis nigricans</i>	0	terrestrial	heterorophic species	coprophilous	present	absent	
	<i>Caloscypha fulgens</i>	0	terrestrial	plant parasites	saprophytic fungi - infect dormant seeds of Picea sitchensis - spring orange peel fungus	present	absent	



	<i>Choiromyces venosus</i>	0	terrestrial	plant parasites	ectomycorrhizal - pig truffle	present	absent	
	<i>Gyromitra esculenta</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Kalaharituber pfeilii</i>	0	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal	present	absent	
	<i>Morchella importuna</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Plectania melastoma</i>	0	terrestrial	heterorophic species	saprophytic fungi (neither mycorrhizal nor edible)	present	absent	
	<i>Pyronema confluens</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Sarcoscypha coccinea</i>	0	terrestrial	heterorophic species	saprophytic fungi - scarlet elf cup	present	absent	
	<i>Terfezia boudieri</i>	0	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal - desert truffle	present	absent	
	<i>Tuber melanosporum</i>	0	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal- black truffle	present	absent	
	<i>Wilcoxina mikolae</i>	0	terrestrial	plant parasites	ectomycorrhizal	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Orbiliomycetes</b>								
	<i>Arthrobotrys oligospora</i>	0	terrestrial	heterorophic species	carnivorous fungus (nematode-trapping)	present	absent	
	<i>Dactyloellina haptotyla</i>	0	terrestrial	heterorophic species	carnivorous fungus (nematode-trapping)	present	absent	
	<i>Monacrosporium haptotylum</i>	0	terrestrial	heterorophic species	carnivorous fungus (nematode-trapping)	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Eurotiomycetes</b>								
	<i>Ajellomyces capsulatus</i>	1	terrestrial	animal parasites	cause histoplasmosis	present	yes	
	<i>Ajellomyces dermatitidis</i>	1	terrestrial	animal parasites	cause histoplasmosis	present	yes	
	<i>Arthroderma otae</i>	0	terrestrial	animal parasites	anthropophilic saprotrop, colonizes the dead skin, fungal infection of nail	present	absent	
	<i>Aspergillus sp.</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Aspergillus sydowii</i>	0	terrestrial	animal parasites	cause of aspergillosis in sea fan corals	present	absent	
	<i>Blastomyces gilchristii</i>	1	terrestrial	animal parasites	human parasites, causes blastomycosis	present	yes	
	<i>Emmonsia crescens</i>	1	terrestrial	animal parasites	causes adiaspiromycosis	present	yes	
	<i>Emmonsia parva</i>	1	terrestrial	animal parasites	causes adiaspiromycosis	present	yes	
	<i>Eurotium rubrum</i>	0	terrestrial	heterorophic species	saprophytic fungi - live in Dead Sea water	present	absent	
	<i>Gymnascella aurantiaca</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Gymnascella citrina</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Histoplasma capsulatum</i>	1	terrestrial	animal parasites	causes histoplasmosis - opportunist human pathogen	present	yes	
	<i>Monascus ruber</i>	0	terrestrial	heterorophic species	corn silage mold	present	absent	
	<i>Paracoccidioides brasiliensis</i>	1	terrestrial	animal parasites	causes paracoccidioidomycosis	present	yes	
	<i>Paracoccidioides lutzii</i>	1	terrestrial	animal parasites	causes paracoccidioidomycosis	present	yes	
	<i>Penicillium oxalicum</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Talaromyces marneffei</i>	0	terrestrial	animal parasites	opportunistic human pathogen	present	absent	
	<i>Thermoascus aurantiacus</i>	0	terrestrial	heterorophic species	thermophilic fungus, saprophytic fungi	present	absent	

	<i>Trichophyton rubrum</i>	0	terrestrial	animal parasites	anthropophilic saprotrop, colonizes the dead skin, fungal infection of nail	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Dothideomycetes</b>								
	<i>Acidomyces richmondensis</i>	0	terrestrial	heterorophic species	acidophilic filamentous fungi	present	absent	
	<i>Ascochyta</i>	0	terrestrial	plant parasites	pathogens of plants (particularly cereal crops)	present	absent	
	<i>Aureobasidium pullulans</i>	0	terrestrial	plant parasites	epiphyte, endophyte, pathogen opportunist of humans	present	absent	
	<i>Bipolaris oryzae</i>	0	terrestrial	plant parasites	causes brown spot disease in rice	present	absent	
	<i>Dothistroma septosporum</i>	0	terrestrial	plant parasites	causes red band needle blight	present	absent	
	<i>Leptosphaeria maculans</i>	0	terrestrial	plant parasites	causal agent of blackleg disease	present	absent	
	<i>Macrophomina phaseolina</i>	0	terrestrial	plant parasites	causes damping off, seedling blight and collar rot	present	absent	
	<i>Neofusicoccum parvum</i>	0	terrestrial	plant parasites	causing serious damage to Eucalyptus	present	absent	
	<i>Parastagonospora nodorum</i>	0	terrestrial	plant parasites	major fungal pathogen of wheat	absent	absent	15.973
	<i>Pseudocercospora fijiensis</i>	0	terrestrial	plant parasites	plant pathogens	present	absent	
	<i>Verruconis gallopava</i>	0	terrestrial	animal parasites	Human parasitic phaeohyphomycosis	present	absent	
	<i>Zymoseptoria brevis</i>	1	terrestrial	plant parasites	causes septoria leaf blotch	present	no	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Lecanoromycetes</b>								
	<i>Xanthoria parietina</i>	0	terrestrial	heterorophic species	lichens	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Leotiomyces</b>								
	<i>Acephala macrosclerotium</i>	0	terrestrial	heterorophic species	saprophytic fungi - forms ectomycorrhizas on Pinus sylvestris	present	absent	
	<i>Amorphotheca resinae</i>	0	terrestrial	heterorophic species	saprophytic fungi - can live in tanks of diesel	present	absent	
	<i>Blumeria graminis</i>	0	terrestrial	plant parasites	causes barley powdery mildew on grasses including cereals	present	absent	
	<i>Botrytis cinerea</i>	0	terrestrial	plant parasites	necrotrophic fungus, botrytis bunch rot	present	absent	
	<i>Bulgaria inquinans</i>	0	terrestrial	heterorophic species	saprophytic fungi - black bulgar	present	absent	
	<i>Cadophora malorum</i>	0	terrestrial	plant parasites	plant pathogen, causes side rot in apple and pear	present	absent	
	<i>Chalara longipes</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Coccomyces strobili</i>	0	terrestrial	plant parasites	plant pathogen - causes Cherry leaf spot	present	absent	
	<i>Erysiphe necator</i>	0	terrestrial	plant parasites	causes powdery mildew of grape	present	absent	
	<i>Leptodontium sp.</i>	0	terrestrial	heterorophic species	saprophytic fungi - responsible for Sooty Blotch disease	present	absent	
	<i>Loramycetes juncicola</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Loramycetes macrosporus</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Meliniomyces bicolor</i>	0	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal - root-associated fungi	present	absent	
	<i>Meliniomyces variabilis</i>	0	terrestrial	plant parasites	saprophytic fungi - ectomycorrhizal - root-associated fungi	present	absent	
	<i>Oidiodendron maius</i>	0	terrestrial	heterorophic species	mycorrhizal fungus	present	absent	

	<i>Phialocephala scopiformis</i>	0	terrestrial	plant parasites	endophyte	present	absent	
	<i>Rhizoscyphus ericae</i>	0	terrestrial	plant parasites	mycorrhizal fungus	present	absent	
	<i>Rutstroemia firma</i>	0	terrestrial	heterorophic species	saprophytic fungi - grows on wood	present	absent	
	<i>Sclerotinia borealis</i>	0	terrestrial	plant parasites	cause a plant pathogen infecting barley	present	absent	
	<i>Sclerotinia sclerotiorum</i>	0	terrestrial	plant parasites	cause a disease called white mold	present	absent	
	<i>Sporothrix insectorum</i>	1	terrestrial	heterorophic species	decomposing plant material and pathogen opportunist (causative agent of sporotrichosis)	present	yes	
	<i>Thelebolus microsporus</i>	0	terrestrial	heterorophic species	saprobic fungus	present	absent	
<b>Dikarya --&gt; Ascomycota --&gt; Pezizomycotina --&gt; Sordariomycetes</b>								
	<i>Acremonium alcalophilum</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Anthostoma avocetta</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Apiospora montagnei</i>	0	terrestrial	plant parasites	causes kernel blight on barley	present	absent	
	<i>Ceratocystis sp.</i>	0	terrestrial	plant parasites	plant pathogens, causing diseases such as oak wilt and pineapple black rot	absent	absent	3.432
	<i>Clonostachys rosea</i>	0	terrestrial	animal parasites	endophyte, saprophytic fungi, parasite of other fungi and of nematodes	present	absent	
	<i>Colletotrichum caudatum</i>	0	terrestrial	plant parasites	phytopathogens	present	absent	
	<i>Colletotrichum zoysiae</i>	0	terrestrial	plant parasites	most common and destructive of plant pathogenic fungi	present	absent	
	<i>Coniochaeta sp.</i>	0	terrestrial	plant parasites	saprotrophs, endophytes and pathogens of trees	present	absent	
	<i>Corollospora maritima</i>	0	marine	heterorophic species	saprophytic fungi	present	absent	
	<i>Cryphonectria parasitica</i>	0	terrestrial	plant parasites	causes chestnut blight	present	absent	
	<i>Daldinia eschscholzii</i>	0	terrestrial	heterorophic species	saprotrophic	present	absent	
	<i>Drechmeria coniospora</i>	0	terrestrial	animal parasites	entomopathons	absent	absent	0
	<i>Fusarium sp.</i>	0	terrestrial	heterorophic species	saprophytic fungus - produces mycotoxins in cereal crops	present	absent	
	<i>Glomerella graminicola</i>	0	terrestrial	plant parasites	causes anthracnose in many cereal	present	absent	
	<i>Hypoxyylon sp.</i>	0	terrestrial	heterorophic species	saprophytic fungi, found on dead wood	present	absent	
	<i>Ilyonectria sp.</i>	0	terrestrial	plant parasites	symptoms of root rot on herbaceous plants	present	absent	
	<i>Lindra thalassiae</i>	0	marine	plant parasites	parasites of various sea grasses	present	absent	
	<i>Lolipopaia minuta</i>	0	terrestrial	heterorophic species	saprophytic fungi	present	absent	
	<i>Magnaporthe oryzae</i>	0	terrestrial	plant parasites	also known as rice blast fungus, rice rotten neck	present	absent	
	<i>Melanconium juglandinum</i>	0	terrestrial	plant parasites	plant pathogen	present	absent	
	<i>Melanospora tiffanyae</i>	0	terrestrial	animal parasites	mycoparasitic fungus	present	absent	
	<i>Microascus trigonosporus</i>	0	terrestrial	animal parasites	saprotrophic, opportunistic human pathogen	present	absent	

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	<i>Rhizophagus irregularis</i>	1	terrestrial	plant parasites	mycorrhizal fungus	present	yes	
<b>Mortierellomycotina</b>								
	<i>Mortierella</i> sp.	0	terrestrial	heterorophic species	saprotrophs in soil	present	absent	
<b>Mucoromycotina</b>								
	<i>Absidia glauca</i>	1	terrestrial	animal parasites	causes zygomycosis and mucormycosis	absent	yes	3
	<i>Absidia repens</i>	1	terrestrial	animal parasites	causes zygomycosis and mucormycosis	present	yes	
	<i>Backusella circina</i>	0	terrestrial	heterorophic species	thermophilic fungus	present	absent	
	<i>Blakeslea trispora</i>	1	terrestrial	plant parasites	pathogen autotrophic species, source of beta carotene	present	yes	
	<i>Hesseltinella vesiculosa</i>	0	terrestrial	plant parasites	saprophytic fungus or facultative plant parasites or facultative pathogens of humans (mucoromycotina)	present	absent	
	<i>Lichtheimia corymbifera</i>	1	terrestrial	animal parasites	saprotrophic mold and opportunistic animals pathogen	present	yes	
	<i>Lichtheimia ramosa</i>	1	terrestrial	animal parasites	saprotrophic mold and opportunistic animals pathogen	absent	yes	0
	<i>Mucor ambiguus</i>	1	terrestrial	plant parasites	plant pathogen	absent	yes	0
	<i>Mucor circinelloides</i>	1	terrestrial	plant parasites	plant pathogen	present	yes	
	<i>Parasitella parasitica</i>	1	terrestrial	animal parasites	mycoparasite	present	yes	
	<i>Phycomyces blakesleeanus</i>	1	terrestrial	heterorophic species	saprophytic fungi	present	yes	
	<i>Rhizopus deleamar</i>	1	terrestrial	plant parasites	infecting carrots, pineapples, ...	present	yes	
	<i>Rhizopus microsporus</i>	1	terrestrial	plant parasites	infecting maize, sunflower, ...	present	yes	
	<i>Syncephalastrum racemosum</i>	1	terrestrial	heterorophic species	nopathogenic organism, common species in soil	present	yes	
	<i>Thamnidium elegans</i>	0	terrestrial	animal parasites	saprophytic fungi mucuromycete	present	absent	
	<i>Umbelopsis ramanniana</i>	1	terrestrial	plant parasites	cosmopolitan saprotrop and endophyte of healthy and declining conifers	present	yes	
<b>Entomophthoromycotina</b>								
	<i>Basidiobolus meristosporus</i>	1	terrestrial	animal parasites	human pathogens - commensal in frogs	present	no	
<b>Blastocladiomycota</b>								
	<i>Allomyces magrogynus</i>	0	terrestrial	heterorophic species	-	present	absent	
	<i>Catenaria anguillulae</i>	0	terrestrial	animal parasites	facultative parasite of nematode parasites	present	absent	
<b>Chytridiomycota</b>								
	<i>Batrachochytrium dendrobatidis</i>	0	terrestrial	animal parasites	amphibian chytrid fungus	present	absent	
	<i>Gonapodya prolifera</i>	1	fresh-water	heterorophic species	carnivorous	present	no	
	<i>Spizellomyces punctatus</i>	0	terrestrial	animal parasites	parasites of organisms that attack nematodes	present	absent	
<b>Neocallimastigomycota</b>								
	<i>Piromyces finnis</i>	1	terrestrial	heterorophic species	obligate anaerobes	present	yes	
<b>Microsporidia</b>								
	<i>Anncaliia algerae</i>	0	fresh-water	animal parasites	infects mosquitoes	present	absent	
	<i>Anncaliia algerae</i>	0	terrestrial	animal parasites	infects mosquitoes	present	absent	
	<i>Antonospora locustae</i>	0	terrestrial	animal parasites	obligate intracellular parasites	present	absent	
	<i>Encephalitozoon intestinalis</i>	0	terrestrial	animal parasites	cause microsporidiosis	present	absent	
	<i>Encephalitozoon romaleae</i>	0	terrestrial	animal parasites	obligate intracellular parasites	present	absent	

	<i>Nematocida parisi</i>	0	terrestrial	animal parasites	nematode-killer from Paris	present	absent	
	<i>Nosema ceranae</i>	0	terrestrial	animal parasites	parasite of Apis cerana, the Asiatic honey bee	present	absent	
	<i>Ordospora colligata</i>	0	terrestrial	animal parasites	obligatory intracellular parasite	absent	absent	0
<b>Cryptomycota</b>								
	<i>Rozella allomyces</i>	0	terrestrial	animal parasites	obligate endoparasite of the water mold	present	absent	
<b>Opisthokonts --&gt; Metazoa --&gt; Diploblasta --&gt; Placozoa</b>								
	<i>Trichoplax adhaerens</i>	2	terrestrial	heterorophic species	very flat organisms	present	yes	
<b>Diploblasta --&gt; Porifera</b>								
	<i>Amphimedon queenslandica</i>	0	marine	heterorophic species	sponge	present	absent	
<b>Diploblasta --&gt; Ctenophora</b>								
	<i>Mnemiopsis leidyi</i>	1	marine	heterorophic species	warty comb jelly or sea walnut	present	yes	
<b>Diploblasta --&gt; Cnidaria</b>								
	<i>Hydra magnipapillata</i>	1	fresh water	heterorophic species	hydra	present	yes	
	<i>Nematostella vectensis</i>	1	marine	heterorophic species	Starlet sea anemone	present	yes	
<b>Opisthokonts --&gt; Metazoa --&gt; Bilateria --&gt; Deuterostomia --&gt; Hemichordata</b>								
	<i>Saccaglossus kowalevskii</i>	1	marine	heterorophic species	Acorn worm	present	yes	
<b>Bilateria --&gt; Deuterostomia --&gt; Echinodermata</b>								
	<i>Paracentrotus lividus</i>	1	marine	heterorophic species	Sea urchin	absent	yes	141217
	<i>Patiria miniata</i>	1	marine	heterorophic species	Blue bat star	present	yes	
	<i>Strongylocentrotus purpuratus</i>	2	marine	heterorophic species	Sea urchin	present	yes	
<b>Bilateria --&gt; Deuterostomia --&gt; Chordata</b>								
<b>Urochordates</b>								
	<i>Ciona intestinalis</i>	2	marine	heterorophic species	Vase tunicate	present	yes	
<b>Cephalochordates</b>								
	<i>Branchiostoma floridae</i>	1	marine	heterorophic species	Florida lancelet	present	yes	
<b>Cyclostomes</b>								
	<i>Myxine glutinosa</i>	1	marine	heterorophic species	Atlantic hagfish	present	yes	
	<i>Petromyzon marinus</i>	1	marine	heterorophic species	Sea lamprey	present	yes	
<b>Cartilaginous fish</b>								
	<i>Callorhynchus milli</i>	2	marine	heterorophic species	Australian ghostshark	present	yes	
<b>Bony fish</b>								
	<i>Cyprinus carpio</i>	2	marine	heterorophic species	Common carp	present	yes	
	<i>Dicentrarchus labrax</i>	1	marine	heterorophic species	European bass	present	yes	
	<i>Fundulus heteroclitus</i>	2	marine	heterorophic species	Mummichog	present	yes	
	<i>Haplochromis chilotes</i>	1	fresh-water	heterorophic species	cichlid (fish)	absent	no	35763
	<i>Osmerus mordax</i>	2	marine	heterorophic species	Rainbow smelt	present	yes	
	<i>Salmo salar</i>	2	marine	heterorophic species	Atlantic salmon	present	yes	
	<i>Takifugu rubripes</i>	2	marine	heterorophic species	Japanese puffer	present	yes	
	<i>Xiphophorus maculatus</i>	2	marine	heterorophic species	Southern platyfish	present	yes	
<b>Amphibians</b>								
	<i>Andrias davidianus</i>	1	terrestrial	heterorophic species	Chinese giant salamander	absent	yes	1504
	<i>Nanorana parkeri</i>	2	terrestrial	heterorophic species	High Himalaya frog	present	yes	
	<i>Rana catesbeiana</i>	2	terrestrial	heterorophic species	American bullfrog	absent	yes	29138

	<i>Xenopus laevis</i>	2	terrestrial	heterorophic species	African clawed frog	present	yes	
<b>Reptiles --&gt; Crocodylia</b>								
	<i>Alligator mississippiensis</i>	2	terrestrial	heterorophic species	Crocodylian	present	yes	
	<i>Alligator sinensis</i>	2	terrestrial	heterorophic species	Crocodylian	<b>absent</b>	yes	1
<b>Reptiles --&gt; Squamata</b>								
	<i>Gekko japonicus</i>	2	terrestrial	heterorophic species	Geckos	<b>absent</b>	yes	6957
	<i>Protobothrops mucrosquamatus</i>	2	terrestrial	heterorophic species	Snakes	absent	yes	0
<b>Reptiles --&gt; Chelonii</b>								
	<i>Chelonia mydas</i>	2	terrestrial	heterorophic species	Green sea turtle	present	yes	
	<i>Chrysemys picta</i>	2	terrestrial	heterorophic species	Painted turtle	present	yes	
<b>Birds</b>								
	<i>Anas platyrhynchos</i>	2	terrestrial	heterorophic species	Mallard (duck)	present	yes	
	<i>Calidris pugnax</i>	2	terrestrial	heterorophic species	Ruff	<b>absent</b>	yes	0
	<i>Ficedula albicollis</i>	2	terrestrial	heterorophic species	Collared flycatcher	present	yes	
	<i>Gallus gallus</i>	2	terrestrial	heterorophic species	Red junglefowl	present	yes	
	<i>Lepidothrix coronata</i>	2	terrestrial	heterorophic species	blue-crowned manakin	absent	yes	0
<b>Mammalian</b>								
	<i>Callithrix jacchus</i>	2	terrestrial	heterorophic species	Common marmoset	present	yes	
	<i>Camelus dromedarius</i>	2	terrestrial	heterorophic species	Dromedary	absent	yes	7
	<i>Canis lupus</i>	2	terrestrial	heterorophic species	Gray wolf	present	no	
	<i>Ceratotherium simum</i>	2	terrestrial	heterorophic species	White rhinoceros	present	yes	
	<i>Chinchilla lanigera</i>	2	terrestrial	heterorophic species	Long-tailed chinchilla	present	yes	
	<i>Chrysochloris asiatica</i>	2	terrestrial	heterorophic species	Cape golden mole	absent	yes	0
	<i>Colobus angolensis</i>	2	terrestrial	heterorophic species	Angola colobus	absent	yes	0
	<i>Condylura cristata</i>	2	terrestrial	heterorophic species	Star-nosed mole	absent	yes	0
	<i>Dasybus novemcinctus</i>	2	terrestrial	heterorophic species	Nine-banded armadillo	present	yes	
	<i>Dipodomys ordii</i>	2	terrestrial	heterorophic species	Kangaroo rats	present	yes	
	<i>Elephantulus edwardii</i>	2	terrestrial	heterorophic species	Cape elephant shrew	absent	yes	0
	<i>Eptesicus fuscus</i>	2	terrestrial	heterorophic species	Big brown bats	absent	yes	0
	<i>Erinaceus europaeus</i>	2	terrestrial	heterorophic species	European hedgehog	present	yes	
	<i>Felis catus</i>	2	terrestrial	heterorophic species	Cats	present	yes	
	<i>Fukomys damarensis</i>	2	terrestrial	heterorophic species	Damaraland mole-rat	present	yes	
	<i>Galeopterus variegatus</i>	2	terrestrial	heterorophic species	Sunda flying lemur	absent	yes	0
	<i>Homo sapiens</i>	2	terrestrial	heterorophic species	human	present	yes	
	<i>Ictidomys tridecemlineatus</i>	2	terrestrial	heterorophic species	Thirteen-lined ground squirrel	present	yes	
	<i>Jaculus jaculus</i>	2	terrestrial	heterorophic species	Jerboas	present	yes	
	<i>Leptonychotes weddellii</i>	2	marine	heterorophic species	Weddell seal	absent	yes	0
	<i>Lipotes vexillifer</i>	2	fresh-water	heterorophic species	Baiji	absent	yes	0
	<i>Loxodonta africana</i>	2	terrestrial	heterorophic species	African bush elephant	present	no	

	<i>Melopsittacus undulatus</i>	1	terrestrial	heterorophic species	Budgerigar	present	yes	
	<i>Meriones unguiculatus</i>	2	terrestrial	heterorophic species	Mongolian gerbil	absent	yes	1442
	<i>Mesocricetus auratus</i>	2	terrestrial	heterorophic species	Golden hamster	present	yes	
	<i>Microcebus murinus</i>	2	terrestrial	heterorophic species	Gray mouse lemur	present	yes	
	<i>Microtus ochrogaster</i>	2	terrestrial	heterorophic species	Prairie vole	present	yes	
	<i>Monodelphis domestica</i>	2	terrestrial	heterorophic species	Gray short-tailed opossum	present	yes	
	<i>Mus musculus</i>	2	terrestrial	heterorophic species	house mouse	present	yes	
	<i>Mustela putorius furo</i>	2	terrestrial	heterorophic species	Ferret	present	yes	
	<i>Nomascus leucogenys</i>	2	terrestrial	heterorophic species	Northern white-cheeked gibbon	present	yes	
	<i>Octodon degus</i>	2	terrestrial	heterorophic species	octodontid rodents	present	yes	
	<i>Odobenus rosmarus</i>	2	marine	heterorophic species	Walrus	present	yes	
	<i>Orcinus orca</i>	2	marine	heterorophic species	Killer whale	present	yes	
	<i>Orycteropus afer</i>	2	terrestrial	heterorophic species	Aardvark	present	yes	
	<i>Otolemur garnettii</i>	2	terrestrial	heterorophic species	Northern greater galago	present	yes	
	<i>Ovis aries</i>	2	terrestrial	heterorophic species	Sheep	present	yes	
	<i>Pan paniscus</i>	2	terrestrial	heterorophic species	Bonobo	present	yes	
	<i>Pongo abelii</i>	2	terrestrial	heterorophic species	Sumatran orangutan	present	yes	
	<i>Propithecus coquereli</i>	2	terrestrial	heterorophic species	Coquerel sifaka (lemur)	present	yes	
	<i>Pteropus vampyrus</i>	2	terrestrial	heterorophic species	Megabat	present	yes	
	<i>Rattus norvegicus</i>	2	terrestrial	heterorophic species	Brown rat	present	yes	
	<i>Saimiri boliviensis</i>	2	terrestrial	heterorophic species	Squirrel monkey	present	yes	
	<i>Sus scrofa</i>	2	terrestrial	heterorophic species	Wild boar	present	yes	
	<i>Trichechus manatus</i>	2	marine	heterorophic species	West Indian manatee	present	yes	
	<i>Tupaia chinensis</i>	2	terrestrial	heterorophic species	Tree shrew	present	yes	
<b>Bilateria --&gt; Protostomia --&gt; Molluscs</b>								
	<i>Aplysia californica</i>	2	marine	heterorophic species	California sea slug	present	yes	
	<i>Biomphalaria glabrata</i>	2	fresh water	heterorophic species	Snail	present	yes	
	<i>Crassostrea gigas</i>	2	marine	heterorophic species	Pacific oyster	present	yes	
	<i>Haliotis discus</i>	1	marine	heterorophic species	Sea snail	absent	yes	8154
	<i>Haliotis diversicolor</i>	1	marine	heterorophic species	Sea snail	absent	no	7435
	<i>Meretrix meretrix</i>	1	marine	heterorophic species	Saltwater clams	absent	yes	3131
	<i>Mytilus galloprovincialis</i>	1	marine	heterorophic species	Mediterranean mussel	absent	yes	19756
	<i>Octopus bimaculoides</i>	1	marine	heterorophic species	Octopus	present	yes	
	<i>Pinctada fucata</i>	1	marine	heterorophic species	Akoya pearl oyster	absent	yes	1380
<b>Bilateria --&gt; Protostomia --&gt; Platyhelminthes</b>								
	<i>Clonorchis sinensis</i>	0	terrestrial	animal parasites	human liver fluke	present	absent	
	<i>Echinococcus granulosus</i>	0	terrestrial	animal parasites	cyclophyllid cestode	present	absent	
	<i>Echinococcus multilocularis</i>	0	terrestrial	animal parasites	cyclophyllid tapeworm	present	absent	



	<i>Hymenolepis microstoma</i>	0	terrestrial	animal parasites	rodent tapeworm	present	absent	
	<i>Schistosoma haematobium</i>	0	terrestrial	animal parasites	trematodes	present	absent	
	<i>Schistosoma japonicum</i>	0	terrestrial	animal parasites	trematodes	present	absent	
	<i>Schistosoma mansoni</i>	0	terrestrial	animal parasites	trematodes	present	absent	
	<i>Schmidtea mediterranea</i>	0	fresh water	heterorophic species	triclad	present	absent	
	<i>Taenia solium</i>	0	terrestrial	animal parasites	pork tapeworm	present	absent	
<b>Bilateria --&gt; Protostomia --&gt; Annelids</b>								
	<i>Capitella teleta</i>	2	marine	heterorophic species	annelid worm	present	yes	
	<i>Helobdella robusta</i>	1	fresh water	heterorophic species	leech	present	yes	
<b>Bilateria --&gt; Protostomia --&gt; Brachiopoda</b>								
	<i>Lingula anatina</i>	2	marine	heterorophic species		present	no	
<b>Bilateria --&gt; Protostomia --&gt; Rotifera</b>								
	<i>Adineta vaga</i>	0	fresh water	heterorophic species	bdelloid rotifer	present	absent	
<b>Bilateria --&gt; Protostomia --&gt; Tardigrades</b>								
	<i>Hypsibius dujardini</i>	0	terrestrial	heterorophic species	tardigrade	present	absent	
<b>Bilateria --&gt; Protostomia --&gt; Nematodes</b>								
<b>Classe I</b>								
	<i>Trichuris muris</i>	2	terrestrial	animal parasites	parasite of mice	present	yes	
	<i>Trichuris suis</i>	2	terrestrial	animal parasites	whipworm	present	yes	
<b>Classe III</b>								
	<i>Acanthocheilonema viteae</i>	2	terrestrial	animal parasites	rodent filarial worm	present	yes	
	<i>Anisakis simplex</i>	2	terrestrial	animal parasites	infect fish and marine mammals	present	yes	
	<i>Ascaris lumbricoides</i>	2	terrestrial	animal parasites	causes ascariasis	present	yes	
	<i>Ascaris suum</i>	2	terrestrial	animal parasites	causes ascariasis	present	yes	
	<i>Brugia malayi</i>	2	terrestrial	animal parasites	causes elephantiasis	present	yes	
	<i>Brugia pahangi</i>	2	terrestrial	animal parasites	nematode that infects domestic cats	present	yes	
	<i>Brugia timori</i>	3	terrestrial	animal parasites	human filarial parasitic nematode	present	yes	
	<i>Dracunculus medinensis</i>	2	terrestrial	animal parasites	causess dracunculiasis	present	yes	
	<i>Elaeophora elaphi</i>	2	terrestrial	animal parasites	parasitic roundworm	present	yes	
	<i>Gongylonema pulchrum</i>	3	terrestrial	animal parasites	human parasitic roundworms	present	yes	
	<i>Loa loa</i>	2	terrestrial	animal parasites	parasitic roundworm	present	yes	
	<i>Onchocerca flexuosa</i>	2	terrestrial	animal parasites	parasitic roundworm	present	no	
	<i>Onchocerca ochengi</i>	2	terrestrial	animal parasites	paraasitic roundworm	present	yes	
	<i>Onchocerca volvulus</i>	2	terrestrial	animal parasites	cause of river blindness in humans	present	yes	
	<i>Ostertagia ostertagi</i>	1	terrestrial	animal parasites	brown stomach worm	present	yes	
	<i>Parascaris equorum</i>	0	terrestrial	animal parasites	equine roundworm	absent	absent	17
	<i>Thelazia callipaeda</i>	2	terrestrial	animal parasites	cause thelaziasis	present	yes	
	<i>Toxocara canis</i>	2	terrestrial	animal parasites	dog roundworms	present	yes	
	<i>Wuchereria bancrofti</i>	2	terrestrial	animal parasites	human parasitic roundworms	present	yes	
<b>Classe IV</b>								
	<i>Bursaphelenchus xylophilus</i>	5	terrestrial	plant parasites	pine wood nematode	present	yes	
	<i>Globodera pallida</i>	0	terrestrial	plant parasites	plant pathogen (especially potatoes)	present	absent	
	<i>Meloidogyne arenaria</i>	3	terrestrial	plant parasites	peanut root knot nematode	present	yes	
	<i>Meloidogyne floridensis</i>	2	terrestrial	plant parasites	root-knot nematodes	present	yes	
	<i>Meloidogyne hapla</i>	3	terrestrial	plant parasites	root-knot nematodes	present	yes	

	<i>Meloidogyne incognita</i>	3	terrestrial	plant parasites	southern root-knot nematodes	present	yes	
	<i>Meloidogyne javanica</i>	4	terrestrial	plant parasites	tropical root-knot nematodes	present	yes	
	<i>Panagrellus redivivus</i>	3	terrestrial	heterorophic species	beer mat nematode	present	yes	
	<i>Strongyloides papillosus</i>	1	terrestrial	animal parasites	human pathogenic parasitic roundworm	present	yes	
	<i>Strongyloides ratti</i>	1	terrestrial	animal parasites	causess strongyloidiasis	present	yes	
	<i>Strongyloides venezuelensis</i>	1	terrestrial	animal parasites	threadworm, gastro-intestinal parasite in mouse	present	yes	
<b>Classe V</b>								
	<i>Ancylostoma caninum</i>	2	terrestrial	animal parasites	infects the small intestine of dogs	present	yes	
	<i>Ancylostoma ceylanicum</i>	3	terrestrial	animal parasites	zoonotic hookworm	present	yes	
	<i>Ancylostoma duodenale</i>	3	terrestrial	animal parasites	Old World hookworm	present	yes	
	<i>Angiostrongylus cantonensis</i>	2	terrestrial	animal parasites	roundworms that causes angiostrongyliasis	present	yes	
	<i>Caenorhabditis angaria</i>	3	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis brenneri</i>	3	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis briggsae</i>	4	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis elegans</i>	4	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis japonica</i>	3	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis remanei</i>	3	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis sinica</i>	3	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Caenorhabditis tropicalis</i>	2	terrestrial	heterorophic species	roundworms	present	yes	
	<i>Cylicostephanus goldi</i>	2	terrestrial	animal parasites	animal parasites nematodes	present	no	
	<i>Dictyocaulus viviparus</i>	2	terrestrial	animal parasites	parasites of horses	present	yes	
	<i>Dirofilaria immitis</i>	2	terrestrial	animal parasites	heartworm or dog heartworm	present	yes	
	<i>Haemonchus contortus</i>	1	terrestrial	animal parasites	pathogenic nematodes of ruminants	present	yes	
	<i>Haemonchus placei</i>	2	terrestrial	animal parasites	parasitic roundworms	present	yes	
	<i>Heligmosomoides polygyrus</i>	3	terrestrial	animal parasites	intestinal roundworm of rodents	present	yes	
	<i>Necator americanus</i>	2	terrestrial	animal parasites	New World hookworm	present	yes	
	<i>Nippostrongylus brasiliensis</i>	1	terrestrial	animal parasites	gastrointestinal roundworm	present	yes	
	<i>Oesophagostomum dentatum</i>	2	terrestrial	animal parasites	human parasitic nematodes	present	no	
	<i>Parastrongyloides trichosuri</i>	0	terrestrial	animal parasites	an intestinal parasite of Australian Brush-tailed possums	present	absent	
	<i>Pristionchus exspectatus</i>	2	terrestrial	animal parasites	roundworms	present	yes	
	<i>Pristionchus pacificus</i>	2	terrestrial	animal parasites	roundworms	present	yes	
	<i>Steinernema carpocapsae</i>	4	terrestrial	animal parasites	entomopathogenic nematodes	present	yes	
	<i>Steinernema feltiae</i>	2	terrestrial	animal parasites	entomopathogenic nematodes	present	yes	
	<i>Steinernema glaseri</i>	1	terrestrial	animal parasites	entomopathogenic nematodes	present	yes	
	<i>Steinernema monticolum</i>	2	terrestrial	animal parasites	insect-parasitic nematode	present	yes	
	<i>Steinernema scapterisci</i>	2	terrestrial	animal parasites	mole cricket nematode	present	yes	

	<i>Strongylus vulgaris</i>	1	terrestrial	animal parasites	blood worm, common horse parasite	present	no	
	<i>Teladorsagia circumcincta</i>	2	terrestrial	animal parasites	nematodes that infect sheep and goats	present	yes	
<b>Classe Other chromadoera</b>								
	<i>Enterobius vermicularis</i>	1	terrestrial	animal parasites	Pinworm (enterobiasis)	present	yes	
	<i>Romanomermis culicivorax</i>	2	terrestrial	animal parasites	endoparasites in arthropods	present	yes	
	<i>Syphacia muris</i>	1	terrestrial	animal parasites	rat pinworm	present	yes	
	<i>Trichinella nativa</i>	1	terrestrial	animal parasites	nematode	absent	yes	16
	<i>Trichinella spiralis</i>	1	terrestrial	animal parasites	nematode	present	yes	
<b>Opisthokonts --&gt; Metazoa --&gt; Protostomia --&gt; Arthropoda</b>								
<b>Crustacea</b>								
	<i>Daphnia magna</i>	2	fresh water	heterorophic species	small planctonic crustacean	absent	yes	15380
	<i>Daphnia pulex</i>	2	fresh water	heterorophic species	small planctonic crustacean	present	yes	
	<i>Eriocheir sinensis</i>	1	marine	heterorophic species	Chinese mitten crab	present	yes	
	<i>Litopenaeus vannamei</i>	1	marine	heterorophic species	Whiteleg shrimp	present	yes	
	<i>Penaeus monodon</i>	1	marine	heterorophic species	Asian tiger shrimp	present	yes	
	<i>Pseudodiaptomus poplesia</i>	1	marine	heterorophic species	a calanoid copepod	absent	yes	0
	<i>Scylla paramamosain</i>	2	marine	heterorophic species	mud and mangrove crab	present	yes	
<b>Chelicerata</b>								
	<i>Amblyomma americanum</i>	2	terrestrial	animal parasites	Lone Star tick	present	yes	
	<i>Dermacentor variabilis</i>	1	terrestrial	animal parasites	American dog ticks	present	yes	
	<i>Haemaphysalis longicornis</i>	1	terrestrial	animal parasites	ticks	present	yes	
	<i>Ixodes scapularis</i>	1	terrestrial	animal parasites	deer tick or black-legged tick	present	yes	
	<i>Limulus polyphemus</i>	1	marine	heterorophic species	Atlantic horseshoe crab	present	yes	
	<i>Onychiurus arcticus</i>	1	terrestrial	heterorophic species	Arctic springtail	present	yes	
	<i>Rhipicephalus microplus</i>	1	terrestrial	animal parasites	Asian blue tick	present	no	
	<i>Sarcoptes scabiei</i>	2	terrestrial	animal parasites	itch mites	present	yes	
	<i>Stegodyphus mimosarum</i>	1	terrestrial	heterorophic species	spiders	present	yes	
	<i>Tetranychus urticae</i>	1	terrestrial	plant parasites	red spider mite	present	yes	
<b>Myriapoda</b>								
	<i>Strigamia maritima</i>	2	marine	heterorophic species	European centipede	present	yes	
<b>Insecta --&gt; Hymenoptera</b>								
	<i>Acromyrmex echinator</i>	0	terrestrial	heterorophic species	New World ants	present	absent	
	<i>Apis florea</i>	0	terrestrial	heterorophic species	dwarf honey bee	present	absent	
	<i>Apis mellifera</i>	0	terrestrial	heterorophic species	western honey bee	present	absent	
	<i>Atta cephalotes</i>	0	terrestrial	heterorophic species	leafcutter ant	present	absent	
	<i>Bombus impatiens</i>	0	terrestrial	heterorophic species	common eastern bumble bee	present	absent	
	<i>Bombus terrestris</i>	0	terrestrial	heterorophic species	buff-tailed bumblebee	present	absent	
	<i>Camponotus floridanus</i>	0	terrestrial	heterorophic species	Florida capenter ant	present	absent	
	<i>Harpegnathos saltator</i>	0	terrestrial	heterorophic species	Indian jumping ant	present	absent	
	<i>Linepithema humile</i>	0	terrestrial	heterorophic species	Argentine ant	present	absent	
	<i>Megachile rotundata</i>	0	terrestrial	heterorophic species	alfalfa leafcutter bee	present	absent	
	<i>Nasonia giraulti</i>	0	terrestrial	heterorophic species	parasitoid	present	absent	

	<i>Nasonia longicornis</i>	0	terrestrial	heterorophic species	parasitoid	present	absent	
	<i>Nasonia vitripennis</i>	0	terrestrial	heterorophic species	parasitoid	present	absent	
	<i>Pogonomyrmex barbatus</i>	0	terrestrial	heterorophic species	red harvester ant	present	absent	
	<i>Solenopsis invicta</i>	0	terrestrial	heterorophic species	red imported fire ant	present	absent	
	<i>Wasmannia auropunctata</i>	0	terrestrial	heterorophic species	little fire ant	present	absent	
<b>Diptera</b>								
	<i>Aedes aegypti</i>	0	terrestrial	heterorophic species	yellow fever mosquito	present	absent	
	<i>Aedes albopictus</i>	0	terrestrial	heterorophic species	Asian tiger mosquito	present	absent	
	<i>Anopheles albimanus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles aquasalis</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles arabiensis</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles atroparvus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles christyi</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles coluzzii</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles culicifacies</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles darlingi</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles dirus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles epiroticus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles farauti</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles funestus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles gambiae</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles maculatus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles melas</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles merus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles minimus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles quadriannulatus</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles sinensis</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Anopheles stephensi</i>	0	terrestrial	heterorophic species	mosquito	present	absent	
	<i>Clogmia albipunctata</i>	0	terrestrial	heterorophic species	drain flies	present	absent	
	<i>Culex quinquefasciatus</i>	0	terrestrial	heterorophic species	southern house mosquito	present	absent	
	<i>Drosophila albomicans</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila ananassae</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila biarmipes</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila bipectinata</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila elegans</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila erecta</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila eugracilis</i>	0	terrestrial	heterorophic species	fly	present	absent	

	<i>Drosophila ficusphila</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila grimshawi</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila kikkawai</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila melanogaster</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila miranda</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila mojavensis</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila neotestacea</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila persimilis</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila pseudoobscura</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila rhopaloa</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila santomea</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila sechellia</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila simulans</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila takahashii</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila virilis</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila willistoni</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Drosophila yakuba</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Episyrphus balteatus</i>	0	terrestrial	heterorophic species	marmalade hoverfly	present	absent	
	<i>Glossina austeni</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Glossina brevipalpis</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Glossina fuscipes</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Glossina morsitans morsitans</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Glossina pallidipes</i>	0	terrestrial	heterorophic species	Tsetse fly	present	absent	
	<i>Lutzomyia longipalpis</i>	0	terrestrial	heterorophic species	blood sucker	present	absent	
	<i>Mayetiola destructor</i>	0	terrestrial	heterorophic species	Hessian fly or barley midge	present	absent	
	<i>Megaselia scalaris</i>	0	terrestrial	heterorophic species	fly	present	absent	
	<i>Musca domestica</i>	0	terrestrial	heterorophic species	housefly	present	absent	
	<i>Phlebotomus papatasi</i>	0	terrestrial	heterorophic species	sand flies	present	absent	
	<i>Stomoxys calcitrans</i>	0	terrestrial	heterorophic species	stable fly, dog fly	present	absent	
	<i>Triatoma infestans</i>	0	terrestrial	heterorophic species	winchuka, "kissing bug", blood sucker	absent	absent	3488
<b>Hemiptera</b>								
	<i>Acyrtosiphon kondoi</i>	2	terrestrial	plant parasites	aphid	absent	yes	23.041
	<i>Acyrtosiphon pisum</i>	4	terrestrial	plant parasites	pea aphid	present	yes	
	<i>Aphis gossypii</i>	2	terrestrial	plant parasites	melon and cotton aphid	present	yes	
	<i>Cimex lectularius</i>	0	terrestrial	free-living species	Bed bugs - human primary hosts	present	absent	
	<i>Diaphorina citri</i>	1	terrestrial	plant parasites	Asian citrus psyllid	present	yes	
	<i>Maconellicoccus hirsutus</i>	1	terrestrial	plant parasites	pink, grape or hibiscus mealybug	absent	yes	7.696

	<i>Myzus ascalonicus</i>	3	terrestrial	plant parasites	Shallot aphid	absent	yes	22.942
	<i>Myzus persicae</i>	3	terrestrial	plant parasites	Green peach aphid	present	yes	
	<i>Nilaparvata lugens</i>	1	terrestrial	plant parasites	brown planthopper	absent	yes	118.141
	<i>Peregrinus maidis</i>	1	terrestrial	plant parasites	Corn planthopper	absent	yes	20.678
	<i>Rhodnius prolixus</i>	0	terrestrial	free-living species	principal triatomine vector of the Chagas (trypanosoma cruzi) parasite	present	absent	
	<i>Rhopalosiphum maidis</i>	3	terrestrial	plant parasites	Corn leaf aphid	present	yes	
	<i>Rhopalosiphum padi</i>	3	terrestrial	plant parasites	Bird cherry-oat aphid	present	yes	
	<i>Sitobion avenae</i>	1	terrestrial	plant parasites	English grain aphid	absent	yes	3.614
Lepidoptera								
	<i>Agrotis segetum</i>	1	terrestrial	heterorophic species	turnip moth	present	yes	
	<i>Amyelois transitella</i>	3	terrestrial	heterorophic species	navel orangeworm	present	yes	
	<i>Antheraea assama</i>	1	terrestrial	heterorophic species	muga silkworm	absent	yes	35,191
	<i>Antheraea mylitta</i>	1	terrestrial	heterorophic species	tasar silkworm	absent	yes	3.913
	<i>Antheraea yamamai</i>	1	terrestrial	heterorophic species	Japanese silk moth	absent	yes	662
	<i>Bicyclus anynana</i>	1	terrestrial	heterorophic species	squinting bush brown	absent	yes	101.595
	<i>Bombyx mori</i>	2	terrestrial	heterorophic species	domestic silkmoth	present	yes	
	<i>Danaus plexippus</i>	2	terrestrial	heterorophic species	monarch butterfly	present	yes	
	<i>Heliconius melpomene</i>	3	terrestrial	heterorophic species	postman butterfly	present	yes	
	<i>Helicoverpa armigera</i>	1	terrestrial	heterorophic species	cotton bullworm, corn earworm	present	yes	
	<i>Heliothis virescens</i>	1	terrestrial	heterorophic species	tobacco budworm	present	yes	
	<i>Manduca sexta</i>	1	terrestrial	heterorophic species	Carolina sphinx moth	present	yes	
	<i>Melitaea cinxia</i>	2	terrestrial	heterorophic species	Glanville fritillary butterfly	present	yes	
	<i>Ostrinia nubilasis</i>	1	terrestrial	heterorophic species	European corn borer	absent	yes	15.040
	<i>Papilio machaon</i>	2	terrestrial	heterorophic species	Old World swallowtail butterfly	present	yes	
	<i>Papilio polytes</i>	2	terrestrial	heterorophic species	common mormon butterfly	present	yes	
	<i>Papilio xuthus</i>	2	terrestrial	heterorophic species	Asian swallowtail butterfly	present	yes	
	<i>Plutella xylostella</i>	1	terrestrial	heterorophic species	diamondback moth, cabbage moth	present	yes	
	<i>Spodoptera exigua</i>	1	terrestrial	heterorophic species	armyworms pests	absent	yes	16359
	<i>Spodoptera frugiperda</i>	2	terrestrial	heterorophic species	armyworms pests	present	yes	
	<i>Spodoptera littoralis</i>	1	terrestrial	heterorophic species	armyworms pests	absent	yes	72.261
	<i>Trichoplusia ni</i>	1	terrestrial	heterorophic species	cabbage looper, pests	present	yes	
Phthiraptera								
	<i>Pediculus humanus</i>	0	terrestrial	heterorophic species	head louse, ectoparasite of humans	present	yes	
Coleoptera								
	<i>Dendroctonus ponderosae</i>	2	terrestrial	heterorophic species	mountain pine beetle	present	yes	
	<i>Pissodes strobi</i>	1	terrestrial	plant parasites	white pine weevil	absent	yes	69.475
	<i>Sitophilus oryzae</i>	1	terrestrial	plant parasites	rice weevil	absent	yes	25.748
	<i>Sphenophorus levis</i>	1	terrestrial	plant parasites	weevil	absent	yes	3.447
	<i>Tribolium castaneum</i>	1	terrestrial	heterorophic species	red flour beetle	present	yes	
Orthoptera								

	<i>Gryllus bimaculatus</i>	1	terrestrial	heterorophic species	cricket	present	yes	
	<i>Schistocerca gregaria</i>	1	terrestrial	heterorophic species	locust	absent	yes	34.709
<b>Blattoptera</b>								
	<i>Coptotermes formosanus</i>	1	terrestrial	heterorophic species	formosan subterranean termite	absent	yes	142.814
	<i>Periplaneta americana</i>	1	terrestrial	heterorophic species	america cockroach	absent	yes	5.394
	<i>Reticulitermes flavipes</i>	1	terrestrial	heterorophic species	eastern subterranean termite	absent	yes	23.767
	<i>Zootermopsis nevadensis</i>	1	terrestrial	heterorophic species	eusocial dampwood termite	present	yes	
<b>Archaeplastida --&gt; Glaucophytes</b>								
	<i>Cyanophora paradoxa</i>	3	fresh water	autotrophic species	algae, model organism	present	no	
<b>Rhodophytes</b>								
	<i>Chondrus crispus</i>	0	marine	autotrophic species	red algae called Irish moss or carageen moss	present	absent	
	<i>Cyanidioschyzon merolae</i>	1	marine	autotrophic species	red algae	present	yes	
	<i>Galdieria sulphuraria</i>	1	marine	autotrophic species	extermophilic red algae	present	yes	
	<i>Grateloupia livida</i>	1	marine	autotrophic species	red algae	present	yes	
	<i>Porphyridium purpureum</i>	1	marine	autotrophic species	red algae	present	yes	
<b>Green algae - Chlorophyta</b>								
	<i>Alnus glutinosa</i>	1	terrestrial	autotrophic species	black alder	absent	yes	32620
	<i>Chlamydomonas reinhardtii</i>	1	marine	autotrophic species	green algae	present	yes	
	<i>Chlorella variabilis</i>	1	marine	autotrophic species	green algae	present	yes	
	<i>Gonium pectorale</i>	1	marine	autotrophic species	colonial algae	absent	yes	0
	<i>Klebsormidium flaccidum</i>	1	marine	autotrophic species	filamentous charophyte green algae	present	yes	
	<i>Monoraphidium neglectum</i>	1	marine	autotrophic species	green algae	present	yes	
	<i>Volvox carteri</i>	1	marine	autotrophic species	colonial green algae	present	yes	
<b>Moss - Bryophyta</b>								
	<i>Physcomitrella patens</i>	1	terrestrial	autotrophic species	moss	present	yes	
<b>Ferns</b>								
	<i>Acrostichum aureum</i>	1	terrestrial	autotrophic species	golden leather fern	absent	yes	0
	<i>Acrostichum speciosum</i>	1	terrestrial	autotrophic species	Mangrove fern	absent	yes	0
	<i>Adiantum capillus</i>	1	terrestrial	autotrophic species	black maidenhair fern	absent	yes	30544
	<i>Azolla filiculoides</i>	1	fresh water	autotrophic species	floating aquatic fern	present	yes	
	<i>Ceratopteris richardii</i>	1	terrestrial	autotrophic species	fern	absent	yes	5133
	<i>Ceratopteris thalictroides</i>	1	terrestrial	autotrophic species	water sprite, Indian fern	absent	yes	0
	<i>Lygodium japonicum</i>	1	terrestrial	autotrophic species	vine-like fern or Japanese climbing fern	absent	yes	0
	<i>Pteridium aquilinum</i>	1	terrestrial	autotrophic species	eagel fern	absent	yes	424
<b>Ferns - relative</b>								
	<i>Selaginella moellendorffii</i>	4	terrestrial	autotrophic species	model organism	present	yes	
<b>Gymnospermes</b>								
	<i>Picea sitchensis</i>	2	terrestrial	autotrophic species	sitka spruce	present	yes	
<b>Marchantiales</b>								
	<i>Marchantia polymorpha</i>	1	terrestrial	autotrophic species	umbrella liverwort	present	yes	

Angiospermes - Dicotylédons								
	<i>Alnus glutinosa</i>	1	terrestrial	autotrophic species	black alder		yes	
	<i>Amborella trichopoda</i>	2	terrestrial	autotrophic species	understory shrubs		yes	
	<i>Arabidopsis lyrata</i>	3	terrestrial	autotrophic species	thale cress, mouse-ear cress	present	yes	
	<i>Arabidopsis thaliana</i>	3	terrestrial	autotrophic species	thale cress, mouse-ear cress	present	yes	
	<i>Artemisia annua</i>	1	terrestrial	autotrophic species	sweet wormwood		yes	
	<i>Beta vulgaris</i>	4	terrestrial	autotrophic species	sugar beet, spinach beet	present	yes	
	<i>Botryococcus braunii</i>	1	marine	autotrophic species	green, pyramid-shaped planktonic microalgua	present	no	
	<i>Brachypodium distachyon</i>	3	terrestrial	autotrophic species	purple false brome	present	yes	
	<i>Brassica napus</i>	3	terrestrial	autotrophic species	oilseed rape	present	yes	
	<i>Brassica oleracea</i>	4	terrestrial	autotrophic species	wild cabbage plants	present	yes	
	<i>Camelina sativa</i>	3	terrestrial	autotrophic species	gold-of-pleasure or false flax	present	yes	
	<i>Camellia sinensis</i>	1	terrestrial	autotrophic species	tea plant	present	no	
	<i>Catharanthus roseus</i>	1	terrestrial	autotrophic species	Madagascar periwinkle	present	no	
	<i>Cicer arietinum</i>	3	terrestrial	autotrophic species	chickpea	present	yes	
	<i>Citrus clementina</i>	3	terrestrial	autotrophic species	clementine	present	yes	
	<i>Citrus reticulata</i>	1	terrestrial	autotrophic species	mandarin orange	present	no	
	<i>Coffea canephora</i>	3	terrestrial	autotrophic species	robusta coffee	present	yes	
	<i>Cucumis melo</i>	3	terrestrial	autotrophic species	muskmelon	present	yes	
	<i>Dendrobium nobile</i>	1	terrestrial	autotrophic species	member of Orchidaceae	present	no	
	<i>Dioscorea alata</i>	1	terrestrial	autotrophic species	purple yam	present	no	
	<i>Erythranthe guttata</i>	3	terrestrial	autotrophic species	seep monkey flower	present	yes	
	<i>Eucalyptus grandis</i>	3	terrestrial	autotrophic species	flooded gum or rose gum	present	yes	
	<i>Euonymus alatus</i>	1	terrestrial	autotrophic species	winged spindle	present	no	
	<i>Eutrema salsugineum</i>	3	terrestrial	autotrophic species	rockcress	present	yes	
	<i>Fragaria vesca</i>	3	terrestrial	autotrophic species	strawberry	present	yes	
	<i>Glycine max</i>	3	terrestrial	autotrophic species	soybean	present	yes	
	<i>Gossypium raimondii</i>	3	terrestrial	autotrophic species	cotton plant	present	yes	
	<i>Jatropha curcas</i>	3	terrestrial	autotrophic species	physic nut, Barbados nut, poison nut, bubble bush or purging nut	present	yes	
	<i>Lotus japonicus</i>	3	terrestrial	autotrophic species	wild legume	present	yes	
	<i>Malus domestica</i>	3	terrestrial	autotrophic species	apple	present	yes	
	<i>Medicago truncatula</i>	4	terrestrial	autotrophic species	barrelclover	present	yes	
	<i>Nelumbo nucifera</i>	3	terrestrial	autotrophic species	Indian lotus	present	yes	
	<i>Nicotiana sylvestris</i>	4	terrestrial	autotrophic species	common domesticated tobacco	present	yes	
	<i>Nicotiana tomentosiformis</i>	2	terrestrial	autotrophic species	tobacco	present	no	
	<i>Panax ginseng</i>	1	terrestrial	autotrophic species	ginseng	present	no	



	<i>Panicum virgatum</i>	1	terrestrial	autotrophic species	switchgrass	present	no	
	<i>Phaseolus vulgaris</i>	3	terrestrial	autotrophic species	common bean	present	yes	
	<i>Populus euphratica</i>	4	terrestrial	autotrophic species	Euphrates poplar or desert poplar	present	yes	
	<i>Populus trichocarpa</i>	2	terrestrial	autotrophic species	black cottonwood	present	yes	
	<i>Prunus mume</i>	3	terrestrial	autotrophic species	Chinese plum or Japanese apricot	present	yes	
	<i>Pyrus bretschneideri</i>	3	terrestrial	autotrophic species	Chinese white pear	present	yes	
	<i>Rehmannia glutinosa</i>	1	terrestrial	autotrophic species	use in Chinese traditional medicine	absent	no	1301
	<i>Ricinus communis</i>	3	terrestrial	autotrophic species	castorbean or castor-oil-plant	present	yes	
	<i>Sesamum indicum</i>	3	terrestrial	autotrophic species	sesame	present	yes	
	<i>Solanum lycopersicum</i>	4	terrestrial	autotrophic species	tomato	present	yes	
	<i>Solanum tuberosum</i>	3	terrestrial	autotrophic species	potato	present	yes	
	<i>Tarenaya hassleriana</i>	4	terrestrial	autotrophic species	cleome hassleriana, spider flower or pink queen	present	yes	
	<i>Theobroma cacao</i>	3	terrestrial	autotrophic species	cacao or cocoa tree	present	yes	
	<i>Triticum aestivum</i>	3	terrestrial	autotrophic species	bread wheat	present	yes	
	<i>Triticum urartu</i>	1	terrestrial	autotrophic species	red wild einkorn	present	yes	
	<i>Vigna radiata</i>	4	terrestrial	autotrophic species	mung bean	present	yes	
	<i>Vitis vinifera</i>	4	terrestrial	autotrophic species	grape vine	present	yes	
	<i>Wolffia arrhiza</i>	1	terrestrial	autotrophic species	spotless watermeal and rootless duckweed	present	no	
<b>Angiospermes - Monocotylédons Liliopsida</b>								
	<i>Brachypodium distachyon</i>	3	terrestrial	autotrophic species	purple false brome or stiff brome	present	yes	
	<i>Elaeis guineensis</i>	2	terrestrial	autotrophic species	oil palm or macaw-fat	present	yes	
	<i>Hordeum vulgare</i>	2	terrestrial	autotrophic species	barley	present	yes	
	<i>Musa acuminata</i>	3	terrestrial	autotrophic species	banana species	present	yes	
	<i>Oryza brachyantha</i>	3	terrestrial	autotrophic species	grass in the rice genus	present	yes	
	<i>Phoenix dactylifera</i>	3	terrestrial	autotrophic species	date palm	present	yes	
	<i>Setaria italica</i>	3	terrestrial	autotrophic species	poales, foxtail millet	present	yes	
	<i>Zea mays</i>	3	terrestrial	autotrophic species	maize	present	yes	
	<i>Zostera marina</i>	2	marine	autotrophic species	common eelgrass, seawrack	present	yes	