Supporting Information

Soilborne fungi have host affinity and host-specific effects on seed germination and survival in a lowland tropical forest

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SI Methods

Seed processing. Seeds were removed from fruits or infructescences immediately after collection and air-dried at room temperature (\sim 22°C) under low red: far-red irradiance. Seeds of frugivore-dispersed species were rinsed with tap water and 0.7% NaClO (2 min) to remove pulp residues before drying. Seeds from dry capsular fruits were stored in paper bags prior to use.

Seeds were placed into mesh bags and deployed as described in the main text. After burial, seeds were removed from bags within 2 hours of collection and rinsed with tap water. Ten intact seeds per bag were selected haphazardly, surface-sterilized (95% ethanol, 10 sec; 0.7% NaClO, 2 min; 70% ethanol, 2 min), allowed to surface-dry, and cut in half under sterile conditions for fungal isolation and viability assessment.

Isolation and molecular characterization of fungi. Fungi were isolated from surface-sterilized seed halves that were placed on 2% malt extract agar in individual microcentrifuge tubes (see main text). Tubes were incubated at room temperature (ca. 23°C) with natural light-dark cycles for 1 y. One fungus emerged in culture from > 90% of detectably infected seeds. Pure cultures of all fungi were deposited as living vouchers at the Robert L. Gilbertson Mycological Herbarium, University of Arizona (MYCO-ARIZ; accessions PS001–PS5673; Table S5).

Most fungi lacked fruiting structures *in vitro*. Therefore, a small piece of fresh mycelium was excised from each culture and used for molecular analysis via Sanger sequencing. A small piece of mycelium obtained from each culture under sterile conditions was ground with a sterile plastic pestle and total genomic DNA was extracted using the REDExtract-N-Amp Plant PCR kit (Sigma-Aldrich, Saint Louis, MO, USA) following a modified protocol (1, 2). Primers ITS1F and LR3 (3–5) were used to PCR-amplify a ca. 1000-1200 basepair (bp) fragment of nuclear ribosomal DNA from each extraction. Amplicons consisted of the nuclear internal transcribed spacers and 5.8S gene (ITS rDNA) and an adjacent portion (ca. 600 basepairs) of the large subunit (LSU rDNA). If amplification failed with these primers, PCR was repeated with primers ITS5 and LR3. Each reaction mixture included 10 μL of the Sigma REDExtract-N-Amp PCR ReadyMix (Saint Louis, MO, USA), 0.8 μL of each primer, 4.4 μL of PCR-quality water and 4 μL of DNA template. Cycling reactions (95°C for 3 min; 36 cycles of 95°C for 30s, 54°C for 30s, 72°C for 1 min; and 72° C for 10 min) were run on an MJ Research PTC200 thermocycler (Waltham, MA, USA).

PCR products were verified by staining with SYBR Green I (Molecular Probes, Invitrogen, Carlsbad, CA, USA) followed by electrophoresis on a 1% agarose gel. All products that yielded single bands were cleaned using 1 µL of the USB ExoSAP-IT reagent (Affymetrix, Inc., Cleveland, OH, USA). Reactions were incubated on a thermal cycler at 37°C for 60 minutes, and then at 80°C for 15 minutes to deactivate enzymes. Cleaned products were quantified, normalized and sequenced bidirectionally at the University of Arizona Genetics Core using the original primers.

The software applications *phred* and *phrap* (6, 7) were used to call bases and assemble contigs with automation provided by the ChromaSeq package in Mesquite v. 1.06 (http://mesquiteproject.org). Sequencher v. 5.1 (Gene Codes, Ann Arbor, MI, USA) was used to confirm base calls. Edited consensus sequences were compared against the NCBI GenBank database using the *blastn* algorithm (http://blast.ncbi.nlm.nih.gov/Blast) to estimate identity of the isolates at higher taxonomic levels (Table S5), and deposited in GenBank under accession numbers KU977534 – KU978121 and KY775762 – KY776423.

Seed viability assessment: tetrazolium staining. We used tetrazolium staining (TZ; 2, 3, 5-triphenyl tetrazolium chloride) to classify seeds as viable or inviable (dead). TZ staining is based on the principle that dehydrogenases in cells of live embryos convert colorless, soluble TZ into an insoluble red precipitate (i.e., 2, 3, 5 triphenyl formazan). Seed halves were placed into a Petri dish lined with wet filter paper and saturated with 0.5% TZ. Dishes were sealed with Parafilm® and kept in the dark at ca. 22°C for 24 h prior to scoring with a stereomicroscope (8).

Evaluation of seeds for uncultivable fungi. Representative seed halves that did not yield fungal growth in media after > 1 y of incubation were evaluated for the presence of uncultivable fungi. Five seed-halves from each of two representative species were processed (*F. insipida*, *T. micrantha* "black").

We first used fungal-specific primers to evaluate whether fungal DNA could be amplified from apparently uninfected seeds. Total genomic DNA was isolated from each seed-half using the Qiagen DNeasy PowerPlant Pro kit (MoBio Laboratories, Carlsbad, CA, USA; at the time of this work, the kit was known as the MoBio PowerPlant Pro kit). The manufacturer's instructions were followed after each seed was pulverized via bead-beating for 5 min with sterile 1.4mm stainless steel beads in a BulletBlender Storm (Next Advance Laboratory Instruments, Averill Park, NY, USA). Primers ITS1F and LR3 were used for PCR amplification as above, with inclusion of a positive control (a seed with known infection, processed as above). We found no evidence of successful amplification from seed halves that did not yield fungal growth in culture, whereas positive controls (i.e., seeds with visible fungal infection) did yield amplicons.

Second, we used the same DNA samples in a dual-barcoded, two-step PCR approach for amplicon sequencing on the Illumina MiSeq platform (Illumina, Inc., San Diego, CA, USA). We quantified DNA concentrations with the Qubit 2.0 Fluorometer (Invitrogen, Carlsbad, CA, USA) with the Qubit dsDNA HS (High Sensitivity) Assay Kit following the manufacturer's instructions prior to initiating PCRs. In the first PCR (PCR1) we amplified the internal transcribed spacer regions ITS1/ITS2. Each PCR1 primer contained a universal 22 bp consensus sequence tag (i.e., CS1 forward and CS2 reverse), 0-5 bp for phase-shifting, a 2 bp linker, and primers (ITS1F and ITS4). We pooled forward or reverse PCR1 primers with different phase-shifting lengths in equimolar concentrations prior to PCR, such that each amplification consisted of a random mixture of different phase-shifting lengths. We chose linkers and phase-shifting bases with low identity between primers and the target sequences. In the second

amplification step (PCR2) we used forward and reverse primers that each contained the complement of the CS tag, a 12 bp barcode, and the corresponding Illumina sequencing primer.

We performed PCR1 in triplicate in 20 μl reaction volumes that each contained 0.5 μl DNA template, 7.5 μl 1X Phusion Flash High-Fidelity PCR Master Mix (ThermoFisher Scientific, Austin, TX, USA), 0.2 μl of 50 μM forward and reverse primers, 1 mg/mL of molecular grade bovine serum albumin (BSA; New England Biolabs, Ipswich, MA, USA), and 6.0 μl of molecular grade water. We used the following cycling protocol: an initial denaturing step at 98°C for 10 sec; 25 cycles consisting of denaturation at 98° C for 1 sec, annealing at 57° C for 5 sec, and extension at 72°C for 20 sec; and a final extension at 72°C for 1 minute. We used sterile, molecular grade water instead of template for negative controls. We used SYBR Green 1 (Invitrogen, Carlsbad, CA, USA) to visualize amplification on a 2% agarose gel after electrophoresis. We then pooled the three PCR1 products for each sample. From this, we diluted 5 μl of the pooled amplicons with molecular grade water to a final concentration of 1:15. We then used 1 μl of the pooled, diluted PCR1 product as the template for PCR2.

Each PCR2 reaction contained a final concentration of 1X Phusion Flash High-Fidelity PCR Master Mix, 0.075 μ M barcoded primers (forward and reverse previously pooled at a concentration of 2 μ M), and 0.24 mg/mL of BSA, for a final volume of 20 μ L. We used the following cycling protocol: an initial denaturing step at 98° C for 10 sec; five cycles consisting of denaturation at 98° C for 1 sec, annealing at 51° C for 5 sec, and extension at 72° C for 15 sec; and a final extension step at 72° C for 1 minute. We visualized products of PCR2 on a 2% agarose gel to verify amplification and confirm that minimal primer dimers were generated. We quantified PCR2 products with PicoGreen and the Biotek Synergy H1 Multi-Mode Reader (Biotek, Winooski, VT, USA). We normalized amplicons to 1 ng/ μ L and pooled 2 μ L of each for Illumina sequencing. We purified the final amplicon pool with Agencourt AMPure XP beads (Beckman Coulter, Inc., Brea, CA, USA) at a ratio of 1:1 to remove excess primers, nucleotides, salts, enzymes, and primer dimers, following the manufacturer's instructions. We evaluated the amplicon library on a BioAnalyzer 2100 (Agilent Technologies, Santa Clara, CA, USA) to determine concentration and fragment size distribution. Paired-end sequencing was performed on an Illumina MiSeq with Reagent Kit v3 (2x300 bp) at the IBEST Genomics Core at the University of Idaho.

To ensure that our MiSeq results were of the highest quality for inference, we prepared PCR mixes in a sterile, dedicated "pre-PCR" hood (i.e., a dedicated environment that was never exposed to amplified DNA). We decontaminated all surfaces and tools in the pre-PCR hood, including pipettes, with DNA Away (Molecular BioProducts, Inc., San Diego, CA, USA) prior to each use. We used a dedicated "post-PCR" hood for library prep following PCR1 (i.e., PCR1 pooling, PCR1 dilutions, addition of diluted PCR1 products to PCR2 master mix, and PCR2 amplicon pooling). We cleaned the hood and all equipment with DNA Away and treated with ultra-violet light for a minimum of 30 minutes prior to each use. We used sterile, aerosol-resistant pipette tips at all steps to minimize cross-contamination of samples. We used separate reagents, pipettes, tips, and consumables for pre- and post-PCR setup. We pooled negative controls from PCR1 and used them as template for reactions in PCR2 to ensure that no contamination occurred during pooling or PCR2 setup. Finally, although we detected no contamination either visually or by fluorometric analysis, we combined 5 µL of each PCR negative control and extraction blank in a separate pool and subjected them to the same pre-sequencing treatment as positive amplicon pools. We sequenced these negative controls in parallel with samples of interest. Positive controls included diverse DNA extracts from plant material and soils gathered in parallel for related but separate projects.

We demultiplexed raw Illumina reads with custom scripts at the IBEST Genomics Core (https://github.com/msettles/dbcAmplicons; one mismatch allowed in barcode, four mismatches allowed in primers with ends matching). We used FastQC to assess the quality of demultiplexed reads (http://www.bioinformatics.babraham.ac.uk/projects/fastqc/). We used the UPARSE pipeline with USEARCH v.8.1.1861_i86linux32 (9) for subsequent analyses. We used the fastq_eestats2 command to create a summary report showing the number of reads that would pass an expected error filter (maxEE 0.25, 0.50, 1.0) at different length thresholds (length_cutoffs 200, 250, 10). Based on this report we chose a length cutoff that would yield a sufficient number of high quality reads per sample while also retaining maximum read length. We used the fastq_filter command to trim forward reads (R1, corresponding to the ITS1 region) to 200 bp (fastq_trunclen = 200) and to remove reads with greater than one error rate (max_ee = 1). We used the command derep_fulllength to dereplicate quality-trimmed reads and then removed singletons (parameters -sizeout -minuniquesize 1). We clustered dereplicated sequences into operational taxonomic units (OTU) at 95% sequence similarity. In addition to de novo chimera checking performed during clustering, we used the RDP classifier for reference-based chimera checking of representative sequences for each OTU.

Overall 70% of seed samples that lacked fungal growth in culture produced no fungal reads. We detected only two fungal OTU, both of which were found in two seeds of F. insipida. Both corresponded to Candida or related yeasts and were represented by \leq 34 reads. In contrast, other samples and the positive controls processed on the same runs yielded hundreds of fungal OTU from plant material, confirming the quality of the run and of the methods used here.

Selection of strains for the inoculation experiment. Because preliminary data suggested a higher prevalence of cultivable vs. uncultivable fungi, we focused on cultivable fungi, which allowed us to obtain strains for inoculation experiments. We used isolation records to select strains with contrasting host range and predicted virulence (Table S12). These strains were chosen to determine the ability of each to influence germination and viability of seeds of seven tree species (*Apeiba membranacea*, *Cecropia insignis, Cochlospermum vitifolium, Ficus insipida, Luehea seemannii, Ochroma pyramidale*, and *Trema micrantha* "black") used in the common garden experiment (Table S11). Species were chosen based on the availability of fresh seeds at the time of the inoculation experiment.

Seeds were cleaned and surface-sterilized as described in the main text (see *Methods*). Seed surface-sterilization does not affect germination or viability (38). Seeds were placed on actively growing mycelium (ca. 11–13 days old) on 2% MEA in 60 mm Petri dishes (25 seeds/dish). Dishes were wrapped with Parafilm® and incubated in the dark at outdoor ambient temperature (mean, 26°C) for 15 d. Controls consisted of plates each containing 25 seeds that were surface-sterilized, placed into Petri dishes with 2% MEA but no fungal growth, and incubated as above. Overall, 8000 seeds were included in the inoculation experiment. Following exposure, seeds from each dish were separated haphazardly into three groups. One group was transferred directly to a sterile 60 mm Petri dish to score germination (10 seeds/dish). To ensure that the observed effects were caused by the fungal inocula on ungerminated seeds and not by negative effects after germination, the second group was surface-sterilized prior to transfer as above (10 seeds/dish). The third group (5 seeds/dish) was surface-sterilized and plated on 2% MEA to confirm successful inoculation and colonization of the seed interior. Identity of isolates was confirmed by PCR and sequencing of ITS-LSU rDNA as above. Germination was scored as positive when radicle protrusion was observed after 6 wk of exposure to 30% full sunlight, high red: far-red irradiance (ca. 1.4) and ambient temperature in a shade house (11).

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Figure S1. Locations of five common gardens used in the experiment on Barro Colorado Island, Panama (modified from ref. 10). Maps show forest age (*A*), soil type (*B*), slope (*C*), and aspect (*D*). Letters correspond to the identity of each common garden: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek.

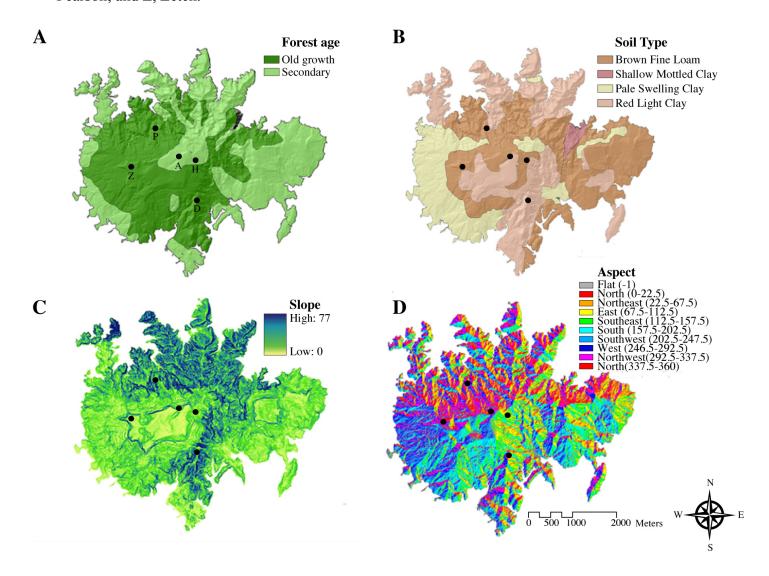
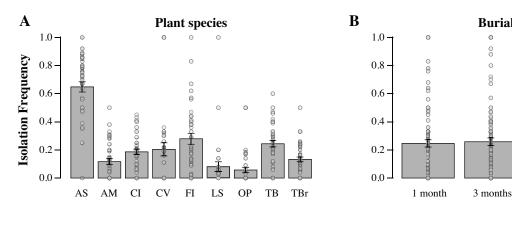
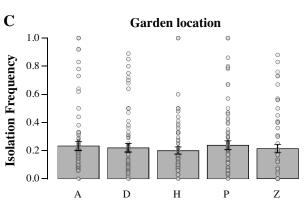
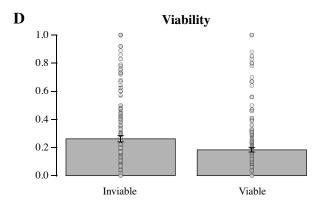


Figure S2. Detectable fungal infections in seeds of tropical trees after burial in common gardens in a lowland tropical forest in Panama. Frequency was calculated as the number of isolates divided by the number of seeds processed for each plant species (A), burial duration (B), garden location (C), and seed viability class (D). Error bars represent standard error (SEM) and each dot represents the frequency of detectable fungal infections (values are shown in Table S2). Plant species: AS, Annona spraguei; AM, Apeiba membranacea; CI, Cecropia insignis; CV, Cochlospermum vitifolium; FI, Ficus insipida; LS, Luehea seemannii; OP, Ochroma pyramidale; TB, Trema micrantha "black"; and TBr, Trema micrantha "brown". Garden location: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek.







Burial duration

0

6 months

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99 99

12 months

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8

Figure S3. Species-accumulation curves for fungi isolated from the interior of seeds of tropical trees. Operational taxonomic units (OTU) were defined at 99% sequence similarity. Panels represent fungi isolated from seeds of nine tree species (*left*) and the four best-sampled tree species (*right*). Top panels (*A* and *B*) represent all nonsingleton OTU isolated from both fresh and buried seeds. Panels *C* and *D* represent nonsingleton OTU from seeds that were buried (i.e., not including fresh seeds; buried seeds were placed for 1, 3, 6, or 12 months in common gardens). Bottom panels represent OTU with \geq 9 isolates (*E*) or \geq 4 isolates (*F*) from buried seeds.

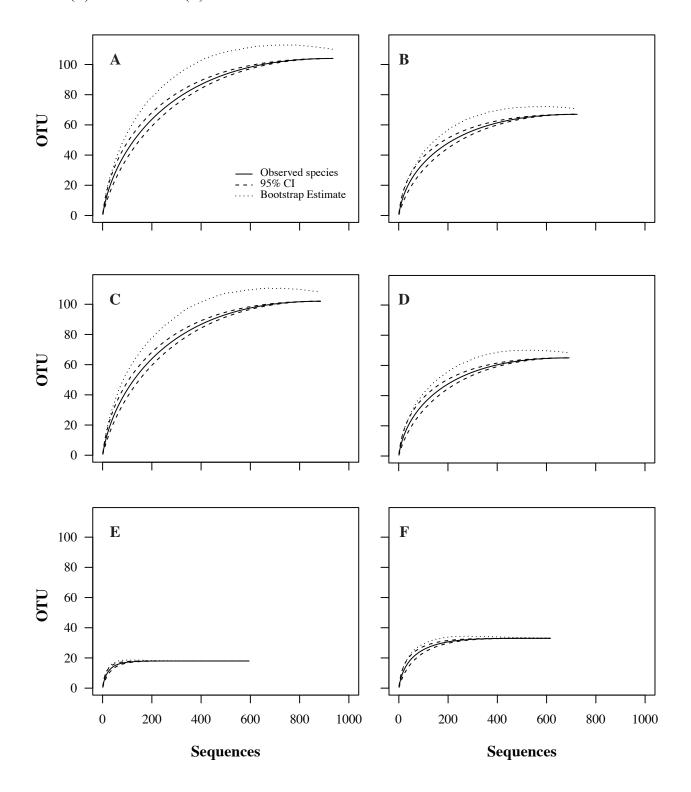


Figure S4. Species-accumulation curves for fungi isolated from the interior of seeds of each tree species used in the study. The curves represent nonsingleton OTU isolated from seeds after burial.

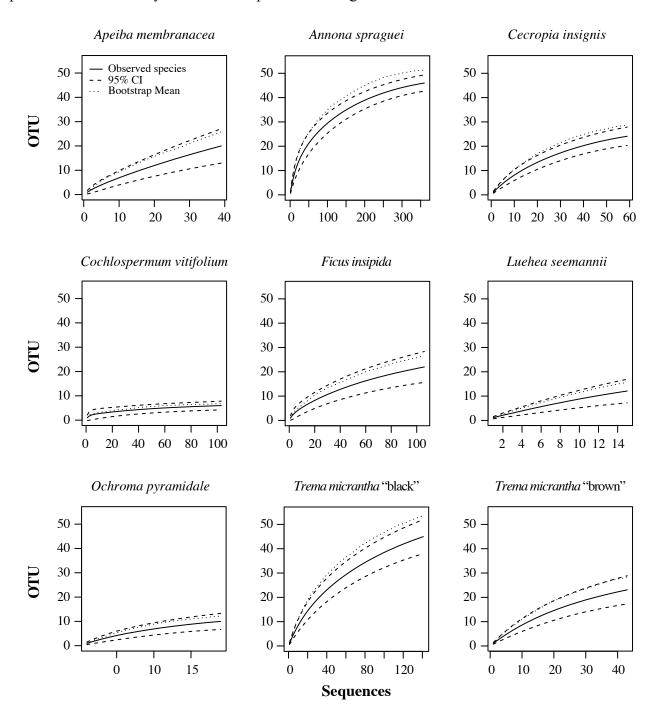


Figure S5. Diversity of fungi from seeds of tropical trees. Fisher's alpha was calculated with all sequenced isolates from each plant species (*A*), burial duration (*B*), garden location (*C*), and seed viability class (*D*). All values are shown in Table S3. Error bars represent standard error (SEM). Plant species: AS, *Annona spraguei*; AM, *Apeiba membranacea*; CI, *Cecropia insignis*; CV, *Cochlospermum vitifolium*; FI, *Ficus insipida*; LS, *Luehea seemannii*; OP, *Ochroma pyramidale*; TB, *Trema micrantha* "black"; and TBr, *Trema micrantha* "brown". Garden location: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek.

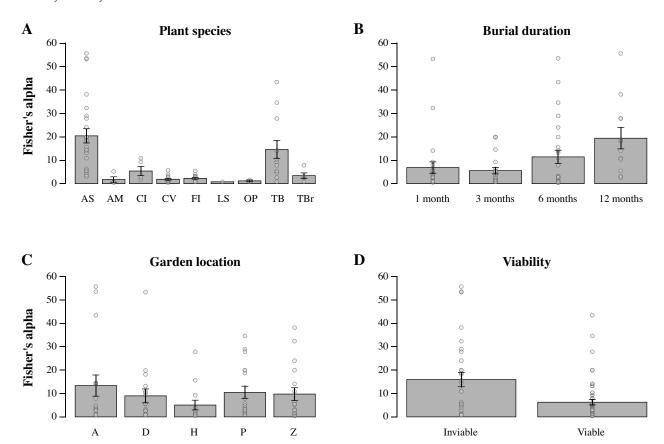


Figure S6. Hierarchical cluster analysis and pairwise similarities of seed-associated fungal communities, evaluated with data from all nine tree species. As in analyses of the four best-represented tree species (see main text), these analyses revealed strong effects of plant species on fungal community structure. Dendrograms represent Morisita–Horn (*A*) and Jaccard (*B*) similarities among communities of seeds-associated fungi. Tips of dendrograms represent fungal communities defined as the sequenced fungal strains isolated from seeds of a given plant species (AM, *Apeiba membranacea*; AS, *Annona spraguei*; CI, *Cecropia insignis*; CV, *Cochlospermum vitifolium*; FI, *Ficus insipida*; LS, *Luehea seemannii*; OP, *Ochroma pyramidale*; TB, *Trema micrantha* "black"; and TBr, *Trema micrantha* "brown"), burial duration (1, 3, 6, or 12 months), burial location (A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek), and viability class (viable or inviable seeds). Lower panels summarize pairwise comparisons of fungal community similarity based on abundance (*C*) and presence-absence data (*D*). Error bars represent standard error (SEM). ** *P* < 0.001; * *P* < 0.05.

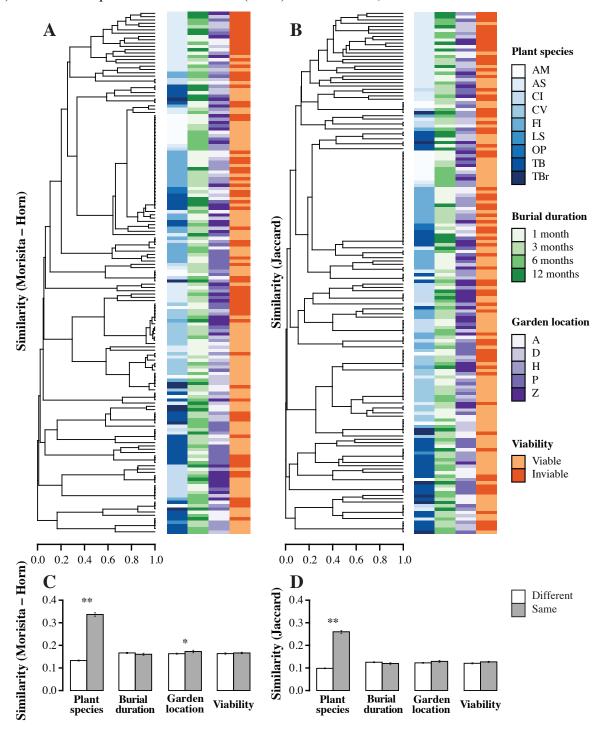


Figure S7. Nonmetric multidimensional scaling (NMDS) analysis representing similarity among fungal communities (points) isolated from seeds of nine tree species. Panels depict the same ordination but different colors represent plant species (A), garden location (B), burial duration (C), and seed viability (D); stress = 0.053. Ellipses represent standard deviation of point scores relative to their centroid. Venn diagrams represent variation in fungal community composition that is explained by each variable and their shared variation, based on abundance (E) and presence-absence data (F). Redundancy analyses show that plant species (F = 8.621, P = 0.001) and viability (F = 2.240, P = 0.027) are significant when abundance is considered, but plant species (F = 6.958, P = 0.001), garden location (F = 1.512, P = 0.012), and viability (F = 2.862, P = 0.001) are significant when presence-absence data are considered. Plant species: AM, *Apeiba membranacea*; AS, *Annona spraguei*; CI, *Cecropia insignis*; CV, *Cochlospermum vitifolium*; FI, *Ficus insipida*; LS, *Luehea seemannii*; OP, *Ochroma pyramidale*; TB, *Trema micrantha* "black"; and TBr, *Trema micrantha* "brown". Garden location: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek.

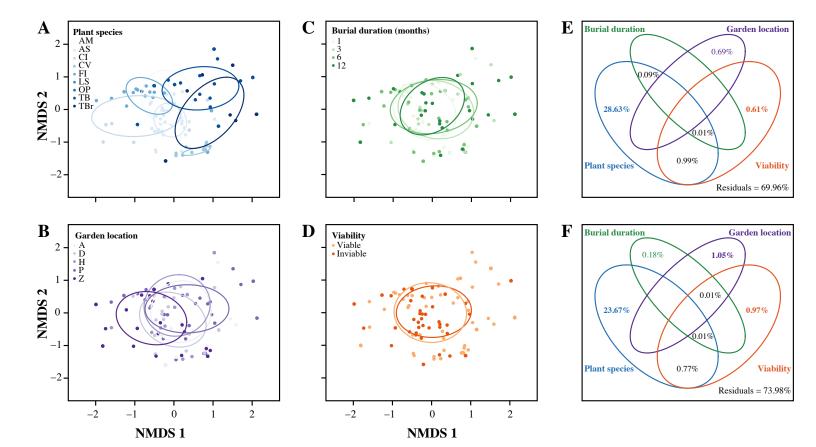


Table S1. Information regarding plant species and the fungi associated with their seeds, including fresh (A) and buried (B) seeds of nine tree species.

A. Fresh Seeds

Plant species	Plant family	Dispersal	Dormancy	Maternal	Number of	% seeds with	Number of	Total number	% singletons	Fisher's
- Trant species	Tiant laminy	mode	type	sources	cultivable fungi	cultivable fungi	sequences obtained	of OTU	(No. singletons)	alpha
Annona spraguei	Annonaceae	Animal	MPD	12	36	18.0	31	16	68.8 (11)	13.3
Apeiba membranacea	Malvaceae	Animal	PY	5	21	10.4	17	10	80.0 (8)	10.2
Cecropia insignis	Urticaceae	Animal	ND	7	0	0.0	0	0	0 (0)	-
Cochlospermum vitifolium	Bixaceae	Wind	PY	8	6	3.0	4	3	66.7 (2)	5.5
Ficus insipida	Moraceae	Animal	ND	3	0	0.0	0	0	0 (0)	-
Luehea seemannii	Malvaceae	Wind	PY	5	9	4.5	7	7	100.0 (7)	-
Ochroma pyramidale	Malvaceae	Wind	PY	6	4	2.0	3	3	100.0 (3)	-
Trema micrantha "black"	Cannabaceae	Animal	PD	6	6	3.0	5	2	50.0(1)	1.2
Trema micrantha "brown"	Cannabaceae	Animal	PD	4	1	0.5	1	1	100.0(1)	-
TOTAL Average (+/- SE)					83 9.2 (4.0)	4.6 4.6 (2.0)	68 7.6 (3.4)	36 4.7 (1.8)	72.2 (26) 62.8% (13.2)	31.0

B. Buried Seeds

Plant species	Plant family	Dispersal	Dormancy	Number of	Number of	% seeds with	Number of	Total number	% singletons	Fisher's
Trant species	Tiant lamny	mode	type	examined seeds	cultivable fungi	cultivable fungi	sequences obtained	of OTU	(No. singletons)	alpha
Annona spraguei	Annonaceae	Animal	MPD	796	533	67.0	394	80	53.8 (43)	30.3
Apeiba membranacea	Malvaceae	Animal	PY	687	84	12.2	52	33	84.8 (28)	38.8
Cecropia insignis	Urticaceae	Animal	ND	751	135	18.0	68	33	54.5 (18)	25.3
Cochlospermum vitifolium	Bixaceae	Wind	PY	576	116	20.1	108	11	63.6 (7)	3.1
Ficus insipida	Moraceae	Animal	ND	759	177	23.3	112	28	60.7 (17)	12.0
Luehea seemannii	Malvaceae	Wind	PY	753	35	4.6	22	19	84.2 (16)	66.3
Ochroma pyramidale	Malvaceae	Wind	PY	721	33	4.6	23	14	64.3 (9)	15.2
Trema micrantha "black"	Cannabaceae	Animal	PD	774	177	22.9	158	62	58.1 (36)	37.6
Trema micrantha "brown"	Cannabaceae	Animal	PD	718	87	12.1	55	35	68.6 (24)	41.4
TOTAL			•	6535	1377	21.1	992	209	51.2 (107)	80.8
Average (+/- SE)				726.1 (21.7)	153.0 (50.6)	20.5 (6.3)	110.2 (38.4)	35.0 (7.5)	65.8 (3.9)	

Seeds of nine species of tropical pioneer trees were buried in the forest soil in five common gardens at Barro Colorado Island (Panama). Seeds were collected from different trees (maternal sources) and pooled at the outset of the experiment. A subset of 200 fresh seeds from each plant species (1800 total) was examined before burial (A). Dormancy types were assigned according to (44): MPD, Morphophysiological dormancy; PY, Physical dormancy; PD, Physiological dormancy; ND, Non-dormant or quiescent seeds.

 Table S2. Isolation frequency of seed-associated fungi.

Plant	Burial	Garden	ssociated	rungi.		Isolation
	duration	location	Viability	No. Seeds	No. Isolates	
species				2.5	1.6	frequency
Annona spraguei	1	A	0	25	16	0.64
Annona spraguei	1	A	1	9	7	0.78
Annona spraguei	1	D	0	22	15	0.68
Annona spraguei	1	D	1	11	7	0.64
Annona spraguei	1	Н	0	23	11	0.48
Annona spraguei	1	Н	1	8	2	0.25
Annona spraguei	1	P	0	18	14	0.78
Annona spraguei	1	P	1	15	7	0.47
Annona spraguei	1	Z	0	33	25	0.76
Annona spraguei	1	Z	1	1	0	0.00
Annona spraguei	3	A	0	37	34	0.92
Annona spraguei	3	A	1	3	3	1.00
Annona spraguei	3	D	0	29	21	0.72
Annona spraguei	3	D	1	10	7	0.70
Annona spraguei	3	Н	0	33	13	0.39
Annona spraguei	3	Н	1	6	3	0.50
Annona spraguei	3	P	0	34	12	0.35
Annona spraguei	3	P	1	5	4	0.80
Annona spraguei	3	Z	0	30	17	0.57
Annona spraguei	3	Z	1	8	7	0.88
Annona spraguei	6	A	0	33	24	0.73
Annona spraguei	6	A	1	6	5	0.83
Annona spraguei	6	D	0	27	24	0.89
Annona spraguei	6	D	1	13	11	0.85
Annona spraguei	6	H	0	29	14	0.48
Annona spraguei	6	Н	1	11	4	0.36
Annona spraguei	6	P	0	28	22	0.79
Annona spraguei	6	P	1	8	8	1.00
Annona spraguei	6	Z	0	30	22	0.73
Annona spraguei	6	Z	1	9	5	0.56
Annona spraguei	12	A	0	36	33	0.92
Annona spraguei	12	A	1	4	1	0.25
Annona spraguei	12	D	0	32	24	0.75
Annona spraguei	12	D	1	5	4	0.80
Annona spraguei	12	Н	0	36	18	0.50
Annona spraguei	12	Н	1	4	1	0.25
Annona spraguei	12	P	0	37	32	0.86
Annona spraguei	12	P	1	3	2	0.67
Annona spraguei	12	Z	0	37	27	0.73
Annona spraguei	12	Z	1	3	2	0.67
Apeiba membranacea	1	Α	0	13	2	0.15
Apeiba membranacea	1	Α	1	17	2	0.12
Apeiba membranacea	1	D	0	15	1	0.07
Apeiba membranacea	1	D	1	25	1	0.04
Apeiba membranacea	1	Н	0	14	4	0.29
Apeiba membranacea	1	Н	1	26	3	0.12
Apeiba membranacea	1	P	0	22	1	0.05
Apeiba membranacea	1	P	1	18	2	0.11
Apeiba membranacea	1	Z	0	13	4	0.31
Apeiba membranacea	1	Z	1	26	5	0.19
Apeiba membranacea	3	A	0	3	0	0.00
Apeiba membranacea	3	A	1	29	8	0.28

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Apeiba membranacea	3	D	0	3	0	0.00	
Apeiba membranacea	3	D	1	24	3	0.12	
Apeiba membranacea	3	Н	0	3	1	0.33	
Apeiba membranacea	3	Н	1	35	3	0.09	
Apeiba membranacea	3	P	0	6	0	0.00	
Apeiba membranacea	3	P	1	32	4	0.12	
Apeiba membranacea	3	Z	0	4	0	0.00	
Apeiba membranacea	3	Z	1	33	10	0.30	
Apeiba membranacea	6	A	0	8	3	0.38	
Apeiba membranacea	6	A	1	29	7	0.24	
Apeiba membranacea	6	D	0	8	0	0.00	
Apeiba membranacea	6	D	1	27	3	0.11	
Apeiba membranacea	6	Н	0	3	0	0.00	
Apeiba membranacea	6	Н	1	27	4	0.15	
Apeiba membranacea	6	P	0	5	1	0.20	
Apeiba membranacea	6	P	1	28	4	0.14	
Apeiba membranacea	6	Z	0	4	2	0.50	
Apeiba membranacea	6	Z	1	31	4	0.13	
Apeiba membranacea	12	A	0	2	0	0.00	
Apeiba membranacea	12	A	1	30	0	0.00	
Apeiba membranacea	12	D	0	2	0	0.00	
Apeiba membranacea	12	D	1	27	0	0.00	
Apeiba membranacea	12	Н	1	24	0	0.00	
Apeiba membranacea	12	P	0	2	0	0.00	
Apeiba membranacea	12	P	1	30	0	0.00	
Apeiba membranacea	12	Z	0	5	0	0.00	
Apeiba membranacea	12	Z	1	27	0	0.00	
Cecropia insignis	1	A	0	2	0	0.00	
Cecropia insignis	1	A	1	33	4	0.00	
Cecropia insignis Cecropia insignis	1	D A	0	4	1	0.12	
Cecropia insignis Cecropia insignis	1	D	1	25	3	0.23	
Cecropia insignis Cecropia insignis	1	Н	0	3	1	0.12	
	1	Н	1	33	11	0.33	
Cecropia insignis		П Р	0	4			
Cecropia insignis	1				1	0.25	
Cecropia insignis	1	P	1	36	6	0.17	
Cecropia insignis	1	Z	0	11	5	0.45	
Cecropia insignis	1	Z	1	16	3	0.19	
Cecropia insignis	3	A	0	11	1	0.09	
Cecropia insignis	3	A	1	27	2	0.07	
Cecropia insignis	3	D	0	14	3	0.21	
Cecropia insignis	3	D	1	21	2	0.10	
Cecropia insignis	3	Н	0	20	5	0.25	
Cecropia insignis	3	Н	1	13	2	0.15	
Cecropia insignis	3	P	0	14	6	0.43	
Cecropia insignis	3	P	1	13	3	0.23	
Cecropia insignis	3	Z	0	11	4	0.36	
Cecropia insignis	3	Z	1	17	2	0.12	
Cecropia insignis	6	A	0	12	3	0.25	
Cecropia insignis	6	A	1	20	4	0.20	
Cecropia insignis	6	D	0	18	3	0.17	
Cecropia insignis	6	D	1	17	2	0.12	
Cecropia insignis	6	Н	0	14	1	0.07	
Cecropia insignis	6	Н	1	20	5	0.25	
Cecropia insignis	6	P	0	11	2	0.18	
Cecropia insignis	6	P	1	15	1	0.07	
Cecropia insignis	6	Z	0	20	4	0.20	

Cagnonia incignia	6	Z	1	14	1	0.07	
Cecropia insignis Cecropia insignis	12	A	0	31	9	0.07	
Cecropia insignis	12	A	1	9	0	0.29	
Cecropia insignis	12	D D	0	27	5	0.00	
Cecropia insignis	12	D	1	3	0	0.19	
	12	Н		19	3	0.00	
Cecropia insignis	12	п Н	0	19		0.10	
Cecropia insignis			1		1		
Cecropia insignis	12	P	0	23	1	0.04	
Cecropia insignis	12	P	1	16	1	0.06	
Cecropia insignis	12	Z	0	29	12	0.41	
Cecropia insignis	12	Z	1	10	4	0.40	
Cochlospermum vitifolium	1	A	0	1	0	0.00	
Cochlospermum vitifolium	1	A	1	37	12	0.32	
Cochlospermum vitifolium	1	D	1	37	8	0.22	
Cochlospermum vitifolium	1	Н	0	2	2	1.00	
Cochlospermum vitifolium	1	Н	1	36	13	0.36	
Cochlospermum vitifolium	1	P	0	3	1	0.33	
Cochlospermum vitifolium	1	P	1	31	10	0.32	
Cochlospermum vitifolium	1	Z	1	34	7	0.21	
Cochlospermum vitifolium	3	A	1	35	7	0.20	
Cochlospermum vitifolium	3	D	0	3	1	0.33	
Cochlospermum vitifolium	3	D	1	32	6	0.19	
Cochlospermum vitifolium	3	Н	0	1	1	1.00	
Cochlospermum vitifolium	3	Н	1	34	11	0.32	
Cochlospermum vitifolium	3	P	0	1	0	0.00	
Cochlospermum vitifolium	3	P	1	31	8	0.26	
Cochlospermum vitifolium	3	Z	0	1	0	0.00	
Cochlospermum vitifolium	3	Z	1	33	10	0.30	
Cochlospermum vitifolium	6	A	1	31	5	0.16	
Cochlospermum vitifolium	6	D	1	20	6	0.30	
Cochlospermum vitifolium	6	H	1	27	3	0.11	
Cochlospermum vitifolium	6	P	1	22	0	0.00	
Cochlospermum vitifolium	6	Z	1	26	5	0.19	
Cochlospermum vitifolium	12	A	0	1	0	0.00	
Cochlospermum vitifolium	12	A	1	20	0	0.00	
Cochlospermum vitifolium	12	D	0	1	0	0.00	
Cochlospermum vitifolium	12	D	1	18	0	0.00	
Cochlospermum vitifolium	12	Н	0	1	0	0.00	
Cochlospermum vitifolium	12	Н	1	19	0	0.00	
Cochlospermum vitifolium	12	P	1	18	0	0.00	
Cochlospermum vitifolium	12	Z	1	17	0	0.00	
Ficus insipida	1	A	0	13	8	0.62	
Ficus insipida	1	A	1	23	4	0.17	
Ficus insipida	1	D	0	11	4	0.36	
Ficus insipida	1	D	1	29	12	0.41	
Ficus insipida	1	H	0	6	2	0.33	
Ficus insipida	1	H	1	34	3	0.09	
Ficus insipida	1	P	0	6	6	1.00	
Ficus insipida	1	P	1	34	10	0.29	
Ficus insipida	1	Z	0	6	5	0.83	
Ficus insipida	1	Z	1	34	19	0.56	
Ficus insipida	3	A	0	9	4	0.44	
Ficus insipida	3	A	1	30	3	0.10	
Ficus insipida	3	D	0	15	7	0.47	
Ficus insipida	3	D	1	23	4	0.17	
Ficus insipida	3	Н	0	8	3	0.38	

Ficus insipida	3	Н	1	22	9	0.41
Ficus insipida	3	P	0	9	6	0.67
Ficus insipida	3	P	1	29	6	0.21
Ficus insipida	3	Z	0	10	4	0.40
Ficus insipida	3	Z	1	30	6	0.20
Ficus insipida	6	A	0	9	0	0.00
Ficus insipida	6	A	1	31	9	0.29
Ficus insipida	6	D	0	16	6	0.38
Ficus insipida	6	D	1	24	3	0.12
Ficus insipida	6	Н	0	9	4	0.44
Ficus insipida	6	Н	1	31	1	0.03
Ficus insipida	6	P	0	7	4	0.57
Ficus insipida	6	P	1	23	5	0.22
Ficus insipida	6	Z	0	7	1	0.14
Ficus insipida	6	Z	1	33	6	0.18
Ficus insipida	12	A	0	28	0	0.00
Ficus insipida	12	A	1	12	0	0.00
Ficus insipida	12	D	0	40	1	0.00
Ficus insipida	12	Н	0	23	2	0.02
-	12	Н		6	0	
Ficus insipida		п Р	1			0.00
Ficus insipida	12		0	25	0	0.00
Ficus insipida	12	P	1	6	1	0.17
Ficus insipida	12	Z	0	31	4	0.13
Ficus insipida	12	Z	1	9	0	0.00
Luehea seemannii	1	A	0	5	1	0.20
Luehea seemannii	1	A	1	35	2	0.06
Luehea seemannii	1	D	0	2	1	0.50
Luehea seemannii	1	D	1	34	2	0.06
Luehea seemannii	1	Н	1	40	3	0.08
Luehea seemannii	1	P	0	2	0	0.00
Luehea seemannii	1	P	1	38	3	0.08
Luehea seemannii	1	Z	1	40	2	0.05
Luehea seemannii	3	A	0	1	1	1.00
Luehea seemannii	3	A	1	39	3	0.08
Luehea seemannii	3	D	1	32	2	0.06
Luehea seemannii	3	Н	0	4	0	0.00
Luehea seemannii	3	Н	1	36	1	0.03
Luehea seemannii	3	P	0	5	0	0.00
Luehea seemannii	3	P	1	35	2	0.06
Luehea seemannii	3	Z	1	40	3	0.08
Luehea seemannii	6	A	0	3	0	0.00
Luehea seemannii	6	A	1	35	5	0.14
Luehea seemannii	6	D	1	28	1	0.04
Luehea seemannii	6	Н	0	1	0	0.00
Luehea seemannii	6	Н	1	35	2	0.06
Luehea seemannii	6	P	0	1	0	0.00
Luehea seemannii	6	P	1	39	1	0.03
Luehea seemannii	6	Z	1	35	0	0.00
Luehea seemannii	12	A	1	34	0	0.00
Luehea seemannii	12	D	1	40	0	0.00
Luehea seemannii	12	Н	0	2	0	0.00
Luehea seemannii	12	H	1	29	0	0.00
Luehea seemannii	12	n P	0	3	0	0.00
Luehea seemannii	12	P	1	35	0	0.00
		Z		33	0	
Luehea seemannii	12		0			0.00
Luehea seemannii	12	Z	1	37	0	0.00

0.1	1		0	4	0	0.00	
Ochroma pyramidale	1	A	0	4	0	0.00	
Ochroma pyramidale	1	A	1	35	0	0.00	
Ochroma pyramidale	1	D	0	6	1	0.17	
Ochroma pyramidale	1	D	1	32	3	0.09	
Ochroma pyramidale	1	Н	0	4	0	0.00	
Ochroma pyramidale	1	Н	1	35	2	0.06	
Ochroma pyramidale	1	P	0	2	1	0.50	
Ochroma pyramidale	1	P	1	37	1	0.03	
Ochroma pyramidale	1	Z	0	5	0	0.00	
Ochroma pyramidale	1	Z	1	25	0	0.00	
Ochroma pyramidale	3	A	0	5	1	0.20	
Ochroma pyramidale	3	A	1	33	6	0.18	
Ochroma pyramidale	3	D	0	3	0	0.00	
Ochroma pyramidale	3	D	1	28	4	0.14	
Ochroma pyramidale	3	Н	0	4	2	0.50	
Ochroma pyramidale	3	Н	1	36	6	0.17	
Ochroma pyramidale	3	P	0	3	0	0.00	
Ochroma pyramidale	3	P	1	37	1	0.03	
Ochroma pyramidale	3	Z	0	2	0	0.00	
Ochroma pyramidale	3	Z	1	28	1	0.04	
Ochroma pyramidale	6	A	0	3	0	0.00	
Ochroma pyramidale	6	A	1	34	2	0.06	
Ochroma pyramidale	6	D	0	4	0	0.00	
Ochroma pyramidale	6	D	1	25	0	0.00	
Ochroma pyramidale	6	Н	0	1	0	0.00	
Ochroma pyramidale	6	Н	1	39	0	0.00	
Ochroma pyramidale	6	P	0	3	0	0.00	
Ochroma pyramidale	6	P	1	37	1	0.03	
Ochroma pyramidale	6	Z	0	2	0	0.00	
Ochroma pyramidale	6	Z	1	29	1	0.03	
Ochroma pyramidale	12	A	0	1	0	0.00	
Ochroma pyramidale	12	A	1	39	0	0.00	
Ochroma pyramidale	12	D	1	19	0	0.00	
Ochroma pyramidale	12	Н	0	2	0	0.00	
Ochroma pyramidale	12	Н	1	38	0	0.00	
Ochroma pyramidale	12	P	0	2	0	0.00	
Ochroma pyramidale	12	P	1	37	0	0.00	
Ochroma pyramidale	12	Z	0	1	0	0.00	
Ochroma pyramidale	12	Z	1	29	0	0.00	
Trema micrantha "black"	1	A	0	16	4	0.25	
Trema micrantha "black"	1	A	1	14	3	0.21	
Trema micrantha "black"	1	D	0	13	1	0.08	
Trema micrantha "black"	1	D	1	27	8	0.30	
Trema micrantha "black"	1	Н	0	15	4	0.27	
Trema micrantha "black"	1	Н	1	25	3	0.12	
Trema micrantha "black"	1	P	0	13	3	0.23	
Trema micrantha "black"	1	P	1	27	9	0.33	
Trema micrantha "black"	1	Z	0	14	0	0.00	
Trema micrantha "black"	1	Z	1	20	0	0.00	
Trema micrantha "black"	3	A	0	9	3	0.33	
Trema micrantha "black"	3	A	1	31	6	0.19	
Trema micrantha "black"	3	D	0	7	2	0.29	
Trema micrantha "black"	3	D	1	34	6	0.18	
Trema micrantha "black"	3	Н	0	5	1	0.20	
Trema micrantha "black"	3	Н	1	35	2	0.06	
Trema micrantha "black"	3	P	0	10	3	0.30	
	-	-	Ŭ		-	0.50	

Trema micrantha "black"	3	P	1	30	14	0.47
Trema micrantha "black"	3	Z	0	5	2	0.40
Trema micrantha "black"	3	Z	1	35	6	0.17
Trema micrantha "black"	6	A	0	4	2	0.50
Trema micrantha "black"	6	A	1	36	11	0.31
Trema micrantha "black"	6	D	0	7	2	0.29
Trema micrantha "black"	6	D	1	23	4	0.17
Trema micrantha "black"	6	Н	0	7	0	0.00
Trema micrantha "black"	6	Н	1	32	4	0.12
Trema micrantha "black"	6	P	0	12	5	0.42
Trema micrantha "black"	6	P	1	28	11	0.39
Trema micrantha "black"	6	Z	0	12	2	0.17
Trema micrantha "black"	6	Z	1	28	7	0.25
Trema micrantha "black"	12	A	0	6	2	0.33
Trema micrantha "black"	12	A	1	34	6	0.18
Trema micrantha "black"	12	D	0	8	1	0.12
Trema micrantha "black"	12	D	1	32	10	0.31
Trema micrantha "black"	12	Н	0	5	3	0.60
Trema micrantha "black"	12	Н	1	35	4	0.11
Trema micrantha "black"	12	P	0	5	2	0.40
Trema micrantha "black"	12	P	1	35	16	0.46
Trema micrantha "black"	12	Z	0	8	1	0.10
Trema micrantha "black"	12	Z	1	32	4	0.12
Trema micrantha "brown"	1	A	0	8	1	0.12
Trema micrantha "brown"	1	A	1	32	3	0.12
Trema micrantha "brown"	1	D D	0	9	0	0.09
Trema micrantha "brown"	1	D D	1	21	1	0.00
Trema micrantha "brown"	1	Н	0		1	
Trema micrantha "brown"		п Н		10	1	0.10
Trema micrantha "brown"	1	н Р	1	10		0.10
Trema micrantha "brown"	1	_	0	12	3	0.25
Trema micrantha "brown"	1	P	1	28	1	0.04
Trema micrantha "brown"	1	Z	0	14	1	0.07
Trema micrantha "brown"	1	Z	1	26	3	0.12
Trema micrantha "brown"	3	A	0	9	3	0.33
Trema micrantha "brown"	3	A	1	31	3	0.10
	3	D	0	13	3	0.23
Trema micrantha "brown"	3	D	1	17	0	0.00
Trema micrantha "brown"	3	Н	0	9	0	0.00
Trema micrantha "brown"	3	Н	1	21	0	0.00
Trema micrantha "brown"	3	P	0	9	1	0.11
Trema micrantha "brown"	3	P	1	31	2	0.06
Trema micrantha "brown"	3	Z	0	15	2	0.13
Trema micrantha "brown"	3	Z	1	25	5	0.20
Trema micrantha "brown"	6	A	0	5	1	0.20
Trema micrantha "brown"	6	A	1	35	9	0.26
Trema micrantha "brown"	6	D	0	4	2	0.50
Trema micrantha "brown"	6	D	1	26	1	0.04
Trema micrantha "brown"	6	Н	0	6	2	0.33
Trema micrantha "brown"	6	Н	1	25	3	0.12
Trema micrantha "brown"	6	P	0	12	2	0.17
Trema micrantha "brown"	6	P	1	28	3	0.11
Trema micrantha "brown"	6	Z	0	12	2	0.17
Trema micrantha "brown"	6	Z	1	25	3	0.12
Trema micrantha "brown"	12	A	0	8	0	0.00
Trema micrantha "brown"	12	A	1	32	5	0.16
Trema micrantha "brown"	12	D	0	17	0	0.00

Trema micrantha "brown"	12	D	1	23	3	0.13
Trema micrantha "brown"	12	Н	0	9	2	0.22
Trema micrantha "brown"	12	Н	1	21	3	0.14
Trema micrantha "brown"	12	P	0	19	2	0.11
Trema micrantha "brown"	12	P	1	21	5	0.24
Trema micrantha "brown"	12	Z	0	15	1	0.07
Trema micrantha "brown"	12	Z	1	24	3	0.12

Isolation frequency was calculated as the number of isolates divided by the number of examined seeds, for each combination of plant species, burial duration (months), garden location, and seed viability. For garden location, letters correspond to the identity of each common garden: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek. Viability is represented as 0, inviable seeds and 1, viable seeds.

Table S3. Diversity of seed-associated fungi.

Plant species duration duration location Viability location N by a labelity location Fisher's alpha labelity location Annona spraguei 1 A 0 12 6 4.8 Annona spraguei 1 A 0 12 6 5.3 Annona spraguei 1 D 0 11 10 5.3 3.3 Annona spraguei 1 H 0 5 5 Annona spraguei 1 H 1 1 1 Annona spraguei 1 P 1 4 4 Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 D 1 4 4 Annona spraguei 3 H 0 7 6 20.0 Annona spraguei	Table S3. Diversity			lungi.			E
Annona spraguei 1 A 0 12 6 4.8 Annona spraguei 1 D 0 11 10 53.3 Annona spraguei 1 D 0 11 10 53.3 Annona spraguei 1 H 0 5 5 - Annona spraguei 1 H 1 1 1 - Annona spraguei 1 P 0 8 5 5.7 Annona spraguei 1 P 0 8 5 5.7 Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 A 1 2 2 - Annona spraguei 3 D 0 13 10 19.9 Annona spraguei 3 P 0 7 6 20.0	Plant	Burial	Garden	Viability	N	\mathbf{S}	Fisher's
Annona spraguei	species	duration	location				
Annona spraguei 1 D 0 11 10 53 3 3.2 Annona spraguei 1 H 0 5 5 - Annona spraguei 1 H 1 1 1 - Annona spraguei 1 P 0 8 5 5.7 Annona spraguei 1 P 1 4 4 - Annona spraguei 3 A 0 21 13 14.6 Annona spraguei 3 A 1 2 2 - Annona spraguei 3 A 1 2 2 - Annona spraguei 3 H 0 7 4 3.9 Annona spraguei 3 H 1 2 2 - Annona spraguei 3 P 1 3 3 - Annona spraguei 6 A 0 16 14 53.6 <							
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Apeiba membranacea 1 D 1 1 1 - Apeiba membranacea 1 H 0 3 3 - Apeiba membranacea 1 H 1 2 2 - Apeiba membranacea 1 P 0 1 1 - Apeiba membranacea 1 P 1 1 1 - Apeiba membranacea 1 Z 0 2 2 - Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 H 1 2 2 -	Apeiba membranacea	1	A	0	2	2	_
Apeiba membranacea 1 H 0 3 3 - Apeiba membranacea 1 H 1 2 2 - Apeiba membranacea 1 P 0 1 1 - Apeiba membranacea 1 P 1 1 1 - Apeiba membranacea 1 Z 0 2 2 - Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	A	1	1	1	_
Apeiba membranacea 1 H 1 2 2 - Apeiba membranacea 1 P 0 1 1 - Apeiba membranacea 1 P 1 1 1 - Apeiba membranacea 1 Z 0 2 2 - Apeiba membranacea 1 Z 1 3 1 0.5 Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	D	1	1	1	_
Apeiba membranacea 1 P 0 1 1 — Apeiba membranacea 1 P 1 1 1 — Apeiba membranacea 1 Z 0 2 2 — Apeiba membranacea 1 Z 1 3 1 0.5 Apeiba membranacea 3 A 1 5 5 — Apeiba membranacea 3 D 1 1 1 — Apeiba membranacea 3 H 0 1 1 — Apeiba membranacea 3 H 1 2 2 — Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	Н	0	3	3	_
Apeiba membranacea 1 P 1 1 1 - Apeiba membranacea 1 Z 0 2 2 - Apeiba membranacea 1 Z 1 3 1 0.5 Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	Н	1	2	2	_
Apeiba membranacea 1 Z 0 2 2 - Apeiba membranacea 1 Z 1 3 1 0.5 Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	P	0	1	1	_
Apeiba membranacea 1 Z 1 3 1 0.5 Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	P	1	1	1	_
Apeiba membranacea 3 A 1 5 5 - Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	Z	0	2	2	_
Apeiba membranacea 3 D 1 1 1 - Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	1	Z	1	3	1	0.5
Apeiba membranacea 3 H 0 1 1 - Apeiba membranacea 3 H 1 2 2 - Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	3	A	1	5	5	-
Apeiba membranacea3H122-Apeiba membranacea3P1210.8	Apeiba membranacea	3	D	1	1	1	-
Apeiba membranacea 3 P 1 2 1 0.8	Apeiba membranacea	3	Н	0	1	1	_
F	Apeiba membranacea	3	Н	1	2	2	-
	•	3	P	1	2	1	0.8
		3	Z	1	6	4	5.2

Apeiba membranacea	6	A	0	3	3	_
Apeiba membranacea	6	A	1	5	5	_
Apeiba membranacea	6	D	1	3	3	_
Apeiba membranacea	6	Н	1	3	1	0.5
Apeiba membranacea	6	P	1	2	2	_
Apeiba membranacea	6	Z	0	1	1	_
Apeiba membranacea	6	Z	1	2	2	_
Cecropia insignis	1	A	1	3	3	_
Cecropia insignis	1	D	0	1	1	_
Cecropia insignis	1	D	1	2	2	_
Cecropia insignis	1	Н	0	1	1	_
Cecropia insignis	1	Н	1	5	4	9.3
Cecropia insignis	1	P	0	1	1	_
Cecropia insignis	1	P	1	3	3	_
Cecropia insignis	1	Z	0	1	1	_
Cecropia insignis	1	Z	1	2	2	_
	3	D	0	2	2	_
Cecropia insignis	3	Н	0	1	1	_
Cecropia insignis	3	Н		2	2	_
Cecropia insignis			1			_
Cecropia insignis	3	P	0	6	6	2.6
Cecropia insignis	3	P	1	3	2	2.6
Cecropia insignis	3	Z	0	3	3	_
Cecropia insignis	3	Z	1	1	1	_
Cecropia insignis	6	Α	0	2	2	_
Cecropia insignis	6	A	1	1	1	_
Cecropia insignis	6	D	0	3	2	2.6
Cecropia insignis	6	D	1	2	2	_
Cecropia insignis	6	Н	1	1	1	_
Cecropia insignis	6	Z	0	4	2	1.6
Cecropia insignis	6	Z	1	1	1	_
Cecropia insignis	12	A	0	1	1	_
Cecropia insignis	12	Н	0	1	1	_
Cecropia insignis	12	P	0	1	1	_
Cecropia insignis	12	Z	0	8	6	10.9
Cecropia insignis	12	Z	1	2	2	_
Cochlospermum vitifolium	1	A	1	10	5	4.0
Cochlospermum vitifolium	1	D	1	8	5	5.7
Cochlospermum vitifolium	1	Н	0	2	2	_
Cochlospermum vitifolium	1	Н	1	13	3	1.2
Cochlospermum vitifolium	1	P	0	1	1	_
Cochlospermum vitifolium	1	P	1	9	2	0.8
Cochlospermum vitifolium	1	Z	1	7	2	0.9
	3	A	1	5	2	1.2
Cochlospermum vitifolium		A D		1	1	1.2
Cochlospermum vitifolium	3		0			1.1
Cochlospermum vitifolium	3	D	1	6	2	1.1
Cochlospermum vitifolium	3	Н	0	1	1	_
Cochlospermum vitifolium	3	Н	1	9	2	0.8
Cochlospermum vitifolium	3	P	1	8	3	1.7
Cochlospermum vitifolium	3	Z	1	10	3	1.5
Cochlospermum vitifolium	6	A	1	5	3	3.2
Cochlospermum vitifolium	6	D	1	5	2	1.2
Cochlospermum vitifolium	6	Н	1	3	2	2.6
Cochlospermum vitifolium	6	Z	1	5	1	0.4
Ficus insipida	1	A	0	2	1	0.8
Ficus insipida	1	A	1	2	1	0.8
Ficus insipida	1	D	0	2	1	0.8
•						

Ficus insipida	1	D	1	6	3	2.4
Ficus insipida	1	Н	0	1	1	_
Ficus insipida	1	Н	1	2	1	0.8
Ficus insipida	1	P	0	6	2	1.1
Ficus insipida	1	P	1	7	4	3.9
Ficus insipida	1	Z	0	4	3	5.5
Ficus insipida	1	Z	1	13	5	3.0
Ficus insipida	3	A	0	2	1	0.8
Ficus insipida	3	A	1	2	2	_
Ficus insipida	3	D	0	2	2	_
Ficus insipida	3	D	1	1	1	_
Ficus insipida	3	Н	0	2	2	_
Ficus insipida	3	Н	1	6	3	2.4
Ficus insipida	3	P	0	1	1	_
Ficus insipida	3	P	1	6	3	2.4
Ficus insipida	3	Z	0	1	1	_
	3	Z	1	3	3	_
Ficus insipida	6	A	1	9	4	2.8
Ficus insipida		A D	0	3	3	
Ficus insipida	6					_ 2.6
Ficus insipida	6	D	1	3	2	2.6
Ficus insipida	6	Н	0	2	2	_
Ficus insipida	6	Н	1	1	1	_
Ficus insipida	6	P	0	3	3	_
Ficus insipida	6	P	1	5	3	3.2
Ficus insipida	6	Z	0	1	1	_
Ficus insipida	6	Z	1	5	3	3.2
Ficus insipida	12	D	0	1	1	_
Ficus insipida	12	Н	0	2	2	_
Ficus insipida	12	P	1	1	1	_
Ficus insipida	12	Z	0	2	2	_
Luehea seemannii	1	A	0	1	1	_
Luehea seemannii	1	A	1	1	1	-
Luehea seemannii	1	D	0	1	1	_
Luehea seemannii	1	D	1	1	1	_
Luehea seemannii	1	Н	1	2	2	_
Luehea seemannii	1	P	1	3	3	_
Luehea seemannii	1	Z	1	2	2	_
Luehea seemannii	3	A	0	1	1	_
Luehea seemannii	3	A	1	3	3	_
Luehea seemannii	3	D	1	1	1	_
Luehea seemannii	3	Н	1	1	1	_
Luehea seemannii	3	P	1	2	2	_
Luehea seemannii	6	Н	1	2	1	0.8
	6	P	1	1	1	0.6
Luehea seemannii	1	D	0	1	1	_
Ochroma pyramidale						_
Ochroma pyramidale	1	D	1	2	2	_
Ochroma pyramidale	1	Н	1	1	1	_
Ochroma pyramidale	3	A	0	1	1	_
Ochroma pyramidale	3	A	1	4	4	_
Ochroma pyramidale	3	D	1	4	4	
Ochroma pyramidale	3	Н	0	2	1	0.8
Ochroma pyramidale	3	Н	1	4	2	1.6
Ochroma pyramidale	3	Z	1	1	1	-
Ochroma pyramidale	6	A	1	1	1	_
Ochroma pyramidale	6	P	1	1	1	_
Ochroma pyramidale	6	Z	1	1	1	_
- ·						

Trema micrantha "black"	1	A	0	3	3	_
Trema micrantha "black"	1	A	1	3	2	2.6
Trema micrantha "black"	1	D	0	1	1	_
Trema micrantha "black"	1	D	1	6	6	_
Trema micrantha "black"	1	Н	0	3	3	_
Trema micrantha "black"	1	Н	1	3	3	_
Trema micrantha "black"	1	P	0	3	3	_
Trema micrantha "black"	1	P	1	9	6	7.9
Trema micrantha "black"	3	A	0	3	3	_
Trema micrantha "black"	3	A	1	6	6	_
Trema micrantha "black"	3	D	0	2	2	_
Trema micrantha "black"	3	D	1	5	4	9.3
Trema micrantha "black"	3	Н	0	1	1	_
Trema micrantha "black"	3	Н	1	2	2	_
Trema micrantha "black"	3	P	0	2	2	_
Trema micrantha "black"	3	P	1	12	6	4.8
Trema micrantha "black"	3	Z	0	2	2	_
Trema micrantha "black"	3	Z	1	4	3	5.5
Trema micrantha "black"	6	A	0	2	2	- -
	6	A	1	10	9	43.5
Trema micrantha "black"				2		
Trema micrantha "black"	6	D	0		1	0.8
Trema micrantha "black"	6	D	1	2	2	_
Trema micrantha "black"	6	Н	1	3	3	_
Trema micrantha "black"	6	P	0	4	4	_
Trema micrantha "black"	6	P	1	9	8	34.6
Trema micrantha "black"	6	Z	0	2	2	_
Trema micrantha "black"	6	Z	1	6	5	14.1
Trema micrantha "black"	12	A	0	2	2	_
Trema micrantha "black"	12	A	1	6	5	14.1
Trema micrantha "black"	12	D	0	1	1	_
Trema micrantha "black"	12	D	1	10	7	10.4
Trema micrantha "black"	12	Н	0	2	2	_
Trema micrantha "black"	12	Н	1	4	4	_
Trema micrantha "black"	12	P	0	2	2	_
Trema micrantha "black"	12	P	1	15	12	27.9
Trema micrantha "black"	12	Z	0	1	1	_
Trema micrantha "black"	12	Z	1	4	4	_
Trema micrantha "brown"	1	A	1	1	1	_
Trema micrantha "brown"	3	A	0	1	1	_
Trema micrantha "brown"	3	A	1	1	1	_
Trema micrantha "brown"	3	D	0	2	1	0.8
Trema micrantha "brown"	3	P	1	1	1	_
Trema micrantha "brown"	3	Z	0	1	1	_
Trema micrantha "brown"	3	Z	1	3	3	_
Trema micrantha "brown"	6	A	0	1	1	_
Trema micrantha "brown"	6	A	1	9	6	7.9
		A D	0			7.9
Trema micrantha "brown"	6			2	2	_
Trema micrantha "brown"	6	D D	1	1	1	_
Trema micrantha "brown"	6	P	0	2	2	_
Trema micrantha "brown"	6	P	1	3	3	_
Trema micrantha "brown"	6	Z	0	2	2	_
Trema micrantha "brown"	6	Z	1	3	2	2.6
Trema micrantha "brown"	12	A	1	5	5	_
Trema micrantha "brown"	12	D	1	2	2	_
Trema micrantha "brown"	12	Н	0	2	2	-
Trema micrantha "brown"	12	Н	1	3	2	2.6

Trema micrantha "brown"	12	P	0	1	1	_
Trema micrantha "brown"	12	P	1	5	3	3.2
Trema micrantha "brown"	12	Z	1	3	3	_

Fisher's alpha was calculated for each combination of plant species, burial duration, garden location, and seed viability. S represents the number of OTU derived from N number of sequences for each particular combination. For garden location, letters correspond to the identity of each common garden: A, Armour; D, Drayton; H, 25 ha; P, Pearson; and Z, Zetek. Viability is represented as 0, inviable seeds and 1, viable seeds.

Table S4. Fungal communities in seeds of four species of tropical trees (AS, *Annona spraguei*; CV, *Cochlospermum vitifolium*; FI, *Ficus insipida*; and TB, *Trema micrantha* "black") differ as a function of plant species, location, burial duration, and seed viability.

	Abunda	nce (negat	nial GLM)	Presence-absence (binomial GLM)				
	Res. Df	Df. diff	Dev	<i>P</i> (>Dev)	Res. Df	Df. diff	Dev	<i>P</i> (>Dev)
(Intercept)	118				118			
Plant species	115	3	654.4	0.001	115	8	579.2	0.001
Burial duration	112	3	143.9	0.009	112	3	143.6	0.022
Garden location	108	4	208.1	0.001	108	4	203.8	0.020
Viability	107	1	1103.2	0.001	107	1	124.6	0.001

Analyses are based on abundance (*left panels*) and presence-absence (*right panels*) of fungal species that were present at least 4 times in the dataset (here approximated by operational taxonomic units, OTU).

 Table S5. Sequences obtained from seed-associated fungi.

Sequence	Accession	OTU	OTU	OTU	Plant	Burial	Garden	Viability	Accession number
code	number	99%	97%	95%	species	duration	location	of origin	of top hit
PS0001	KU977534	222	133	112	Apeiba membranacea	0	NA	1	KC311468.1
PS0002	KU977535	195	149	125	Apeiba membranacea	0	NA	0	JQ411355.1
PS0003	KU977536	6	1	2	Apeiba membranacea	0	NA	1	EU563622.1
PS0004	KU977537	3	1	2	Apeiba membranacea	0	NA	1	JX104215.1
PS0005	KY775762	31	1	2	Apeiba membranacea	0	NA	0	KP698094.1
PS0006	KU977538	186	147	26	Apeiba membranacea	0	NA	0	EU563525.1
PS0007	KU977539	3	1	2	Apeiba membranacea	0	NA	0	JX104215.1
PS0008	KU977540	3	1	2	Apeiba membranacea	0	NA	0	FN645639.1
PS0009	KU977541	6	1	2	Apeiba membranacea	0	NA	0	EU563622.1
PS0011	KU977543	7	4	3	Apeiba membranacea	0	NA	0	GU170644.1
PS0012	KU977544	6	1	2	Apeiba membranacea	0	NA	1	EU563622.1
PS0013	KU977545	26	18	18	Apeiba membranacea	0	NA	1	JN890298.1
PS0014	KU977546	6	1	2	Apeiba membranacea	0	NA	1	EU563622.1
PS0017	KU977547	6	1	2	Apeiba membranacea	0	NA	0	EU563622.1
PS0018	KU977548	49	31	29	Apeiba membranacea	0	NA	0	EU687129.1
PS0019	KU977549	6	1	2	Apeiba membranacea	0	NA	1	JX104215.1
PS0020	KY775763	180	135	89	Apeiba membranacea	0	NA	1	GQ153082.1
PS0022	KU977550	38	14	4	Apeiba membranacea	1	A	0	AB513852.1
PS0024	KY775764	167	132	73	Apeiba membranacea	1	A	0	KF436013.1
PS0025	KU977551	105	49	37	Apeiba membranacea	1	A	1	JN890386.1
PS0028	KU977552	3	1	2	Apeiba membranacea	1	D	1	JX104215.1
PS0031	KU977553	150	47	44	Apeiba membranacea	1	Н	0	JQ922192.1
PS0035	KU977554	46	38	33	Apeiba membranacea	1	Н	1	JN943417.1
PS0036	KU977555	95	18	18	Apeiba membranacea	1	Н	0	JN890117.1
PS0037	KU977556	1	2	1	Apeiba membranacea	1	Н	0	JN943369.1
PS0038	KY775765	145	119	100	Apeiba membranacea	1	Н	1	KF435841.1
PS0041	KY775766	8	5	3	Apeiba membranacea	1	P	1	KF938479.1
PS0042	KU977557	2	1	2	Apeiba membranacea	1	P	0	EU563622.1
PS0043	KU977558	1	2	1	Apeiba membranacea	1	Z	1	JN943369.1
PS0044	KU977559	1	2	1	Apeiba membranacea	1	Z	0	JN943369.1
PS0045	KU977560	1	2	1	Apeiba membranacea	1	Z	1	JN943369.1
PS0047	KU977561	1	2	1	Apeiba membranacea	1	Z	1	JN943369.1
PS0051	KU977562	31	1	2	Apeiba membranacea	1	Z	0	FN645639.1
PS0052	KU977563	50	42	35	Apeiba membranacea	3	A	1	EU687094.1
PS0053	KU977564	132	110	118	Apeiba membranacea	3	A	1	EU552151.1
PS0054	KU977565	93	51	43	Apeiba membranacea	3	A	1	EU686955.1
PS0056	KY775767	107	21	13	Apeiba membranacea	3	A	1	EU686927.1
PS0059	KY775768	66	21	13	Apeiba membranacea	3	A	1	EU687025.1
PS0061	KY775769	10	2	1	Apeiba membranacea	3	D	1	KR995120.1
PS0065	KY775770	104	72	55	Apeiba membranacea	3	Н	1	KF436390.1
PS0067	KY775771	20	11	12	Apeiba membranacea	3	Н	0	AY598667.1
PS0068	KY775772	8	5	3	Apeiba membranacea	3	Н	1	KC808241.1
					*				-

PS0070	KY775773	1	2	1	Apeiba membranacea	3	P	1	KF436184.1
PS0071	KU977566	1	2	1	Apeiba membranacea	3	P	1	JN943369.1
PS0075	KY775774	1	2	1	Apeiba membranacea	3	Z	1	KF435246.1
PS0078	KU977567	1	2	1	Apeiba membranacea	3	Z	1	JN943369.1
PS0081	KY775775	45	40	23	Apeiba membranacea	3	Z	1	KJ439208.1
PS0082	KU977568	1	2	1	Apeiba membranacea	3	Z	1	JN943369.1
PS0083	KY775776	116	107	52	Apeiba membranacea	3	Z	1	KF436172.1
PS0084	KU977569	27	27	22	Apeiba membranacea	3	Z	1	HM469428.1
PS0085	KY775777	31	1	2	Apeiba membranacea	6	A	1	KF436274.1
PS0086	KY775778	114	95	98	Apeiba membranacea	6	A	1	GU055699.1
PS0087	KU977570	36	13	15	Apeiba membranacea	6	A	1	EU687157.1
PS0088	KY775779	110	33	27	Apeiba membranacea	6	A	0	EU687015.1
PS0089	KY775780	1	2	1	Apeiba membranacea	6	A	1	KF436184.1
PS0092	KY775781	108	92	94	Apeiba membranacea	6	A	1	JQ747684.1
PS0093	KY775782	112	90	90	Apeiba membranacea	6	A	0	JQ760549.1
PS0094	KY775783	113	89	88	Apeiba membranacea	6	A	0	AB438513.1
PS0095	KY775784	155	88	86	Apeiba membranacea	6	D	1	EU687056.1
PS0098	KU977571	1	2	1	Apeiba membranacea	6	D	1	JQ411357.1
PS0099	KU977572	157	35	25	Apeiba membranacea	6	D	1	HQ207023.1
PS0101	KU977573	45	40	23	Apeiba membranacea	6	Н	1	AF033420.1
PS0102	KU977574	45	40	23	Apeiba membranacea	6	Н	1	AF033420.1
PS0103	KU977575	45	40	23	Apeiba membranacea	6	Н	1	AF033420.1
PS0104	KU977576	1	2	1	Apeiba membranacea	6	P	1	JN943369.1
PS0105	KU977577	36	13	15	Apeiba membranacea	6	P	1	EU687157.1
PS0110	KU977578	1	2	1	Apeiba membranacea	6	Z	1	JQ411357.1
PS0113	KU977579	87	71	64	Apeiba membranacea	6	Z	0	AB627114.1
PS0114	KY775785	188	82	68	Apeiba membranacea	6	Z	1	KT582081.1
PS0117	KU977580	221	39	31	Ochroma pyramidale	0	NA	1	AB572911.1
PS0118	KU977581	225	79	70	Ochroma pyramidale	0	NA	1	GQ921743.1
PS0120	KU977583	151	77	71	Ochroma pyramidale	0	NA	1	JQ747684.1
PS0122	KY775786	1	2	1	Ochroma pyramidale	1	D	1	KF436184.1
PS0123	KY775787	62	35	25	Ochroma pyramidale	1	D	0	JQ747653.1
PS0124	KU977584	226	74	32	Ochroma pyramidale	1	D	1	KC505176.1
PS0127	KU977587	30	28	13	Ochroma pyramidale	1	Н	1	EU686873.1
PS0130	KY775788	1	2	1	Ochroma pyramidale	3	A	0	KF436184.1
PS0131	KY775789	65	21	13	Ochroma pyramidale	3	A	1	JQ760828.1
PS0132	KU977588	219	78	78	Ochroma pyramidale	3	A	1	DQ201124.1
PS0134	KY775790	30	28	13	Ochroma pyramidale	3	A	1	KF435257.1
PS0135	KY775791	209	80	80	Ochroma pyramidale	3	A	1	EU687032.1
PS0138	KY775792	84	45	36	Ochroma pyramidale	3	D	1	DQ168665.1
PS0139	KU977590	64	55	32	Ochroma pyramidale	3	D	1	JQ761140.1
PS0140	KU977591	36	13	15	Ochroma pyramidale	3	D	1	EU687157.1
PS0141	KY775793	58	53	41	Ochroma pyramidale	3	D	1	KM520352.1
PS0142	KU977592	64	55	32	Ochroma pyramidale	3	Н	1	KC807225.1
PS0145	KU977595	37	30	28	Ochroma pyramidale	3	Н	0	JN209920.1

PS0146	KU977596	37	30	28	Ochroma pyramidale	3	Н	1	JN209920.1
PS0147	KU977597	37	30	28	Ochroma pyramidale	3	Н	1	KC603768.1
PS0148	KU977598	37	30	28	Ochroma pyramidale	3	Н	0	JN209920.1
PS0149	KU977599	37	30	28	Ochroma pyramidale	3	Н	1	HE962576.1
PS0153	KU977600	64	55	32	Ochroma pyramidale	3	Z	1	JQ761140.1
PS0155	KU977601	159	91	23	Ochroma pyramidale	6	A	1	HM469415.1
PS0162	KU977602	106	13	15	Ochroma pyramidale	6	P	1	JQ760777.1
PS0163	KY775794	58	53	41	Ochroma pyramidale	6	Z	1	AF033488.1
PS0167	KU977603	96	65	54	Cochlospermum vitifolium	0	NA	0	AB217858.1
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PS0169	KU977605	135	97	97	Cochlospermum vitifolium	0	NA	1	HM122994.1
PS0170	KU977606	134	98	52	Cochlospermum vitifolium	0	NA	1	JQ747711.1
PS0171	KU977607	2	1	2	Cochlospermum vitifolium	1	A	1	EU563622.1
PS0172	KU977608	2	1	2	Cochlospermum vitifolium	1	A	1	AB217858.1
PS0173	KU977609	6	1	2	Cochlospermum vitifolium	1	A	1	AB217858.1
PS0174	KU977610	2	1	2	Cochlospermum vitifolium	1	A	1	EU563622.1
PS0176	KU977611	2	1	2	Cochlospermum vitifolium	1	A	1	EU563622.1
PS0177	KU977612	117	51	43	Cochlospermum vitifolium	1	A	1	JQ760671.1
PS0178	KU977613	3	1	2	Cochlospermum vitifolium	1	A	1	FN645639.1
PS0179	KU977614	2	1	2	Cochlospermum vitifolium	1	A	1	EU563622.1
PS0181	KU977615	2	1	2	Cochlospermum vitifolium	1	A	1	EU563622.1
PS0182	KU977616	11	7	5	Cochlospermum vitifolium	1	A	1	GU055710.1
PS0183	KU977617	3	1	2	Cochlospermum vitifolium	1	D	1	JX104215.1
PS0184	KU977618	2	1	2	Cochlospermum vitifolium	1	D	1	EU563622.1
PS0185	KY775795	111	111	62	Cochlospermum vitifolium	1	D	1	JX244056.1
PS0186	KU977619	2	1	2	Cochlospermum vitifolium	1	D	1	EU563622.1
PS0187	KU977620	3	1	2	Cochlospermum vitifolium	1	D	1	FN645639.1
PS0188	KU977621	62	35	25	Cochlospermum vitifolium	1	D	1	EU686996.1
PS0190	KU977622	6	1	2	Cochlospermum vitifolium	1	D	1	EU563622.1
PS0191	KU977623	3	1	2	Cochlospermum vitifolium	1	D	1	JX104215.1
PS0192	KU977624	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0193	KU977625	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0194	KU977626	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0195	KU977627	2	1	2	Cochlospermum vitifolium	1	Н	0	EU563622.1
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PS0197	KU977629	2	1	2	Cochlospermum vitifolium	1	Н	1	FN645639.1
PS0198	KU977630	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0199	KU977631	3	1	2	Cochlospermum vitifolium	1	Н	1	FN645639.1
PS0200	KU977632	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0201	KU977633	3	1	2	Cochlospermum vitifolium	1	Н	1	FN645639.1
PS0202	KU977634	2	1	2	Cochlospermum vitifolium	1	Н	1	EU563622.1
PS0203	KU977635	3	1	2	Cochlospermum vitifolium	1	Н	0	FN645639.1
PS0204	KU977636	68	39	31	Cochlospermum vitifolium	1	Н	1	JX175037.1
PS0205	KU977637	2	1	2	Cochlospermum vitifolium	1	Н	1	FN645639.1
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PS0208	KU977639	3	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
PS0209	KU977640	3	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
PS0210	KY775796	3	1	2	Cochlospermum vitifolium	1	P	1	FN645637.1
PS0211	KU977641	3	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
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PS0213	KU977643	3	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
PS0214	KU977644	2	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
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PS0217	KU977646	3	1	2	Cochlospermum vitifolium	1	P	1	FN645639.1
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PS0219	KU977648	2	1	2	Cochlospermum vitifolium	1	Z	1	EU563622.1
PS0220	KU977649	2	1	2	Cochlospermum vitifolium	1	Z	1	EU563622.1
PS0221	KU977650	11	7	5	Cochlospermum vitifolium	1	Z	1	GU055710.1
PS0222	KU977651	2	1	2	Cochlospermum vitifolium	1	Z	1	FN645639.1
PS0223	KY775797	2	1	2	Cochlospermum vitifolium	1	Z	1	KF435249.1
PS0224	KU977652	2	1	2	Cochlospermum vitifolium	1	Z	1	FN645639.1
PS0225	KU977653	2	1	2	Cochlospermum vitifolium	1	Z	1	EU563622.1
PS0227	KU977654	3	1	2	Cochlospermum vitifolium	3	A	1	FN645639.1
PS0228	KU977655	3	1	2	Cochlospermum vitifolium	3	A	1	FN645639.1
PS0230	KU977656	11	7	5	Cochlospermum vitifolium	3	A	1	GU055710.1
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PS0232	KU977658	3	1	2	Cochlospermum vitifolium	3	A	1	FN645639.1
PS0233	KU977659	2	1	2	Cochlospermum vitifolium	3	D	1	EU563622.1
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PS0235	KY775799	3	1	2	Cochlospermum vitifolium	3	D	1	FN645637.1
PS0236	KU977660	2	1	2	Cochlospermum vitifolium	3	D	0	FN645639.1
PS0237	KU977661	2	1	2	Cochlospermum vitifolium	3	D	1	FN645639.1
PS0238	KU977662	3	1	2	Cochlospermum vitifolium	3	D	1	FN645639.1
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PS0240	KU977664	2	1	2	Cochlospermum vitifolium	3	Н	1	FN645639.1
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PS0251	KU977671	2	1	2	Cochlospermum vitifolium	3	Н	0	EU563622.1
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PS0254	KY775800	153	153	129	Cochlospermum vitifolium	3	P	1	KU164261.1
PS0255	KU977674	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1
PS0256	KU977675	3	1	2	Cochlospermum vitifolium	3	P	1	FN645639.1
PS0257	KU977676	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1
PS0258	KU977677	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1
PS0259	KU977678	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1

PS0260	KU977679	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1
PS0261	KU977680	2	1	2	Cochlospermum vitifolium	3	P	1	EU563622.1
PS0262	KU977681	2	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
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PS0265	KU977684	3	1	2	Cochlospermum vitifolium	3	Z	1	FN645639.1
PS0266	KU977685	2	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
PS0267	KU977686	2	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
PS0268	KU977687	2	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
PS0269	KU977688	2	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
PS0270	KU977689	2	1	2	Cochlospermum vitifolium	3	Z	1	FN645639.1
PS0271	KU977690	6	1	2	Cochlospermum vitifolium	3	Z	1	EU563622.1
PS0272	KU977691	161	59	49	Cochlospermum vitifolium	6	A	1	JQ762000.1
PS0274	KU977692	3	1	2	Cochlospermum vitifolium	6	A	1	FN645639.1
PS0276	KU977693	3	1	2	Cochlospermum vitifolium	6	A	1	FN645639.1
PS0277	KU977694	3	1	2	Cochlospermum vitifolium	6	A	1	FN645639.1
PS0278	KU977695	165	154	128	Cochlospermum vitifolium	6	A	1	GQ153006.1
PS0279	KU977696	3	1	2	Cochlospermum vitifolium	6	D	1	FN645639.1
PS0281	KU977697	2	1	2	Cochlospermum vitifolium	6	D	1	EU563622.1
PS0282	KU977698	2	1	2	Cochlospermum vitifolium	6	D	1	EU563622.1
PS0283	KU977699	2	1	2	Cochlospermum vitifolium	6	D	1	EU563622.1
PS0284	KU977700	2	1	2	Cochlospermum vitifolium	6	D	1	FN645639.1
PS0285	KU977701	2	1	2	Cochlospermum vitifolium	6	Н	1	EU563622.1
PS0286	KU977702	3	1	2	Cochlospermum vitifolium	6	Н	1	FN645639.1
PS0288	KU977703	3	1	2	Cochlospermum vitifolium	6	Н	1	FN645639.1
PS0289	KU977704	2	1	2	Cochlospermum vitifolium	6	Z	1	FN645639.1
PS0290	KU977705	2	1	2	Cochlospermum vitifolium	6	Z	1	EU563622.1
PS0291	KU977706	2	1	2	Cochlospermum vitifolium	6	Z	1	FN645639.1
PS0292	KU977707	2	1	2	Cochlospermum vitifolium	6	Z	1	EU563622.1
PS0293	KU977708	2	1	2	Cochlospermum vitifolium	6	Z	1	EU563622.1
PS0295	KU977709	169	152	127	Luehea seemannii	0	NA	1	JQ388930.1
PS0297	KU977710	170	151	48	Luehea seemannii	0	NA	0	GQ505680.1
PS0298	KU977711	2	1	2	Luehea seemannii	0	NA	0	EU563622.1
PS0299	KU977712	67	44	26	Luehea seemannii	0	NA	0	JQ761037.1
PS0300	KU977713	172	150	126	Luehea seemannii	0	NA	1	JQ761153.1
PS0301	KU977714	173	44	26	Luehea seemannii	0	NA	0	JQ761037.1
PS0302	KU977715	31	1	2	Luehea seemannii	0	NA	0	FN645639.1
PS0304	KY775801	30	28	13	Luehea seemannii	1	A	1	KF436196.1
PS0306	KU977716	67	44	26	Luehea seemannii	1	A	0	JQ761037.1
PS0307	KU977717	40	26	14	Luehea seemannii	1	D	1	JX243910.1
PS0308	KU977718	67	44	26	Luehea seemannii	1	D	0	JQ761037.1
PS0310	KU977719	179	21	13	Luehea seemannii	1	Н	1	EU687039.1
PS0311	KU977720	72	45	36	Luehea seemannii	1	Н	1	DQ168665.1
PS0313	KU977721	68	39	31	Luehea seemannii	1	P	1	JX175037.1
PS0314	KU977722	182	148	124	Luehea seemannii	1	P	1	AY742705.1

PS0315	KU977723	27	27	22	Luehea seemannii	1	P	1	HM469428.1
PS0316	KU977724	87	71	64	Luehea seemannii	1	Z	1	AB627114.1
PS0317	KU977725	49	31	29	Luehea seemannii	1	Z	1	EU687129.1
PS0319	KU977726	66	21	13	Luehea seemannii	3	A	1	EU687039.1
PS0320	KU977727	187	67	53	Luehea seemannii	3	A	0	JQ747707.1
PS0321	KU977728	30	28	13	Luehea seemannii	3	A	1	EU687030.1
PS0322	KU977729	189	146	122	Luehea seemannii	3	A	1	JQ762009.1
PS0329	KU977730	190	145	42	Luehea seemannii	3	D	1	EF652449.1
PS0332	KU977731	13	8	8	Luehea seemannii	3	Н	1	GU214680.1
PS0334	KU977732	192	144	56	Luehea seemannii	3	P	1	EU686913.1
PS0335	KU977733	29	13	15	Luehea seemannii	3	P	1	JQ760667.1
PS0349	KU977734	52	33	27	Luehea seemannii	6	Н	1	EU687043.1
PS0350	KU977735	52	33	27	Luehea seemannii	6	Н	1	EU686891.1
PS0352	KU977736	196	143	121	Luehea seemannii	6	P	1	JQ922133.1
PS0354	KU977737	197	142	120	Cecropia insignis	1	A	1	GQ153131.1
PS0358	KU977738	73	29	14	Cecropia insignis	1	A	NA	GU183108.1
PS0361	KU977739	199	141	119	Cecropia insignis	1	A	1	JQ747684.1
PS0362	KU977740	7	4	3	Cecropia insignis	1	A	1	GU170643.1
PS0365	KU977741	81	64	51	Cecropia insignis	1	D	0	JQ760450.1
PS0366	KU977742	202	140	62	Cecropia insignis	1	D	1	JX244014.1
PS0367	KY775802	81	64	51	Cecropia insignis	1	D	1	JQ760450.1
PS0369	KU977743	15	6	1	Cecropia insignis	1	Н	1	KC007277.1
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PS0371	KY775803	12	6	1	Cecropia insignis	1	Н	1	FJ454984.1
PS0373	KY775804	40	26	14	Cecropia insignis	1	Н	NA	JX243910.1
PS0375	KY775805	40	26	14	Cecropia insignis	1	Н	1	JX243910.1
PS0380	KY775806	9	2	1	Cecropia insignis	1	Н	0	JQ411358.1
PS0381	KY775807	9	2	1	Cecropia insignis	1	Н	1	JQ411358.1
PS0386	KU977745	12	6	1	Cecropia insignis	1	P	1	KC007277.1
PS0387	KU977746	39	34	30	Cecropia insignis	1	P	1	KC007211.1
PS0388	KU977747	43	43	34	Cecropia insignis	1	P	0	JN634831.1
PS0389	KY775808	215	63	14	Cecropia insignis	1	P	1	GU183113.1
PS0391	KY775809	23	23	20	Cecropia insignis	1	Z	0	GU183113.1
PS0392	KU977748	12	6	1	Cecropia insignis	1	Z	1	KC007277.1
PS0398	KY775810	39	34	30	Cecropia insignis	1	Z	1	KC007211.1
PS0405	KY775811	220	138	116	Cecropia insignis	3	D	0	EU552151.1
PS0411	KU977749	7	4	3	Cecropia insignis	3	D	0	GU170644.1
PS0417	KU977750	40	26	14	Cecropia insignis	3	Н	1	GU183108.1
PS0420	KU977751	69	29	14	Cecropia insignis	3	Н	1	GU183113.1
PS0421	KU977752	224	63	14	Cecropia insignis	3	Н	0	GU183113.1
PS0426	KY775812	8	5	3	Cecropia insignis	3	P	0	KC808241.1
PS0427	KU977753	11	7	5	Cecropia insignis	3	P	1	GU055710.1
PS0428	KU977754	6	1	2	Cecropia insignis	3	P	0	FN645639.1
PS0429	KY775813	11	7	5	Cecropia insignis	3	P	1	GU055710.1
PS0430	KU977755	73	29	14	Cecropia insignis	3	P	0	GU183108.1

PS0431	KU977756	228	136	115	Cecropia insignis	3	P	0	AB741611.1
PS0432	KU977757	48	4	3	Cecropia insignis	3	P	0	GU170644.1
PS0433	KU977758	76	26	14	Cecropia insignis	3	P	0	GU183108.1
PS0434	KU977759	48	4	3	Cecropia insignis	3	P	1	GU170644.1
PS0435	KU977760	12	6	1	Cecropia insignis	3	Z	1	KC007227.1
PS0437	KU977761	12	6	1	Cecropia insignis	3	Z	0	KC007277.1
PS0439	KU977762	227	54	38	Cecropia insignis	3	Z	0	EU686953.1
PS0441	KU977763	15	6	1	Cecropia insignis	3	Z	0	KC007277.1
PS0443	KU977764	50	42	35	Cecropia insignis	6	A	1	EU687094.1
PS0447	KU977766	8	5	3	Cecropia insignis	6	A	0	GU170651.1
PS0451	KU977767	102	37	19	Cecropia insignis	6	A	0	JX243765.1
PS0452	KY775814	74	62	50	Cecropia insignis	6	D	0	JX243936.1
PS0453	KY775815	74	62	50	Cecropia insignis	6	D	0	JX243936.1
PS0454	KU977768	75	69	61	Cecropia insignis	6	D	0	JX243941.1
PS0455	KU977769	69	29	14	Cecropia insignis	6	D	NA	GU183113.1
PS0456	KU977770	12	6	1	Cecropia insignis	6	D	1	KC007277.1
PS0457	KU977771	76	26	14	Cecropia insignis	6	D	1	JX243910.1
PS0458	KU977772	223	134	113	Cecropia insignis	6	D	NA	AJ301961.1
PS0459	KY775816	1	2	1	Cecropia insignis	6	Н	1	KF435246.1
PS0468	KU977773	15	6	1	Cecropia insignis	6	Z	1	KC007277.1
PS0469	KU977774	23	23	20	Cecropia insignis	6	Z	0	GU183113.1
PS0470	KU977775	23	23	20	Cecropia insignis	6	Z	0	GU183113.1
PS0471	KU977776	15	6	1	Cecropia insignis	6	Z	0	KC007277.1
PS0472	KU977777	15	6	1	Cecropia insignis	6	Z	0	KC007277.1
PS0670	KY775817	71	12	9	Trema micrantha "black"	3	D	0	EU552110.1
PS0867	KU977940	79	8	8	Trema micrantha "brown"	0	NA	1	GU214680.1
PS0868	KY775818	77	47	44	Trema micrantha "brown"	1	A	1	JX244042.1
PS0885	KU977941	50	42	35	Trema micrantha "brown"	3	A	1	EU687094.1
PS0886	KU977942	3	1	2	Trema micrantha "brown"	3	A	0	FN645639.1
PS0895	KU977943	78	37	19	Trema micrantha "brown"	3	D	0	JX243765.1
PS0896	KU977944	78	37	19	Trema micrantha "brown"	3	D	0	JX243765.1
PS0898	KU977945	218	59	49	Trema micrantha "brown"	3	P	1	JQ762000.1
PS0901	KU977946	80	58	47	Trema micrantha "brown"	3	Z	1	JF449891.1
PS0902	KU977947	79	8	8	Trema micrantha "brown"	3	Z	1	GU214673.1
PS0903	KU977948	216	33	27	Trema micrantha "brown"	3	Z	1	EU687064.1
PS0904	KU977949	23	23	20	Trema micrantha "brown"	3	Z	0	GU183113.1
PS0908	KU977950	3	1	2	Annona spraguei	0	NA	0	FN645639.1
PS0909	KU977951	22	4	3	Annona spraguei	0	NA	0	JQ922214.1
PS0910	KU977952	17	15	17	Annona spraguei	0	NA	1	EU686869.1
PS0911	KU977953	4	3	4	Annona spraguei	0	NA	NA	EU563552.1
PS0912	KU977954	3	1	2	Annona spraguei	0	NA	1	FN645639.1
PS0913	KU977955	17	15	17	Annona spraguei	0	NA	0	EU686869.1
PS0914	KU977956	214	3	4	Annona spraguei	0	NA	0	EU563552.1
PS0915	KU977957	17	15	17	Annona spraguei	0	NA	1	EU686869.1
PS0916	KU977958	5	3	4	Annona spraguei	0	NA	NA	EU563552.1

PS0917	KU977959	5	3	4	Annona spraguei	0	NA	1	EU563552.1
PS0921	KU977961	213	130	109	Annona spraguei	0	NA	1	JN615482.1
PS0922	KU977962	212	129	108	Annona spraguei	0	NA	1	AB741616.1
PS0925	KU977963	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0926	KU977964	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0927	KU977965	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0928	KU977966	6	1	2	Annona spraguei	0	NA	1	EU563622.1
PS0929	KU977967	211	128	107	Annona spraguei	0	NA	1	AF354084.1
PS0930	KU977968	2	1	2	Annona spraguei	0	NA	1	EU563622.1
PS0931	KU977969	6	1	2	Annona spraguei	0	NA	1	EU563622.1
PS0932	KU977970	6	1	2	Annona spraguei	0	NA	1	EU563622.1
PS0933	KU977971	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0934	KU977972	2	1	2	Annona spraguei	0	NA	1	EU563622.1
PS0935	KU977973	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0937	KU977974	6	1	2	Annona spraguei	0	NA	0	EU563622.1
PS0938	KU977975	3	1	2	Annona spraguei	0	NA	1	FN645639.1
PS0939	KU977976	3	1	2	Annona spraguei	0	NA	1	FN645639.1
PS0941	KU977977	29	13	15	Annona spraguei	0	NA	0	JQ760669.1
PS0942	KU977978	210	127	106	Annona spraguei	0	NA	0	EU687119.1
PS0943	KU977979	49	31	29	Annona spraguei	0	NA	0	EU687129.1
PS0944	KU977980	7	4	3	Annona spraguei	0	NA	0	GU170644.1
PS0945	KU977981	8	5	3	Annona spraguei	0	NA	0	GU170651.1
PS0948	KU977982	1	2	1	Annona spraguei	1	A	NA	JN943369.1
PS0949	KU977983	7	4	3	Annona spraguei	1	A	0	GU170644.1
PS0952	KU977984	4	3	4	Annona spraguei	1	A	0	EU563552.1
PS0953	KU977985	4	3	4	Annona spraguei	1	A	0	JX270176.1
PS0956	KU977986	3	1	2	Annona spraguei	1	A	0	JX104215.1
PS0957	KU977987	3	1	2	Annona spraguei	1	A	1	FN645639.1
PS0958	KU977988	4	3	4	Annona spraguei	1	A	1	EU563552.1
PS0959	KU977989	5	3	4	Annona spraguei	1	A	0	EU63552.1
PS0960	KU977990	5	3	4	Annona spraguei	1	A	0	EU563552.1
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PS0962	KU977992	8	5	3	Annona spraguei	1	A	0	GU170651.1
PS0963	KY775819	7	4	3	Annona spraguei	1	A	0	KF918581.1
PS0964	KU977993	3	1	2	Annona spraguei	1	A	1	FN645639.1
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PS0966	KY775820	1	2	1	Annona spraguei	1	A	1	KF436184.1
PS0967	KU977995	4	3	4	Annona spraguei	1	A	NA	EU563552.1
PS0968	KU977996	4	3	4	Annona spraguei	1	A	0	EU563552.1
PS0970	KU977997	10	2	1	Annona spraguei	1	A	0	JN943369.1
PS0971	KU977998	44	19	5	Annona spraguei	1	A	1	JX243941.1
PS0972	KU977999	7	4	3	Annona spraguei	1	A	1	GU170644.1
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PS0975	KU978001	38	14	4	Annona spraguei	1	D	0	AB513852.1
PS0979	KU978004	1	2	1	Annona spraguei	1	D	0	JN943369.1

PS0981	KU978005	80	58	47	Annona spraguei	1	D	0	JF449891.1
PS0982	KU978006	7	4	3	Annona spraguei	1	D	0	GU170644.1
PS0983	KU978007	3	1	2	Annona spraguei	1	D	1	JX104215.1
PS0988	KU978008	4	3	4	Annona spraguei	1	D	1	EU563552.1
PS0990	KU978009	8	5	3	Annona spraguei	1	D	0	GU170651.1
PS0992	KU978011	2	1	2	Annona spraguei	1	D	NA	EU563622.1
PS0993	KU978012	5	3	4	Annona spraguei	1	D	NA	EU563552.1
PS0994	KU978013	9	2	1	Annona spraguei	1	D	0	JN943369.1
PS0995	KU978014	3	1	2	Annona spraguei	1	D	1	FN645639.1
PS0996	KU978015	4	3	4	Annona spraguei	1	D	0	EU563552.1
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PS0999	KU978018	60	4	3	Annona spraguei	1	D	0	KC691584.1
PS1001	KU978020	11	7	5	Annona spraguei	1	D	NA	JX243941.1
PS1002	KU978021	71	12	9	Annona spraguei	1	D	0	EU552110.1
PS1004	KU978022	5	3	4	Annona spraguei	1	D	1	EU563552.1
PS1005	KU978023	5	3	4	Annona spraguei	1	D	1	EU563552.1
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PS1015	KU978027	3	1	2	Annona spraguei	1	Н	0	JX646815.1
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PS1020	KU978029	10	2	1	Annona spraguei	1	Н	0	JN943369.1
PS1021	KU978030	17	15	17	Annona spraguei	1	Н	1	EU686869.1
PS1022	KU978031	4	3	4	Annona spraguei	1	Н	0	EU5635521
PS1024	KU978032	1	2	1	Annona spraguei	1	Н	NA	JN943369.1
PS1026	KU978033	6	1	2	Annona spraguei	1	Н	0	EU563622.1
PS1028	KU978035	51	41	19	Annona spraguei	1	P	0	JX243765.1
PS1034	KU978037	4	3	4	Annona spraguei	1	P	0	EU563552.1
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PS1038	KU978041	5	3	4	Annona spraguei	1	P	0	EU563552.1
PS1042	KU978042	2	1	2	Annona spraguei	1	P	1	EU563622.1
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PS1050	KU978047	5	3	4	Annona spraguei	1	P	0	EU563552.1
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PS1060	KU978053	17	15	17	Annona spraguei	1	Z	0	EU686869.1
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PS1068	KU978058	3	1	2	Annona spraguei	1	Z	0	JX104215.1
PS1069	KU978059	206	124	104	Annona spraguei	1	Z	0	HQ130707.1
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PS1078	KU978063	17	15	17	Annona spraguei	1	Z	0	EU686869.1
PS1084	KU978068	7	4	3	Annona spraguei	1	Z	0	GU170644.1
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PS1086	KU978070	8	5	3	Annona spraguei	3	A	0	GU170651.1
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PS1090	KU978073	1	2	1	Annona spraguei	3	A	0	JN943369.1
PS1091	KU978074	47	32	24	Annona spraguei	3	A	0	JN890051.1
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PS1101	KU978079	82	4	3	Annona spraguei	3	A	0	JX435198.1
PS1102	KU978080	24	24	21	Annona spraguei	3	A	0	JF449885.1
PS1103	KU978081	2	1	2	Annona spraguei	3	A	1	EU563622.1
PS1106	KU978084	27	27	22	Annona spraguei	3	A	0	HM469428.1
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PS1120	KY775829	205	123	103	Annona spraguei	3	A	0	JQ668740.1
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PS1130	KU978097	201	122	102	Annona spraguei	3	D	0	AF272580.1
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PS1140	KU978103	24	24	21	Annona spraguei	3	D	0	JF449885.1
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PS1217	KY775854	3	1	2	Annona spraguei	3	Z	0	FN645639.1
PS1218	KY775855	22	4	3	Annona spraguei	3	Z	0	JQ922214.1

PS1219	KY775856	2	1	2	Annona spraguei	3	Z	0	KF435249.1
PS1220	KY775857	83	1	2	Annona spraguei	3	Z	1	FN645639.1
PS1221	KY775858	85	1	2	Annona spraguei	3	Z	1	JX104215.1
PS1277	KY775859	59	2	1	Ficus insipida	3	Н	1	KF746133.1
PS1278	KY775860	1	2	1	Ficus insipida	3	Н	0	KF435246.1
PS1279	KY775861	1	2	1	Ficus insipida	3	Н	1	KF746133.1
PS1280	KY775862	12	6	1	Ficus insipida	3	Z	1	KC007277.1
PS1282	KY775863	1	2	1	Ficus insipida	3	Z	0	KF746133.1
PS1284	KY775864	1	2	1	Ficus insipida	3	Z	1	KF746133.1
PS1289	KY775865	15	6	1	Ficus insipida	3	Z	1	GU055648.1
PS1294	KY775866	1	2	1	Ficus insipida	1	A	0	KF746133.1
PS1295	KY775867	1	2	1	Ficus insipida	1	A	1	KF746133.1
PS1296	KY775868	1	2	1	Ficus insipida	1	A	0	KF746133.1
PS1301	KY775869	1	2	1	Ficus insipida	1	A	NA	KF436184.1
PS1302	KY775870	9	2	1	Ficus insipida	1	A	NA	JQ411364.1
PS1305	KY775871	1	2	1	Ficus insipida	1	A	1	KF436184.1
PS1307	KY775872	1	2	1	Ficus insipida	1	P	0	KF746133.1
PS1308	KY775873	1	2	1	Ficus insipida	1	P	0	KF436184.1
PS1309	KY775874	9	2	1	Ficus insipida	1	P	0	JQ411364.1
PS1311	KY775875	12	6	1	Ficus insipida	1	P	1	FJ454984.1
PS1312	KY775876	1	2	1	Ficus insipida	1	P	1	HE649488.1
PS1313	KY775877	1	2	1	Ficus insipida	1	P	1	KF436184.1
PS1314	KY775878	9	2	1	Ficus insipida	1	P	0	KF746133.1
PS1315	KY775879	9	2	1	Ficus insipida	1	P	1	KF746133.1
PS1316	KY775880	9	2	1	Ficus insipida	1	P	1	JQ411364.1
PS1317	KY775881	10	2	1	Ficus insipida	1	P	1	JQ411364.1
PS1318	KY775882	1	2	1	Ficus insipida	1	P	0	KF746133.1
PS1320	KY775883	9	2	1	Ficus insipida	1	P	0	JQ411364.1
PS1323	KY775884	1	2	1	Ficus insipida	1	P	1	KF436184.1
PS1326	KY775885	1	2	1	Ficus insipida	1	D	1	KF436184.1
PS1329	KY775886	1	2	1	Ficus insipida	1	D	0	KF436184.1
PS1331	KY775887	1	2	1	Ficus insipida	1	D	1	KF746133.1
PS1333	KY775888	1	2	1	Ficus insipida	1	D	0	KF746133.1
PS1335	KY775889	10	2	1	Ficus insipida	1	D	1	JQ411364.1
PS1336	KY775890	1	2	1	Ficus insipida	1	D	1	KF436184.1
PS1337	KY775891	1	2	1	Ficus insipida	1	D	1	KF746133.1
PS1340	KY775892	9	2	1	Ficus insipida	1	D	1	KF746133.1
PS1342	KY775893	1	2	1	Ficus insipida	1	Н	1	KF436184.1
PS1343	KY775894	1	2	1	Ficus insipida	1	Н	0	KF746133.1
PS1345	KY775895	1	2	1	Ficus insipida	1	Н	1	KF746133.1
PS1347	KY775896	1	2	1	Ficus insipida	1	Z	1	KF746133.1
PS1350	KY775897	1	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1352	KY775898	59	2	1	Ficus insipida	1	Z	0	JQ411358.1
PS1354	KY775899	1	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1355	KY775900	59	2	1	Ficus insipida	1	Z	1	KF436184.1

PS1356	KY775901	1	2	1	Ficus insipida	1	Z	0	KF436184.1
PS1357	KY775902	15	6	1	Ficus insipida	1	Z	1	FJ454984.1
PS1358	KY775903	1	2	1	Ficus insipida	1	Z	0	KF746133.1
PS1360	KY775904	1	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1361	KY775905	1	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1362	KY775906	9	2	1	Ficus insipida	1	Z	1	KF746133.1
PS1363	KY775907	1	2	1	Ficus insipida	1	Z	1	KF746133.1
PS1365	KY775908	39	34	30	Ficus insipida	1	Z	1	KC007211.1
PS1366	KY775909	9	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1369	KY775910	10	2	1	Ficus insipida	1	Z	0	KF746133.1
PS1370	KY775911	1	2	1	Ficus insipida	1	Z	1	KF746133.1
PS1371	KY775912	1	2	1	Ficus insipida	1	Z	1	KF436184.1
PS1389	KY775913	29	13	15	Cecropia insignis	12	A	0	KF436370.1
PS1391	KY775914	94	66	59	Cecropia insignis	12	P	0	FJ755257.1
PS1433	KY775915	40	26	14	Cecropia insignis	12	Н	0	JX243910.1
PS1438	KY775916	23	23	20	Cecropia insignis	12	Z	1	AB520272.1
PS1439	KY775917	69	29	14	Cecropia insignis	12	Z	0	AB520272.1
PS1441	KY775918	15	6	1	Cecropia insignis	12	Z	1	GU055648.1
PS1444	KY775919	12	6	1	Cecropia insignis	12	Z	0	KC007277.1
PS1445	KY775920	15	6	1	Cecropia insignis	12	Z	0	GU055648.1
PS1446	KY775921	15	6	1	Cecropia insignis	12	Z	0	FJ454984.1
PS1448	KY775922	15	6	1	Cecropia insignis	12	Z	0	GU055648.1
PS1453	KY775923	39	34	30	Cecropia insignis	12	Z	0	KC007211.1
PS1457	KY775924	23	23	20	Cecropia insignis	12	Z	0	GU183113.1
PS1461	KY775925	2	1	2	Cecropia insignis	12	Z	0	KF436286.1
PS1462	KY775926	4	3	4	Annona spraguei	6	A	0	EU563552.1
PS1464	KY775927	1	2	1	Annona spraguei	6	Н	1	KF436184.1
PS1465	KY775928	41	3	4	Annona spraguei	6	A	0	KF897898.1
PS1466	KY775929	33	12	9	Annona spraguei	6	A	0	KC806286.1
PS1468	KY775930	177	116	95	Annona spraguei	6	A	0	KF435852.1
PS1469	KY775931	3	1	2	Annona spraguei	6	A	0	JX104215.1
PS1471	KY775932	1	2	1	Annona spraguei	6	A	1	KF436184.1
PS1473	KY775933	42	36	7	Annona spraguei	6	A	1	JX243750.1
PS1474	KY775934	17	15	17	Annona spraguei	6	A	0	KF436410.1
PS1476	KY775935	8	5	3	Annona spraguei	6	A	0	KC808241.1
PS1478	KY775936	43	43	34	Annona spraguei	6	Н	0	JN634831.1
PS1479	KY775937	2	1	2	Annona spraguei	6	A	0	KF436286.1
PS1480	KY775938	4	3	4	Annona spraguei	6	A	0	KT211542.1
PS1481	KY775939	11	7	5	Annona spraguei	6	A	0	JX243941.1
PS1482	KY775940	11	7	5	Annona spraguei	6	A	1	JX243941.1
PS1484	KY775941	8	5	3	Annona spraguei	6	A	0	KF938479.1
PS1485	KY775942	176	14	4	Annona spraguei	6	A	0	KF880406.1
PS1486	KY775943	7	4	3	Annona spraguei	6	A	0	KF918581.1
PS1487	KY775944	5	3	4	Annona spraguei	6	A	0	EU563552.1
PS1488	KY775945	8	5	3	Annona spraguei	6	Н	0	KC808241.1

PS1490	KY775946	1	2	1	Annona spraguei	6	A	1	KF436184.1
PS1492	KY775947	1	2	1	Annona spraguei	6	A	1	KF436184.1
PS1493	KY775948	22	4	3	Annona spraguei	6	A	0	KF918563.1
PS1494	KY775949	55	12	9	Annona spraguei	6	A	0	EU563608.1
PS1497	KY775950	7	4	3	Annona spraguei	6	P	0	KF918581.1
PS1498	KY775951	2	1	2	Annona spraguei	6	P	1	KF435249.1
PS1499	KY775952	48	4	3	Annona spraguei	6	P	0	KR422338.1
PS1503	KY775953	2	1	2	Annona spraguei	6	P	0	KF435249.1
PS1504	KY775954	20	11	12	Annona spraguei	6	P	0	HQ643400.2
PS1505	KY775955	8	5	3	Annona spraguei	6	P	0	KC808241.1
PS1506	KY775956	175	115	60	Annona spraguei	6	P	1	AB513849.1
PS1507	KY775957	5	3	4	Annona spraguei	6	P	NA	EU563552.1
PS1508	KY775958	9	2	1	Annona spraguei	6	P	0	KF435246.1
PS1509	KY775959	12	6	1	Annona spraguei	6	P	0	KC007277.1
PS1512	KY775960	4	3	4	Annona spraguei	6	P	1	EU563552.1
PS1513	KY775961	33	12	9	Annona spraguei	6	P	0	KC806275.1
PS1514	KY775962	33	12	9	Annona spraguei	6	P	1	HM999896.1
PS1515	KY775963	1	2	1	Annona spraguei	6	P	0	KF435433.1
PS1517	KY775964	174	114	93	Annona spraguei	6	P	0	KC573914.1
PS1519	KY775965	14	10	11	Annona spraguei	6	P	1	JX243750.1
PS1520	KY775966	7	4	3	Annona spraguei	6	P	0	KF918581.1
PS1521	KY775967	14	10	11	Annona spraguei	6	P	1	KT290029.1
PS1522	KY775968	1	2	1	Annona spraguei	6	P	0	KF435246.1
PS1523	KY775969	5	3	4	Annona spraguei	6	P	0	EU563552.1
PS1524	KY775970	6	1	2	Annona spraguei	6	P	0	EU563622.1
PS1525	KY775971	10	2	1	Annona spraguei	6	P	0	KF436184.1
PS1527	KY775972	5	3	4	Annona spraguei	6	P	1	JX435197.1
PS1528	KY775973	4	3	4	Annona spraguei	6	P	NA	EU563552.1
PS1531	KY775974	1	2	1	Annona spraguei	6	P	0	KF435246.1
PS1532	KY775975	5	3	4	Annona spraguei	6	P	0	EU563552.1
PS1533	KY775976	4	3	4	Annona spraguei	6	P	0	JX435197.1
PS1534	KY775977	6	1	2	Annona spraguei	6	D	0	KF436286.1
PS1536	KY775978	171	113	92	Annona spraguei	6	D	1	AF502857.1
PS1537	KY775979	90	14	4	Annona spraguei	6	D	0	EU563552.1
PS1539	KY775980	1	2	1	Annona spraguei	6	D	1	KF435246.1
PS1540	KY775981	5	3	4	Annona spraguei	6	D	0	EU563552.1
PS1541	KY775982	5	3	4	Annona spraguei	6	D	1	EU563552.1
PS1542	KY775983	1	2	1	Annona spraguei	6	D	1	KF435246.1
PS1543	KY775984	3	1	2	Annona spraguei	6	D	0	FN645637.1
PS1544	KY775985	6	1	2	Annona spraguei	6	D	0	KF435276.1
PS1545	KY775986	1	2	1	Annona spraguei	6	D	0	KF435246.1
PS1546	KY775987	2	1	2	Annona spraguei	6	D	1	KP698094.1
PS1547	KY775988	44	19	5	Annona spraguei	6	D	0	KC007303.1
PS1548	KY775989	6	1	2	Annona spraguei	6	D	0	EU563622.1
PS1549	KY775990	8	5	3	Annona spraguei	6	D	1	KC808241.1

PS1550	KY775991	4	3	4	Annona spraguei	6	D	0	EU563552.1
PS1553	KY775992	4	3	4	Annona spraguei	6	D	0	EU563552.1
PS1554	KY775993	33	12	9	Annona spraguei	6	D	0	KC806275.1
PS1557	KY775994	5	3	4	Annona spraguei	6	D	0	EU563552.1
PS1558	KY775995	1	2	1	Annona spraguei	6	D	0	KF436184.1
PS1559	KY775996	10	2	1	Annona spraguei	6	D	0	KF435246.1
PS1560	KY775997	7	4	3	Annona spraguei	6	D	0	GU170643.1
PS1561	KY775998	101	56	46	Annona spraguei	6	D	1	KF436303.1
PS1562	KY775999	7	4	3	Annona spraguei	6	D	0	KF918581.1
PS1563	KY776000	21	4	3	Annona spraguei	6	D	1	KF918563.1
PS1564	KY776001	1	2	1	Annona spraguei	6	D	1	KF436184.1
PS1565	KY776002	1	2	1	Annona spraguei	6	D	0	KF436184.1
PS1566	KY776003	21	4	3	Annona spraguei	6	D	0	KF918563.1
PS1567	KY776004	1	2	1	Annona spraguei	6	D	1	KF436184.1
PS1568	KY776005	10	2	1	Annona spraguei	6	D	1	KF435246.1
PS1569	KY776006	1	2	1	Annona spraguei	6	D	0	KF435246.1
PS1570	KY776007	8	5	3	Annona spraguei	6	Н	0	KC808241.1
PS1571	KY776008	7	4	3	Annona spraguei	6	Н	0	KF918581.1
PS1572	KY776009	35	9	7	Annona spraguei	6	Н	1	JX243750.1
PS1574	KY776010	7	4	3	Annona spraguei	6	Н	0	KJ467101.1
PS1576	KY776011	166	4	3	Annona spraguei	6	Н	0	GU170643.1
PS1577	KY776012	9	2	1	Annona spraguei	6	Н	0	JQ411358.1
PS1578	KY776013	1	2	1	Annona spraguei	6	Н	0	KF435246.1
PS1579	KY776014	8	5	3	Annona spraguei	6	Н	0	KF938479.1
PS1580	KY776015	47	32	24	Annona spraguei	6	Н	0	JN890051.1
PS1581	KY776016	4	3	4	Annona spraguei	6	Н	0	EU563552.1
PS1582	KY776017	1	2	1	Annona spraguei	6	Н	0	KF435246.1
PS1583	KY776018	164	112	91	Annona spraguei	6	Н	0	KF435374.1
PS1584	KY776019	6	1	2	Annona spraguei	6	Н	0	KF435276.1
PS1585	KY776020	1	2	1	Annona spraguei	6	Z	0	KF436184.1
PS1586	KY776021	4	3	4	Annona spraguei	6	Z	1	EU563552.1
PS1587	KY776022	8	5	3	Annona spraguei	6	Z	0	KC808241.1
PS1591	KY776023	11	7	5	Annona spraguei	6	Z	1	JX243941.1
PS1592	KY776024	71	12	9	Annona spraguei	6	Z	0	EU552110.1
PS1593	KY776025	21	4	3	Annona spraguei	6	Z	0	JQ922214.1
PS1594	KY776026	31	1	2	Annona spraguei	6	Z	0	KF435249.1
PS1595	KY776027	162	5	3	Annona spraguei	6	Z	0	KF918571.1
PS1596	KY776028	63	19	5	Annona spraguei	6	Z	0	JX243941.1
PS1597	KY776029	9	2	1	Annona spraguei	6	Z	0	KF435246.1
PS1598	KY776030	63	19	5	Annona spraguei	6	Z	0	JX243941.1
PS1599	KY776031	1	2	1	Annona spraguei	6	Z	0	KF435246.1
PS1600	KY776032	3	1	2	Annona spraguei	6	Z	0	KP747702.1
PS1603	KY776033	2	1	2	Annona spraguei	6	Z	0	KF436286.1
PS1604	KY776034	160	1	2	Annona spraguei	6	Z	0	EU563622.1
PS1605	KY776035	2	1	2	Annona spraguei	6	Z	0	KF435249.1

PS1606	KY776036	6	1	2	Annona spraguei	6	Z	0	KF435276.1
PS1607	KY776037	3	1	2	Annona spraguei	6	Z	1	FN645637.1
PS1608	KY776038	7	4	3	Annona spraguei	6	Z	0	GU170643.1
PS1609	KY776039	2	1	2	Annona spraguei	6	Z	0	KF435249.1
PS1610	KY776040	6	1	2	Annona spraguei	6	Z	1	EU563622.1
PS1611	KY776041	7	4	3	Annona spraguei	6	Z	0	KF918581.1
PS1612	KY776042	53	50	6	Trema micrantha "brown"	6	Z	1	AY598667.1
PS1613	KY776043	34	20	6	Trema micrantha "brown"	6	Z	1	AY598667.1
PS1614	KY776044	34	20	6	Trema micrantha "brown"	6	Z	1	GU258938.1
PS1615	KY776045	91	57	57	Trema micrantha "brown"	6	Z	0	KF436222.1
PS1616	KY776046	100	20	6	Trema micrantha "brown"	6	Z	0	KR092141.1
PS1617	KY776047	158	109	87	Trema micrantha "brown"	6	D	0	AB520271.1
PS1618	KY776048	92	60	58	Trema micrantha "brown"	6	D	1	HQ698593.1
PS1619	KY776049	156	70	63	Trema micrantha "brown"	6	D	0	FJ612677.1
PS1620	KY776050	11	7	5	Trema micrantha "brown"	6	A	1	EU860058.1
PS1621	KY776051	11	7	5	Trema micrantha "brown"	6	A	1	GU055710.1
PS1622	KY776052	14	10	11	Trema micrantha "brown"	6	A	1	JN099129.1
PS1623	KY776053	94	66	59	Trema micrantha "brown"	6	A	0	AY677294.1
PS1624	KY776054	14	10	11	Trema micrantha "brown"	6	A	1	JX243750.1
PS1625	KY776055	26	18	18	Trema micrantha "brown"	6	A	1	KF435220.1
PS1626	KY776056	154	106	84	Trema micrantha "brown"	6	A	1	JN890051.1
PS1627	KY776057	26	18	18	Trema micrantha "brown"	6	A	1	JN890258.1
PS1628	KY776058	19	17	6	Trema micrantha "brown"	6	A	1	HQ643955.1
PS1629	KY776059	95	18	18	Trema micrantha "brown"	6	A	1	KF436162.1
PS1630	KY776060	229	105	83	Trema micrantha "brown"	6	P	0	EU860056.1
PS1631	KY776061	36	13	15	Trema micrantha "brown"	6	P	1	KF435806.1
PS1632	KY776062	14	10	11	Trema micrantha "brown"	6	P	1	JX243750.1
PS1633	KY776063	26	18	18	Trema micrantha "brown"	6	P	0	KF746154.1
PS1634	KY776064	18	16	16	Trema micrantha "brown"	6	P	1	FJ612616.1
PS1753	KY776065	9	2	1	Ficus insipida	3	A	1	KC330218.1
PS1754	KY776066	1	2	1	Ficus insipida	3	A	0	KF436184.1
PS1755	KY776067	1	2	1	Ficus insipida	3	A	0	KF746133.1
PS1758	KY776068	23	23	20	Ficus insipida	3	A	1	EU040239.1
PS1760	KY776069	1	2	1	Ficus insipida	3	P	1	KF436184.1
PS1762	KY776070	9	2	1	Ficus insipida	3	P	0	JQ411364.1
PS1766	KY776071	12	6	1	Ficus insipida	3	P	1	KC007277.1
PS1768	KY776072	9	2	1	Ficus insipida	3	P	1	KF436184.1
PS1769	KY776073	1	2	1	Ficus insipida	3	P	1	KF436184.1
PS1770	KY776074	9	2	1	Ficus insipida	3	P	1	JQ411358.1
PS1772	KY776075	9	2	1	Ficus insipida	3	P	1	JQ411358.1
PS1781	KY776076	12	6	1	Ficus insipida	3	D	0	FJ454984.1
PS1785	KY776077	1	2	1	Ficus insipida	3	D	1	KF436184.1
PS1786	KY776078	1	2	1	Ficus insipida	3	D	NA	KF436184.1
PS1788	KY776079	1	2	1	Ficus insipida	3	D	0	KF436184.1
PS1793	KY776080	1	2	1	Ficus insipida	3	Н	1	KF436184.1

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PS1794	KY776081	66	21	13	Ficus insipida	3	Н	1	EU687039.1
PS1795	KY776082	149	104	82	Ficus insipida	3	Н	0	JN709486.1
PS1796	KY776083	1	2	1	Ficus insipida	3	Н	1	KF436184.1
PS1797	KY776084	1	2	1	Ficus insipida	3	Н	1	KF436184.1
PS1952	KY776085	29	13	15	Annona spraguei	6	Z	0	JQ760667.1
PS2098	KY776086	5	3	4	Annona spraguei	12	D	0	EU563552.1
PS2099	KY776087	1	2	1	Annona spraguei	12	D	0	JQ411357.1
PS2100	KY776088	4	3	4	Annona spraguei	12	D	1	EU563557.1
PS2101	KY776089	17	15	17	Annona spraguei	12	D	0	EU686869.1
PS2102	KY776090	41	3	4	Annona spraguei	12	D	0	EU563552.1
PS2103	KY776091	1	2	1	Annona spraguei	12	D	0	KF435433.1
PS2104	KY776092	3	1	2	Annona spraguei	12	D	1	FN645637.1
PS2106	KY776093	5	3	4	Annona spraguei	12	D	0	EU563552.1
PS2108	KY776094	24	24	21	Annona spraguei	12	D	0	KC806293.1
PS2110	KY776095	148	19	5	Annona spraguei	12	D	0	JX243941.1
PS2111	KY776096	7	4	3	Annona spraguei	12	D	0	KF918581.1
PS2114	KY776097	8	5	3	Annona spraguei	12	D	0	KC808241.1
PS2118	KY776098	10	2	1	Annona spraguei	12	D	1	JQ411357.1
PS2119	KY776099	9	2	1	Annona spraguei	12	D	0	KF746133.1
PS2120	KY776100	1	2	1	Annona spraguei	12	D	0	KF746133.1
PS2121	KY776101	10	2	1	Annona spraguei	12	D	1	JQ411357.1
PS2122	KY776102	4	3	4	Annona spraguei	12	D	0	EU563552.1
PS2123	KY776103	4	3	4	Annona spraguei	12	D	0	EU563552.1
PS2124	KY776104	147	19	5	Annona spraguei	12	D	0	KC007242.1
PS2126	KY776105	8	5	3	Annona spraguei	12	D	0	KC808241.1
PS2127	KY776106	146	31	29	Annona spraguei	12	D	0	JX244011.1
PS2194	KY776107	3	1	2	Annona spraguei	12	Z	0	FN645637.1
PS2195	KY776108	5	3	4	Annona spraguei	12	Z	0	KP696750.1
PS2198	KY776109	17	15	17	Annona spraguei	12	Z	0	KP306999.1
PS2199	KY776110	5	3	4	Annona spraguei	12	Z	0	EU563552.1
PS2200	KY776111	47	32	24	Annona spraguei	12	Z	0	JN890051.1
PS2201	KY776112	1	2	1	Annona spraguei	12	Z	0	KF435433.1
PS2203	KY776113	4	3	4	Annona spraguei	12	Z	0	KP263119.1
PS2204	KY776114	60	4	3	Annona spraguei	12	Z	1	KF918563.1
PS2206	KY776115	1	2	1	Annona spraguei	12	Z	0	KF435246.1
PS2207	KY776116	21	4	3	Annona spraguei	12	Z	0	KF918563.1
PS2208	KY776117	7	4	3	Annona spraguei	12	Z	0	KF918581.1
PS2209	KY776118	144	3	4	Annona spraguei	12	Z	0	EU563552.1
PS2211	KY776119	4	3	4	Annona spraguei	12	Z	0	EU563552.1
PS2212	KY776120	143	7	5	Annona spraguei	12	Z	0	EU860058.1
PS2214	KY776121	10	2	1	Annona spraguei	12	Z	0	JQ411357.1
PS2215	KY776122	8	5	3	Annona spraguei	12	Z	0	KC808241.1
PS2216	KY776123	24	24	21	Annona spraguei	12	Z	0	KC806293.1
PS2217	KY776124	142	103	81	Annona spraguei	12	Z	0	KF918590.1
PS2218	KY776125	24	24	21	Annona spraguei	12	Z	0	KC806293.1
1 52210	11 / / / / / / / /	47	47	<u>~ 1</u>	monu spruguei	12	ட	U	150000273.1

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PS2219	KY776126	141	102	79	Annona spraguei	12	Z	0	KM011996.1
PS2220	KY776127	140	101	60	Annona spraguei	12	Z	0	GU170643.1
PS2221	KY776128	21	4	3	Annona spraguei	12	Z	0	KF918563.1
PS2222	KY776129	63	19	5	Annona spraguei	12	Z	0	JX243941.1
PS2223	KY776130	103	12	9	Annona spraguei	12	Z	0	JF449861.1
PS2224	KY776131	2	1	2	Annona spraguei	12	Н	0	KF435249.1
PS2225	KY776132	1	2	1	Annona spraguei	12	Н	0	KF435246.1
PS2227	KY776133	9	2	1	Annona spraguei	12	Н	0	HE649414.1
PS2229	KY776134	32	4	3	Annona spraguei	12	Н	0	GU170643.1
PS2231	KY776135	21	4	3	Annona spraguei	12	Н	0	KF918563.1
PS2232	KY776136	5	3	4	Annona spraguei	12	Н	0	EU563552.1
PS2235	KY776137	17	15	17	Annona spraguei	12	Н	0	KF436411.1
PS2236	KY776138	41	3	4	Annona spraguei	12	Н	0	EU563552.1
PS2237	KY776139	41	3	4	Annona spraguei	12	Н	0	EU563552.1
PS2238	KY776140	6	1	2	Annona spraguei	12	Н	0	EU563622.1
PS2241	KY776141	21	4	3	Annona spraguei	12	Н	0	KF918563.1
PS2242	KY776142	11	7	5	Annona spraguei	12	Н	1	GU055710.1
PS2243	KY776143	4	3	4	Annona spraguei	12	Н	0	EU563552.1
PS2245	KY776144	137	100	76	Annona spraguei	12	Н	0	JX435198.1
PS2247	KY776145	5	3	4	Annona spraguei	12	Н	0	EU563552.1
PS2249	KY776146	10	2	1	Annona spraguei	12	Н	0	KF435246.1
PS2250	KY776147	7	4	3	Annona spraguei	12	P	0	KF918581.1
PS2251	KY776148	136	99	75	Annona spraguei	12	P	0	KM012000.1
PS2252	KY776149	8	5	3	Annona spraguei	12	P	0	GU170651.1
PS2253	KY776150	1	2	1	Annona spraguei	12	P	0	KF435433.1
PS2256	KY776151	11	7	5	Annona spraguei	12	P	0	GU055710.1
PS2257	KY776152	1	2	1	Annona spraguei	12	P	0	KF435433.1
PS2258	KY776153	17	15	17	Annona spraguei	12	P	0	KF436382.1
PS2259	KY776154	60	4	3	Annona spraguei	12	P	0	KF918563.1
PS2261	KY776155	10	2	1	Annona spraguei	12	P	0	JQ411364.1
PS2262	KY776156	7	4	3	Annona spraguei	12	P	0	KF918581.1
PS2265	KY776157	10	2	1	Annona spraguei	12	P	0	JQ411357.1
PS2266	KY776158	32	4	3	Annona spraguei	12	P	0	JX282607.1
PS2267	KY776159	4	3	4	Annona spraguei	12	P	1	EU563552.1
PS2269	KY776160	1	2	1	Annona spraguei	12	P	1	KF435246.1
PS2270	KY776161	3	1	2	Annona spraguei	12	P	0	FN645637.1
PS2272	KY776162	4	3	4	Annona spraguei	12	P	0	EU563552.1
PS2273	KY776163	1	2	1	Annona spraguei	12	P	0	KF435246.1
PS2274	KY776164	22	4	3	Annona spraguei	12	P	0	KF918563.1
PS2275	KY776165	1	2	1	Annona spraguei	12	P	0	KF436184.1
PS2276	KY776166	56	14	4	Annona spraguei	12	P	0	KF918590.1
PS2277	KY776167	12	6	1	Annona spraguei	12	P	0	KM011996.1
PS2278	KY776168	11	7	5	Annona spraguei	12	P	0	JX243941.1
PS2280	KY776169	1	2	1	Annona spraguei	12	P	0	KF435246.1
PS2281	KY776170	21	4	3	Annona spraguei	12	P	0	JQ922214.1
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PS2282	KY776171	10	2	1	Annona spraguei	12	P	0	KF435246.1
PS2317	KY776172	5	3	4	Annona spraguei	12	A	0	EU563552.1
PS2318	KY776173	3	1	2	Annona spraguei	12	A	0	JX104215.1
PS2319	KY776174	10	2	1	Annona spraguei	12	A	0	JQ411357.1
PS2320	KY776175	48	4	3	Annona spraguei	12	A	0	KF918581.1
PS2321	KY776176	56	14	4	Annona spraguei	12	A	0	KF918590.1
PS2322	KY776177	8	5	3	Annona spraguei	12	A	0	KC808241.1
PS2323	KY776178	128	19	5	Annona spraguei	12	A	0	GU174380.1
PS2325	KY776179	127	32	24	Annona spraguei	12	A	0	JN890051.1
PS2326	KY776180	55	12	9	Annona spraguei	12	A	0	EU563608.1
PS2327	KY776181	1	2	1	Annona spraguei	12	A	0	KF436184.1
PS2329	KY776182	2	1	2	Annona spraguei	12	A	0	KF435249.1
PS2330	KY776183	11	7	5	Annona spraguei	12	A	0	GU055710.1
PS2331	KY776184	18	16	16	Annona spraguei	12	A	0	FJ612616.1
PS2332	KY776185	18	16	16	Annona spraguei	12	A	0	FJ612616.1
PS2334	KY776186	9	2	1	Annona spraguei	12	A	0	KF435246.1
PS2336	KY776187	6	1	2	Annona spraguei	12	A	0	KF435276.1
PS2337	KY776188	2	1	2	Annona spraguei	12	A	0	KF435249.1
PS2338	KY776189	125	3	4	Annona spraguei	12	A	0	JX435197.1
PS2340	KY776190	44	19	5	Annona spraguei	12	A	0	JX243941.1
PS2341	KY776191	123	87	72	Annona spraguei	12	A	0	KF918594.1
PS2342	KY776192	22	4	3	Annona spraguei	12	A	0	KF918563.1
PS2343	KY776193	103	12	9	Annona spraguei	12	A	0	KC806269.1
PS2344	KY776194	120	86	69	Annona spraguei	12	A	0	KF617895.1
PS2345	KY776195	4	3	4	Annona spraguei	12	A	0	EU563552.1
PS2347	KY776196	3	1	2	Annona spraguei	12	A	0	FN645637.1
PS2348	KY776197	24	24	21	Annona spraguei	12	A	0	KC806293.1
PS2349	KY776198	119	12	9	Annona spraguei	12	A	0	KC806269.1
PS2350	KY776199	4	3	4	Annona spraguei	12	A	0	EU563552.1
PS2351	KY776200	4	3	4	Annona spraguei	12	A	0	EU563552.1
PS2352	KY776201	1	2	1	Annona spraguei	12	A	0	KF435433.1
PS3021	KY776202	118	49	37	Ficus insipida	6	A	1	JN890119.1
PS3022	KY776203	9	2	1	Ficus insipida	6	A	1	KF746133.1
PS3023	KY776204	9	2	1	Ficus insipida	6	A	1	JN943369.1
PS3024	KY776205	9	2	1	Ficus insipida	6	A	1	JQ411358.1
PS3025	KY776206	54	52	40	Ficus insipida	6	A	1	KF435879.1
PS3026	KY776207	54	52	40	Ficus insipida	6	A	1	KF435879.1
PS3027	KY776208	9	2	1	Ficus insipida	6	A	1	JQ411358.1
PS3028	KY776209	1	2	1	Ficus insipida	6	A	1	KF435433.1
PS3029	KY776210	54	52	40	Ficus insipida	6	A	1	KF435879.1
PS3031	KY776211	24	24	21	Ficus insipida	6	D	0	KC806287.1
PS3032	KY776212	51	41	19	Ficus insipida	6	D	0	JX243765.1
PS3034	KY776213	105	49	37	Ficus insipida	6	D	0	JN890321.1
PS3035	KY776214	3	1	2	Ficus insipida	6	D	1	JX104215.1
PS3036	KY776215	51	41	19	Ficus insipida	6	D	1	KP307000.1

PS3038	KY776216	51	41	19	Ficus insipida	6	D	1	KP307000.1
PS3039	KY776217	106	13	15	Ficus insipida	12	D	0	JQ760777.1
PS3040	KY776218	1	2	1	Ficus insipida	6	Н	0	KF435246.1
PS3042	KY776219	7	4	3	Ficus insipida	6	Н	0	KF918581.1
PS3043	KY776220	107	21	13	Ficus insipida	6	Н	1	EU686927.1
PS3045	KY776221	1	2	1	Ficus insipida	12	Н	0	KF435433.1
PS3046	KY776222	23	23	20	Ficus insipida	12	Н	0	KM030303.1
PS3047	KY776223	14	10	11	Ficus insipida	6	P	0	JX243750.1
PS3048	KY776224	8	5	3	Ficus insipida	6	P	0	KC808241.1
PS3050	KY776225	109	70	63	Ficus insipida	6	P	1	AB986463.1
PS3051	KY776226	7	4	3	Ficus insipida	6	P	0	KF918581.1
PS3052	KY776227	12	6	1	Ficus insipida	6	P	1	KM011996.1
PS3053	KY776228	9	2	1	Ficus insipida	6	P	1	JQ411358.1
PS3054	KY776229	12	6	1	Ficus insipida	6	P	1	KM011996.1
PS3055	KY776230	9	2	1	Ficus insipida	6	P	1	JQ411358.1
PS3056	KY776231	65	21	13	Ficus insipida	12	P	1	KF435761.1
PS3057	KY776232	57	46	39	Ficus insipida	6	Z	1	KM030318.1
PS3058	KY776233	57	46	39	Ficus insipida	6	Z	1	KM030318.1
PS3059	KY776234	57	46	39	Ficus insipida	6	Z	1	KM030318.1
PS3060	KY776235	12	6	1	Ficus insipida	6	Z	0	KM011996.1
PS3061	KY776236	115	75	67	Ficus insipida	6	Z	1	AB986467.1
PS3062	KY776237	121	73	77	Ficus insipida	6	Z	1	DQ123635.1
PS3064	KY776238	2	1	2	Ficus insipida	12	Z	0	KP698094.1
PS3067	KY776239	124	76	85	Ficus insipida	12	Z	0	JN890233.1
PS3667	KY776240	13	8	8	Trema micrantha "black"	0	NA	1	GU214680.1
PS3668	KY776241	13	8	8	Trema micrantha "black"	0	NA	1	GU214680.1
PS3669	KY776242	13	8	8	Trema micrantha "black"	0	NA	1	KF435653.1
PS3670	KY776243	126	81	96	Trema micrantha "black"	0	NA	1	JQ760367.1
PS3675	KY776244	130	67	53	Trema micrantha "black"	1	A	0	JQ747707.1
PS3676	KY776245	20	11	12	Trema micrantha "black"	1	A	1	HQ643400.2
PS3677	KY776246	131	83	99	Trema micrantha "black"	1	A	0	KF435756.1
PS3678	KY776247	70	48	45	Trema micrantha "black"	1	A	0	KP335626.1
PS3679	KY776248	20	11	12	Trema micrantha "black"	1	A	1	HQ643400.2
PS3680	KY776249	13	8	8	Trema micrantha "black"	1	A	1	KF435653.1
PS3682	KY776250	99	8	8	Trema micrantha "black"	3	A	1	KF435252.1
PS3683	KY776251	11	7	5	Trema micrantha "black"	3	A	0	GU055710.1
PS3684	KY776252	26	18	18	Trema micrantha "black"	3	A	1	KF435925.1
PS3685	KY776253	152	20	6	Trema micrantha "black"	3	A	1	GU258940.1
PS3686	KY776254	29	13	15	Trema micrantha "black"	3	A	1	KF436317.1
PS3687	KY776255	11	7	5	Trema micrantha "black"	3	A	1	GU055710.1
PS3688	KY776256	93	51	43	Trema micrantha "black"	3	A	0	KF435370.1
PS3689	KY776257	19	17	6	Trema micrantha "black"	3	A	1	AY598667.1
PS3690	KY776258	26	18	18	Trema micrantha "black"	3	A	0	KF435220.1
PS3691	KY776259	13	8	8	Trema micrantha "black"	6	A	1	KF435653.1
PS3692	KY776260	50	42	35	Trema micrantha "black"	6	A	1	EU687094.1

PS3693	KY776261	26	18	18	Trema micrantha "black"	6	A	1	KF435220.1
PS3694	KY776262	178	84	101	Trema micrantha "black"	6	A	1	KF436187.1
PS3695	KY776263	184	85	105	Trema micrantha "black"	6	A	1	JX244056.1
PS3696	KY776264	26	18	18	Trema micrantha "black"	6	A	1	KF435220.1
PS3697	KY776265	68	39	31	Trema micrantha "black"	6	A	0	JX175037.1
PS3698	KY776266	8	5	3	Trema micrantha "black"	6	A	1	KC808241.1
PS3699	KY776267	20	11	12	Trema micrantha "black"	6	A	0	HQ643400.2
PS3700	KY776268	20	11	12	Trema micrantha "black"	6	A	1	HQ643400.2
PS3701	KY776269	25	22	10	Trema micrantha "black"	6	A	1	HM469429.1
PS3703	KY776270	61	11	12	Trema micrantha "black"	6	A	1	HQ643400.2
PS3706	KY776271	84	45	36	Trema micrantha "black"	1	D	1	KP757577.1
PS3707	KY776272	19	17	6	Trema micrantha "black"	1	D	1	AY598667.1
PS3708	KY776273	1	2	1	Trema micrantha "black"	1	D	1	KF435433.1
PS3709	KY776274	8	5	3	Trema micrantha "black"	1	D	1	KC808241.1
PS3710	KY776275	98	54	38	Trema micrantha "black"	1	D	1	EU686953.1
PS3711	KY776276	1	2	1	Trema micrantha "black"	1	D	0	KF435246.1
PS3712	KY776277	25	22	10	Trema micrantha "black"	1	D	1	HM469429.1
PS3713	KY776278	191	93	111	Trema micrantha "black"	3	D	1	KM030294.1
PS3715	KY776279	25	22	10	Trema micrantha "black"	3	D	1	EF634422.1
PS3716	KY776280	25	22	10	Trema micrantha "black"	3	D	1	EF634422.1
PS3717	KY776281	14	10	11	Trema micrantha "black"	3	D	0	JX243750.1
PS3718	KY776282	11	7	5	Trema micrantha "black"	3	D	1	GU055710.1
PS3719	KY776283	97	8	8	Trema micrantha "black"	3	D	1	GU214675.1
PS3720	KY776284	14	10	11	Trema micrantha "black"	6	D	0	JX243750.1
PS3721	KY776285	13	8	8	Trema micrantha "black"	6	D	1	KF435653.1
PS3722	KY776286	6	1	2	Trema micrantha "black"	6	D	1	EU563622.1
PS3723	KY776287	14	10	11	Trema micrantha "black"	6	D	0	JX243750.1
PS3727	KY776288	200	35	25	Trema micrantha "black"	1	Н	1	JQ747653.1
PS3728	KY776289	203	94	114	Trema micrantha "black"	1	Н	0	AB272162.1
PS3729	KY776290	42	36	7	Trema micrantha "black"	1	Н	1	JX243750.1
PS3731	KY776291	217	96	117	Trema micrantha "black"	1	Н	0	KF435756.1
PS3732	KY776292	19	17	6	Trema micrantha "black"	1	Н	0	AY598667.1
PS3733	KY776293	10	2	1	Trema micrantha "black"	1	Н	1	JQ411357.1
PS3734	KY776294	49	31	29	Trema micrantha "black"	3	Н	1	KF436412.1
PS3735	KY776295	13	8	8	Trema micrantha "black"	3	Н	1	KF435653.1
PS3736	KY776296	14	10	11	Trema micrantha "black"	3	Н	0	JX243750.1
PS3737	KY776297	89	61	65	Trema micrantha "black"	6	Н	1	JQ761698.1
PS3738	KY776298	13	8	8	Trema micrantha "black"	6	Н	1	KF435653.1
PS3739	KY776299	18	16	16	Trema micrantha "black"	6	Н	1	FJ612616.1
PS3741	KY776300	35	9	7	Trema micrantha "black"	1	P	0	JX243750.1
PS3742	KY776301	13	8	8	Trema micrantha "black"	1	P	1	KF435653.1
PS3743	KY776302	1	2	1	Trema micrantha "black"	1	P	1	KF435433.1
PS3744	KY776303	16	9	7	Trema micrantha "black"	1	P	1	JX243750.1
PS3745	KY776304	16	9	7	Trema micrantha "black"	1	P	1	JX243750.1
PS3746	KY776305	16	9	7	Trema micrantha "black"	1	P	1	JX243750.1

PS3747	KY776306	16	9	7	Trema micrantha "black"	1	P	0	JX243750.1
PS3748	KY776307	1	2	1	Trema micrantha "black"	1	P	1	KF435433.1
PS3749	KY776308	28	25	10	Trema micrantha "black"	1	P	1	KF673652.1
PS3750	KY776309	61	11	12	Trema micrantha "black"	1	P	0	HQ643400.2
PS3751	KY776310	2	1	2	Trema micrantha "black"	1	P	1	KP179221.1
PS3752	KY776311	70	48	45	Trema micrantha "black"	1	P	1	KP335626.1
PS3753	KY776312	16	9	7	Trema micrantha "black"	3	P	1	JX243750.1
PS3754	KY776313	16	9	7	Trema micrantha "black"	3	P	1	JX243750.1
PS3755	KY776314	35	9	7	Trema micrantha "black"	3	P	0	JX243750.1
PS3756	KY776315	14	10	11	Trema micrantha "black"	3	P	1	JX243750.1
PS3757	KY776316	1	2	1	Trema micrantha "black"	3	P	1	KF435433.1
PS3758	KY776317	14	10	11	Trema micrantha "black"	3	P	1	JX243750.1
PS3759	KY776318	14	10	11	Trema micrantha "black"	3	P	1	JX243750.1
PS3760	KY776319	75	69	61	Trema micrantha "black"	3	P	1	GU055710.1
PS3761	KY776320	13	8	8	Trema micrantha "black"	3	P	1	KF435252.1
PS3762	KY776321	16	9	7	Trema micrantha "black"	3	P	0	JX243750.1
PS3763	KY776322	4	3	4	Trema micrantha "black"	3	P	1	EU563552.1
PS3764	KY776323	16	9	7	Trema micrantha "black"	3	P	1	JX243750.1
PS3765	KY776324	16	9	7	Trema micrantha "black"	3	P	1	JX243750.1
PS3767	KY776325	4	3	4	Trema micrantha "black"	3	P	1	KP263119.1
PS3768	KY776326	72	45	36	Trema micrantha "black"	3	P	NA	KP757577.1
PS3770	KY776327	35	9	7	Trema micrantha "black"	6	P	0	JX243750.1
PS3771	KY776328	185	9	7	Trema micrantha "black"	6	P	1	JX243750.1
PS3773	KY776329	30	28	13	Trema micrantha "black"	6	P	1	KP263075.1
PS3774	KY776330	89	61	65	Trema micrantha "black"	6	P	1	JQ761698.1
PS3776	KY776331	168	108	123	Trema micrantha "black"	6	P	1	JX243892.1
PS3777	KY776332	16	9	7	Trema micrantha "black"	6	P	0	JX243750.1
PS3778	KY776333	16	9	7	Trema micrantha "black"	6	P	1	JX243750.1
PS3779	KY776334	16	9	7	Trema micrantha "black"	6	P	1	JX243750.1
PS3780	KY776335	61	11	12	Trema micrantha "black"	6	P	1	HQ643400.2
PS3781	KY776336	14	10	11	Trema micrantha "black"	6	P	1	JX243750.1
PS3782	KY776337	27	27	22	Trema micrantha "black"	6	P	0	KF436279.1
PS3783	KY776338	28	25	10	Trema micrantha "black"	6	P	0	KF673652.1
PS3785	KY776339	13	8	8	Trema micrantha "black"	6	P	1	KF435653.1
PS3787	KY776340	1	2	1	Trema micrantha "black"	3	Z	0	KF435433.1
PS3788	KY776341	13	8	8	Trema micrantha "black"	3	Z	1	KF435653.1
PS3789	KY776342	25	22	10	Trema micrantha "black"	3	Z	1	HM469429.1
PS3791	KY776343	1	2	1	Trema micrantha "black"	3	Z	1	KF435433.1
PS3792	KY776344	1	2	1	Trema micrantha "black"	3	Z	1	KF435433.1
PS3794	KY776345	28	25	10	Trema micrantha "black"	3	Z	0	HM469430.1
PS3795	KY776346	1	2	1	Trema micrantha "black"	6	Z	1	KF435433.1
PS3796	KY776347	30	28	13	Trema micrantha "black"	6	Z	0	KP263075.1
PS3797	KY776348	25	22	10	Trema micrantha "black"	6	Z	1	EF634422.1
PS3798	KY776349	52	33	27	Trema micrantha "black"	6	Z	1	EU686891.1
PS3799	KY776350	10	2	1	Trema micrantha "black"	6	Z	0	JQ411357.1

PS3800	KY776351	53	50	6	Trema micrantha "black"	6	Z	1	AY598667.1
PS3802	KY776352	1	2	1	Trema micrantha "black"	6	Z	1	KF435433.1
PS3803	KY776353	12	6	1	Trema micrantha "black"	6	Z	1	KM011996.1
PS4142	KY776354	13	8	8	Trema micrantha "black"	0	NA	1	KF435252.1
PS4144	KY776355	104	72	55	Trema micrantha "brown"	12	A	1	KP306925.1
PS4145	KY776356	11	7	5	Trema micrantha "brown"	12	A	1	GU174380.1
PS4146	KY776357	14	10	11	Trema micrantha "brown"	12	A	1	JN099129.1
PS4147	KY776358	122	117	110	Trema micrantha "brown"	12	A	1	KF436392.1
PS4148	KY776359	102	37	19	Trema micrantha "brown"	12	A	1	KP307000.1
PS4156	KY776360	46	38	33	Trema micrantha "brown"	12	D	1	JN943417.1
PS4157	KY776361	3	1	2	Trema micrantha "brown"	12	D	1	FN645637.1
PS4162	KY776362	101	56	46	Trema micrantha "brown"	12	Н	0	KF436326.1
PS4163	KY776363	46	38	33	Trema micrantha "brown"	12	Н	1	JN943417.1
PS4164	KY776364	18	16	16	Trema micrantha "brown"	12	Н	1	FJ612616.1
PS4165	KY776365	18	16	16	Trema micrantha "brown"	12	Н	1	FJ612616.1
PS4166	KY776366	8	5	3	Trema micrantha "brown"	12	Н	0	KR422350.1
PS4169	KY776367	20	11	12	Trema micrantha "brown"	12	P	1	KP183944.1
PS4170	KY776368	129	20	6	Trema micrantha "brown"	12	P	0	GU258938.1
PS4172	KY776369	88	11	12	Trema micrantha "brown"	12	P	1	HQ643400.2
PS4173	KY776370	20	11	12	Trema micrantha "brown"	12	P	1	HQ643400.2
PS4174	KY776371	18	16	16	Trema micrantha "brown"	12	P	1	FJ612616.1
PS4175	KY776372	18	16	16	Trema micrantha "brown"	12	P	1	FJ612616.1
PS4179	KY776373	46	38	33	Trema micrantha "brown"	12	Z	1	JN943417.1
PS4180	KY776374	100	20	6	Trema micrantha "brown"	12	Z	1	AY598667.1
PS4181	KY776375	19	17	6	Trema micrantha "brown"	12	Z	1	AY598667.1
PS4182	KY776376	34	20	6	Trema micrantha "brown"	12	Z	NA	AY598667.1
PS5566	KY776377	99	8	8	Trema micrantha "black"	12	A	1	KF435252.1
PS5567	KY776378	25	22	10	Trema micrantha "black"	12	A	1	HM469429.1
PS5568	KY776379	1	2	1	Trema micrantha "black"	12	A	1	KF435433.1
PS5569	KY776380	42	36	7	Trema micrantha "black"	12	A	1	JX243750.1
PS5570	KY776381	1	2	1	Trema micrantha "black"	12	A	1	KF435372.1
PS5571	KY776382	34	20	6	Trema micrantha "black"	12	A	0	AY598667.1
PS5572	KY776383	13	8	8	Trema micrantha "black"	12	A	0	KF435653.1
PS5573	KY776384	133	118	66	Trema micrantha "black"	12	A	1	KF435166.1
PS5596	KY776385	28	25	10	Trema micrantha "black"	12	D	1	KF673652.1
PS5597	KY776386	98	54	38	Trema micrantha "black"	12	D	0	EU686953.1
PS5598	KY776387	62	35	25	Trema micrantha "black"	12	D	1	EU686996.1
PS5599	KY776388	97	8	8	Trema micrantha "black"	12	D	1	KF435653.1
PS5600	KY776389	28	25	10	Trema micrantha "black"	12	D	1	HM469430.1
PS5601	KY776390	138	126	74	Trema micrantha "black"	12	D	1	JQ760339.1
PS5602	KY776391	1	2	1	Trema micrantha "black"	12	D	1	KF435433.1
PS5603	KY776392	139	131	56	Trema micrantha "black"	12	D	1	EU686982.1
PS5604	KY776393	19	17	6	Trema micrantha "black"	12	D	1	AY598667.1
PS5605	KY776394	1	2	1	Trema micrantha "black"	12	D	1	KF435433.1
PS5606	KY776395	19	17	6	Trema micrantha "black"	12	D	1	AY598667.1

PS5615	KY776396	65	21	13	Trema micrantha "black"	12	Н	1	JQ760828.1
PS5616	KY776397	36	13	15	Trema micrantha "black"	12	Н	1	KP306902.1
PS5617	KY776398	27	27	22	Trema micrantha "black"	12	Н	1	KP757562.1
PS5619	KY776399	29	13	15	Trema micrantha "black"	12	Н	1	KF436317.1
PS5620	KY776400	1	2	1	Trema micrantha "black"	12	Н	0	KF435433.1
PS5621	KY776401	19	17	6	Trema micrantha "black"	12	Н	0	AY598667.1
PS5631	KY776402	20	11	12	Trema micrantha "black"	12	P	1	HQ643400.2
PS5632	KY776403	27	27	22	Trema micrantha "black"	12	P	1	KP757562.1
PS5633	KY776404	163	137	23	Trema micrantha "black"	12	P	1	KP402588.1
PS5634	KY776405	88	11	12	Trema micrantha "black"	12	P	1	HQ643400.1
PS5635	KY776406	181	2	1	Trema micrantha "black"	12	P	1	JN943369.1
PS5636	KY776407	10	2	1	Trema micrantha "black"	12	P	1	JQ411357.1
PS5637	KY776408	1	2	1	Trema micrantha "black"	12	P	0	KF435433.1
PS5638	KY776409	86	68	42	Trema micrantha "black"	12	P	1	EF652436.1
PS5639	KY776410	19	17	6	Trema micrantha "black"	12	P	1	AY598667.1
PS5640	KY776411	183	139	23	Trema micrantha "black"	12	P	1	EU427293.1
PS5641	KY776412	19	17	6	Trema micrantha "black"	12	P	1	AY598667.1
PS5642	KY776413	27	27	22	Trema micrantha "black"	12	P	1	KP757562.1
PS5643	KY776414	1	2	1	Trema micrantha "black"	12	P	1	KF435433.1
PS5645	KY776415	86	68	42	Trema micrantha "black"	12	P	1	EF652436.1
PS5646	KY776416	25	22	10	Trema micrantha "black"	12	P	0	HM469429.1
PS5647	KY776417	42	36	7	Trema micrantha "black"	12	P	1	JX243750.1
PS5648	KY776418	6	1	2	Trema micrantha "black"	12	P	1	EU563622.1
PS5669	KY776419	70	48	45	Trema micrantha "black"	12	Z	1	KP335626.1
PS5670	KY776420	1	2	1	Trema micrantha "black"	12	Z	1	KF435433.1
PS5671	KY776421	28	25	10	Trema micrantha "black"	12	Z	1	KF673652.1
PS5672	KY776422	28	25	10	Trema micrantha "black"	12	Z	0	KF673652.1
PS5673	KY776423	43	43	34	Trema micrantha "black"	12	Z	1	KJ543754.1

Fungal isolates were obtained from nine plant species that were buried in five common gardens in the forest at BCI (Panama) and retrieved at 1, 3, 6, and 12 months after burial. Operational taxonomic units (OTU) were defined at 99%, 97%, and 95% sequence similarity. For each sequence we provide the GenBank accession number. We also provide the accession number of the top hit after comparing the edited consensus sequences against the NCBI GenBank database using the *blastn* algorithm.

Table S6. Pairwise similarity comparisons reveal strong effects of plant species on fungal communities in seeds.

A. Four best-sampled plant species

		Abunda	nce (Morisi	ta-Horn)			Presen	ce-absence (Jaccard)	
	Df	Sum Sq	Mean Sq	F value	Pr (>F)	Df	Sum Sq	Mean Sq	F value	Pr (>F)
Plant species	1	2468	2467.98	818.67	< 0.001	1	1880.8	1880.83	895.6	< 0.001
Burial duration	1	1	1.12	0.37	0.542	1	1.7	1.67	0.8	0.372
Garden location	1	5	5.42	1.80	0.180	1	3.5	3.52	1.7	0.196
Viability	1	2	2.29	0.76	0.384	1	9.1	9.13	4.3	0.037
Residuals	7016	21151	3.01			7016	14733.6	2.10		

B. Nine plant species

		Abunda	nce (Morisi	ta-Horn)			Presen	ce-absence (Jaccard)	
	Df	Sum Sq	Mean Sq	F value	Pr (> F)	Df	Sum Sq	Mean Sq	F value	Pr (>F)
Plant species	1	3314	3314.4	847.27	< 0.001	1	2541	2541.04	815.4	< 0.001
Burial duration	1	7	6.9	1.76	0.185	1	7	6.77	2.2	0.141
Garden location	1	17	17.2	4.40	0.036	1	12	11.78	3.8	0.052
Viability	1	0	0.1	0.03	0.699	1	1	0.65	0.2	0.647
Residuals	12398	48500	3.9			12398	38637	3.12		

Comparisons are based on abundance (Morisita–Horn, *left panels*) and presence-absence (Jaccard index, *right panels*) of nonsingleton OTU. Comparisons were made between pairs of fungal communities isolated from same vs. different plant species, burial durations, garden locations, and seed viability classes, drawing from the communities defining the tips of the cluster diagrams (Fig. 1, Fig. S6). Tables show results for comparisons between fungal communities isolated from the four best-sampled species (*A*; see Fig. 1*C* and *D*) and nine species (*B*; see Figure S6*C* and *D*).

Table S7. Fungal communities in seeds of nine species of tropical trees (*Annona spraguei*, *Apeiba membranacea*, *Cecropia insignis*, *Cochlospermum vitifolium*, *Ficus insipida*, *Luehea seemannii*, *Ochroma pyramidale*, *Trema micrantha* "black", and *Trema micrantha* "brown") differ as a function of plant species, garden location, and seed viability, but not as a function of burial duration.

	Abundar	ıce (negati	ve binor	nial GLM)	Presenc	Presence-absence (binomial GLM)					
	Res. Df	Df. diff	Dev	<i>P</i> (>Dev)	Res. Df	Df. diff	Dev	<i>P</i> (>Dev)			
(Intercept)	157				157						
Plant species	149	8	705.4	0.001	149	8	582.6	0.001			
Burial duration	146	3	63.9	0.342	146	3	62.7	0.436			
Garden location	142	4	124.3	0.008	142	4	125.4	0.021			
Viability	141	1	60.8	0.001	141	1	61.9	0.001			

Analyses are based on abundance (*left panels*) and presence-absence (*right panels*) of nonsingleton fungal species (here approximated by operational taxonomic units, OTU). Analyses focusing on four species of trees that together accounted for >77% of sequenced fungal isolates further highlight the significant importance of plant species, location, and viability, as well as burial duration (Fig. 1, Fig. 2, Table S4). In turn, variance partitioning quantifies the relevance of each explanatory factor, highlighting the predominant effect of plant species on fungal community structure in seeds (Fig. 2).

Table S8. Variance partitioning shows that community composition of seed-associated fungi is explained by primarily by plant species and to a lesser degree seed viability, and when presence-absence data are included, to a mild degree by burial duration (four species of trees) and garden location (four or nine species of trees).

A. Four best-sampled species

		Abur	ıdance			Presenc	e-absence	9
Explanatory variable	DF	Adjusted R ²	F	P (> F)	DF	Adjusted R ²	F	P (> F)
Plant species	3	0.2594	14.261	< 0.001	3	0.1976	10.347	0.001
Burial duration	3	0.0004	1.019	0.413	3	0.0088	1.416	0.023
Garden location	4	0.0081	1.312	0.095	4	0.0083	1.297	0.046
Viability	1	0.0084	2.262	0.029	1	0.0117	2.629	0.001

B. Nine plant species

		Abun	dance		Presence-absence					
Explanatory variable	DF	Adjusted R ²	F	P (> F)	DF	Adjusted R ²	F	P (> F)		
Plant species	8	0.2863	8.621	0.001	8	0.2367	6.959	0.001		
Burial duration	3	-0.0007	0.952	0.531	3	0.0018	1.118	0.286		
Garden location	4	0.0069	1.359	0.102	4	0.0105	1.512	0.012		
Viability	1	0.0061	2.240	0.027	1	0.0097	2.863	0.001		

Variation partitioning analyses were done using abundance data (*left panels*) and presence-absence data (*right panels*) for fungal communities isolated from the four best-sampled species (*A*) and nine plant species (*B*). The significance of each variable was assessed using redundancy analysis and a Monte Carlo permutation test of the predictor effect (999 permutations).

Table S9. Evaluation of the quality of the seed inoculation experiment.

Plant Species	Isolate	Proportion of correctly	Proportion
		inoculated seeds	clean controls
Apeiba membranacea		1.00	0.80
Cecropia insignis		1.00	1.00
Cochlospermum vitifolium		0.50	1.00
Ficus insipida	PS0042	1.00	1.00
Luehea seemannii		1.00	1.00
Ochroma pyramidale		1.00	1.00
Trema micrantha "black"		1.00	1.00
Apeiba membranacea		1.00	1.00
Cecropia insignis		1.00	1.00
Cochlospermum vitifolium		1.00	1.00
Ficus insipida	PS1042	0.80	0.80
Luehea seemannii		1.00	1.00
Ochroma pyramidale		1.00	1.00
Trema micrantha "black"		1.00	1.00
Apeiba membranacea		1.00	1.00
Cecropia insignis		1.00	1.00
Cochlospermum vitifolium		1.00	1.00
Ficus insipida	PS0142	1.00	1.00
Luehea seemannii		1.00	1.00
Ochroma pyramidale		1.00	1.00
Trema micrantha "black"		1.00	1.00
Apeiba membranacea		NA	1.00
Ĉecropia insignis		0.80	1.00
Cochlospermum vitifolium		0.67	1.00
Ficus insipida	PS0670	0.83	1.00
Luehea seemannii		NA	NA
Ochroma pyramidale		1.00	1.00
Trema micrantha "black"		1.00	1.00

The proportion of correctly inoculated seeds refers to the proportion of seeds with a fungal infection that corresponded to the inoculated fungus. The proportion of clean controls refers to the proportion of control seeds that yielded no fungal growth in culture. Some seeds of *Luehea seemannii* germinated unexpectedly during the inoculation trials, such that results for this species are not shown here.

Table S10. Effects of fungal inoculation on the germination and viability of seeds from seven species

of tropical trees.

	G	ermi	nation	Viability				
	Chisq	Df	P (>Chisq)	Chisq	Df	<i>P</i> (>Chisq)		
Isolate	103.17	3	< 0.001	248.84	3	< 0.001		
Plant species	188.83	6	< 0.001	285.02	6	< 0.001		
Isolate * plant species	387.81	18	< 0.001	290.31	18	< 0.001		
Treatment	0.01	1	0.938	0.12	1	0.732		

Effects of fungal isolate, plant species, their interaction, and treatment (i.e., surface-sterilization after inoculation) were tested using a binomial generalized linear mixed-effects model. To test germination (*left panel*), germination values that were bigger in the treatments than the number of germinated seeds in controls were excluded from the analysis. Effects on viability (*right panel*) were tested on the proportion of seeds that were alive (as determined via TZ staining, see *SI Methods*) but failed to germinate plus successfully germinated seeds.

Table S11. Strains used for testing the effects of seed-associated fungi on the germination and viability of seeds of tropical trees.

Isolate	OTU code	Taxonomic	Species of	Viability	Host	Proportion
Isolate	(99% similarity)	placement	origin	of origin	range	viable
1	2.1	Lasiodiplodia sp.	AM	Inviable	AM, AS, CI CV, FI, LS, TB	0.74
2	2.2	Lasiodiplodia sp.	AS	Viable	AM, AS, CI CV, FI, LS, TB	0.74
3	64	Nigrospora sp.	OP	Viable	OP	1.00
4	71	Bionectria sp.	TB	Inviable	TB, AS	0.00

Columns indicate operational taxonomic unit (OTU) defined using 99% similarity; taxonomic placement of each OTU; species of pioneer tree from which the strain was isolated (Species of origin: AM, *Apeiba membranacea*; AS, *Annona spraguei*; OP, *Ochroma pyramidale*; and TB, *Trema micrantha* "black"); viability of the seed from which each isolate was obtained (viability of origin); plant species from which each OTU was isolated following seed burial and retrieval (Host range: CI, *Cecropia insignis*; CV, *Cochlospermum vitifolium*; FI, *Ficus insipida*; LS, *Luehea seemannii*; and TB, *Trema micrantha* "black"); and proportion of seeds from which the OTU was isolated that were viable (Proportion viable). Isolates 1 and 2 represent the same OTU at 99% sequence similarity, but different OTU at 100% sequence similarity.

Table S12. Host range for each OTU (designated at 99% sequence similarity).

OTU		Number of					nt sp					
99% similarity	viable	isolates	AS	AM	CI	CV	FI	LS	OP	TB	TBr	_
1	0.54	127										
2	0.74	86										
8	0.25	28										
3	0.7	60										
11	0.72	18										Host range
10	0.42	24										Number of specie
6	0.36	22										6
12	0.65	17										5
14	0.67	15										4
20	0.67	9										3
27	0.71	7										2
29	0.6	5										1
36	1	5										
50	1	4										
7	0.1	29										
9	0.55	29										
15	0.46	13										
18	0.75	8										
23	0.25	8										
30	0.83	6										
4	0.24	34										
13	0.91	11										
19	0.8	10										
24	0	7										
26	0.71	7										
35	0.2	5										
31	0.5	4										
38	0.25	4										
39	0.75	4										
40	0.75	4										
42	1	4										
46	1	4										
48	0.25	4										
51	0.23	4										
5 16	0.16 0.75	31 12										
17	0.12	8										
21	0.12	8										
25	0.88	8										
22	0	7										
28	0.57	7										
32	0	5										
37	0.6	5										
33	0.25	4										
41	0	4										
44	0.25	4										
45	1	4] ona spraguei: AM Ai

Plant species from which each OTU was isolated following seed burial and retrieval (AS, Annona spraguei; AM, Apeiba membranacea; CI, Cecropia insignis; CV, Cochlospermum vitifolium; FI, Ficus insipida; LS, Luehea seemannii; OP, Ochroma pyramidale; TB, Trema micrantha "black"; and TBr, Trema micrantha "brown"), host range (number of plant species from which each OTU was isolated), proportion of seeds from which the OTU was isolated that were viable, and the number of isolates observed in each OTU. The list includes only OTUs represented by \geq 4 isolates.

Table S13. Mean pairwise similarity for seed-associated fungi as a function of plant species, burial

location, burial duration, and seed viability.

	Morisita-Horn (abu	ndance)	Jaccard (presence/a	bsence)
	Mean similarity	SE	Mean similarity	SE
Species	0.16	0.03	0.11	0.01
Plot	0.83	0.01	0.40	0.02
Time	0.81	0.03	0.44	0.02
Viability	0.77	NA	0.60	NA

Values were calculated using abundance data (Morisita–Horn) or presence-absence data (Jaccard) and were compared against values presented in the literature for foliar endophytes in the same forest (43). Results show that similarity of seed-associated fungal communities is low among plant species, intermediate with respect to viability, and relatively higher among locations and burial durations. Similarity values among plant species are similar to those observed previously for foliar endophytes (43).