

Online supplementary material

Table S1 – Details of the seed lot tested by the 100-seed test.

Family	Species	Code	Altitude (m a.s.l.)	Collecting Date
Annonaceae	Annona bicolor Urb.	WE571	222	2016-08-03
Annonaceae	Annona montana Macfad.	WA114	10	2017-06-28
Annonaceae	Annona squamosa L.	WE450	864	2015-05-11
Annonaceae	Annona urbaniana R.E.Fr.	WE668	131	2017-07-28
Annonaceae	Guatteria blainii (Griseb.) Urb.	WE428	906	2015-10-06
Annonaceae	Oxandra lanceolata (Sw.) Baill.	WE572	103	2016-03-09
Annonaceae	Rollinia mucosa (Jacq.) Baill.	WE679	846	2017-11-20
Annonaceae	Rollinia mucosa (Jacq.) Baill.	WA46	595	2017-03-16
Araliaceae	Schefflera tremula (Krug & Urb.) Alain	WE575	1382	2016-03-10
Arecaceae	Coccothrinax ekmanii Burret	WE642	194	2017-03-01
Arecaceae	Coccothrinax fragrans Burret	WE609	384	2016-07-06
Arecaceae	Prestoea acuminata var. montana (Graham) A.J.Hend. & Galeano	WA59a	1017	2017-03-30
Arecaceae	Pseudophoenix ekmanii Burret	WE467	50	2015-09-17
Arecaceae	Roystonea borinquena O.F.Cook	WE423	78	2015-02-10
Arecaceae	Sabal domingensis Becc.	WE419	21	2015-09-19
Arecaceae	Thrinax radiata Lodd. ex Schult. & Schult.f.	WE417	16	2015-09-02
Arecaceae	Zombia antillarum (Descourt.) L.H.Bailey	WA135	30	2017-12-08
Bignoniaceae	Amphitecna latifolia (Mill.) A.H.Gentry	WA133	123	2017-12-06
Bignoniaceae	Ekmanianthe longiflora (Griseb.) Urb.	WE565	44	2016-03-10
Bignoniaceae	Tabebuia berteroi (DC.) Britton	WE463	1234	2015-11-25
Bignoniaceae	Tabebuia polyantha Urb. & Ekman	WE560	786	2016-10-02
Boraginaceae	Cordia alliodora (Ruiz & Pav.) Oken	WA30	494	2017-03-09
Boraginaceae	Cordia sulcata A.DC.	WE424	58	2015-10-05
Calophyllaceae	Mammea americana L.	WE446	615	2015-11-05
Canellaceae	Canella winterana (L.) Gaertn.	WE566	512	2016-03-08
Canellaceae	Canella winterana (L.) Gaertn.	WA48	434	2017-03-17
Cannabaceae	Celtis trinervia Lam.	WA64	919	2017-03-31
Capparaceae	Capparis amplissima Lam.	WE416	21	2015-09-19
Capparaceae	Quadrella cynophallophora (L.) Hutch.	WE540	272	2016-02-17
Celastraceae	Crossopetalum rhacoma Crantz	WE662	72	2017-07-27
Combretaceae	Bucida buceras L.	WA36	1	2017-03-15
Euphorbiaceae	Alchornea latifolia Sw.	WA92	862	2017-06-13
Euphorbiaceae	Alchornea latifolia Sw.	WE590	710	2016-05-22
Juglandaceae	Juglans jamaicensis C.DC.	WE436	1260	2015-10-07
Lamiaceae	Pseudocarpidium domingense (Urb. & Ekman) Moldenke	WA20	194	2017-03-08
Lauraceae	Beilschmiedia pendula (Sw.) Hemsl.	WE432	904	2015-10-06
Lauraceae	Licaria triandra (Sw.) Kosterm.	WE564	27	2016-03-09
Lauraceae	Ocotea leucoxydon (Sw.) Laness.	WA05	75	2017-03-03
Leguminosae	Abarema oppositifolia (Urb.) Barneby & J.W.Grimes	WA66	1321	2017-03-31
Leguminosae	Arcoa gonavensis Urb.	WE569	523	2016-03-08
Leguminosae	Caesalpinia coriaria (Jacq.) Willd.	WE451	864	2015-05-11

Leguminosae	Cojoba arborea (L.) Britton & Rose	WA124	784	2017-08-29
Leguminosae	Cojoba zanonii (Barneby) Barneby & J.W.Grimes	WE598	1667	2016-05-25
Leguminosae	Inga vera Willd.	WE587	583	2016-05-24
Leguminosae	Inga laurina (Sw.) Willd.	WA42	393	2017-03-16
Leguminosae	Mora abbottii Britton & Rose	WE427	928	2015-10-06
Leguminosae	Peltophorum dubium var. berterioanum (Urb.) Barneby	WE685	470	2017-09-26
Leguminosae	Senegalia skleroxyla (Tussac) Seigler & Ebinger	WE546	188	2016-02-17
Magnoliaceae	Magnolia hamorii Howard	WE553	1375	2016-02-18
Magnoliaceae	Magnolia pallescens Urb. & Ekman	WA51	1711	2017-03-07
Malpighiaceae	Bunchosia glandulosa (Cav.) DC.	WE452	864	2015-11-05
Malvaceae	Akrosida floribunda Fryxell & Clase	WE468	855	2015-04-12
Malvaceae	Guazuma ulmifolia Lam.	WE552	548	2016-02-17
Melastomataceae	Mouriri spathulata Griseb.	WA43	393	2017-03-16
Meliaceae	Cedrela odorata L.	WE578	76	2016-05-10
Meliaceae	Guarea guidonia (L.) Sleumer	WE408	724	2015-09-18
Menispermaceae	Hyperbaena sp	WE541	742	2016-02-17
Moraceae	Maclura tinctoria (L.) D.Don ex Steud.	WE617	416	2016-07-15
Moraceae	Maclura tinctoria (L.) D.Don ex Steud.	WE414	597	2015-09-19
Myrtaceae	Eugenia domingensis O.Berg	WE717	847	2017-11-17
Myrtaceae	Eugenia domingensis O.Berg	WA137	847	2017-09-14
Myrtaceae	Eugenia domingensis O.Berg	WE461	768	2015-11-25
Myrtaceae	Eugenia foetida Pers.	WE548	96	2016-02-17
Myrtaceae	Marlierea montana (Aubl.) Amshoff	WE535	462	2016-02-16
Myrtaceae	Pimenta haitiensis (Urb.) Landrum	WE725	222	2017-10-16
Myrtaceae	Pimenta racemosa var. ozua (Urb. & Ekman) Landrum	JBN1	43	2015-09-03
Oleaceae	Chionanthus ligustrinus (Sw.) Pers.	WA61	629	2017-03-31
Polygonaceae	Coccoloba costata C.Wright	WE544	791	2016-02-17
Polygonaceae	Coccoloba fuertesii Urb.	WE559	697	2016-11-02
Primulaceae	Myrsine nubicola Alain	WA81	1412	2017-05-11
Primulaceae	Myrsine coriacea (Sw.) R.Br. ex Roem. & Schult.	WA59b	1017	2017-03-30
Rhamnaceae	Colubrina arborescens (Mill.) Sarg.	WE445	750	2015-04-11
Rhamnaceae	Colubrina elliptica (Sw.) Brizicky & W.L.Stern	WA47	567	2017-03-17
Rhamnaceae	Colubrina glandulosa G.Perkins	WA16	436	2017-03-04
Rhamnaceae	Krugiodendron ferreum (Vahl) Urb.	WE443	750	2015-11-04
Rhamnaceae	Ziziphus rhodoxylon Urb.	WA72	531	2017-04-05
Rhamnaceae	Ziziphus rignonii Delponte	WE454	747	2015-11-24
Rubiaceae	Exostema caribaeum (Jacq.) Schult.	WA13	271	2017-03-08
Rubiaceae	Genipa americana L.	WE421	122	2015-10-02
Rubiaceae	Spermacoe divaricata (Hook.f.) Kuntze.	WE661	200	2017-07-27
Rubiaceae	Stenostomum lucidum (Sw.) C.F.Gaertn.	WE534	462	2016-02-16
Rutaceae	Zanthoxylum elephantiasis Macfad.	WE551	407	2016-02-17
Sapindaceae	Cupania americana L.	WE596	740	2016-05-24
Sapindaceae	Melicoccus jimenezii (A. H. Liogier) Acev.-Rodr.	WA106	30	2017-06-22
Sapindaceae	Sapindus saponaria L.	WE579	170	2016-05-23
Sapindaceae	Thyana trifoliata (Poit.) Ham.	WE458	822	2015-11-24
Sapotaceae	Chrysophyllum oliviforme L.	WE550	377	2016-02-17
Sapotaceae	Chrysophyllum cainito L.	WA44	441	2017-03-26
Sapotaceae	Manilkara valenzuelana (A.Rich.) T.D.Penn.	WE447	972	2015-11-05

Sapotaceae	Sideroxylon foetidissimum Jacq.	WE549	136	2016-02-17
Sapotaceae	Sideroxylon salicifolium (L.) Lam.	WE583	455	2016-06-01
Sapotaceae	Sideroxylon portoricense Urb.	WA54	804	2017-03-29
Simaroubaceae	Simarouba berteriana Krug & Urb.	WE581	32	2016-05-23
Staphyleaceae	Turpinia occidentalis (Sw.) G.Don	WE431	866	2015-10-06
Ulmaceae	Phyllostylon rhamnoides (J.Poiss.) Taub.	WE580	504	2016-05-23
Zygophyllaceae	Guaiacum sanctum L.	WE415	21	2015-09-19
Zygophyllaceae	Guaiacum officinale L.	WE613	187	2016-07-08

Table S2 – Results of the 100 seed test for the investigated collections and of the predictive models. VLI = Viability Lost Index as result of the experiment carried out in this study; PoR = Probability of Recalcitrance according to Wyse and Dickie (2018). In bold records for which the models and experimental results provided consistent results whereas (!) highlight contrasting results and therefore they should be taken with caution.

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germination (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Annona bicolor Urb.	Annonaceae	WE571	228.2	DT	10.10	42.31 ± 16.32	4.74	23.39 ± 21.30	9.58	38.89 ± 23.57			0.008	Orthodox	Genus
Annona montana Macfad.	Annonaceae	WA114	363.2	DT	15.7	65 ± 49.5	2.42	18.05 ± 9.82	7.04	46.5 ± 11.38			0.017	Orthodox	Genus
Annona squamosa L.	Annonaceae	WE450	292	DT	29.31	69.78 ± 22.53	4.92	83.93 ± 12.63	49.50	87.5 ± 5.90			0	Orthodox	Species
Annona urbaniana R.E.Fr.	Annonaceae	WE668	265	DT	8.5	82.52 ± 13.84	0.71	95.83 ± 5.89	1.5	90.91 ± 12.85	-0.16	vDT	0.004	Orthodox	Genus
Guatteria blainii (Griseb.) Urb.	Annonaceae	WE428	96.8	DT	11.98	0	5.34	10 ± 14.14	12.10	0			0.537	Orthodox	Family
Oxandra lanceolata (Sw.) Baill.	Annonaceae	WE572	386	NDT1	36.81	91.66 ± 11.79	5.89	71.43 ± 40.40	22.69	91.29 ± 0.54			0.299	Orthodox	Family
Rollinia mucosa (Jacq.) Baill.	Annonaceae	WA46	499.09	NDT1	34.32	68.88 ± 33.13	6.63	41.34 ± 47.59	4.01	50 ± 70.71			0	Orthodox	Species
Rollinia mucosa (Jacq.) Baill.	Annonaceae	WE679	888.69	NDT2	10.3	84.61 ± 10.88	1.8	48.57 ± 6.35	8.38	63.02 ± 10.38	0.43	vDTp	0	Orthodox	Species
Schefflera tremula (Krug & Urb.) Alain	Araliaceae	WE575	3.1	DT	19.35	0	20	0	15	0			0.003	Orthodox	Genus
Coccothrinax ekmanii Burret	Arecaceae	WE642	69.05	DT	27.6	8.33 ± 0	4.8	0	28.9	0			0.133	Orthodox	Family
Coccothrinax fragrans Burret	Arecaceae	WE609	427	DT	13.82	89.58 ± 2.95	4.10	92.31 ± 10.87	13.65	95.83 ± 5.89	-0.03	vDT	0.712	Recalcitrant(!)	Family
Prestoea acuminata var. montana (Graham) A.J.Hend. & Galeano	Arecaceae	WA59a	764.9	DS	52.8	8.71 ± 0.54	7	0	41.1	NA			0.731	Recalcitrant	Family
Pseudophoenix ekmanii Burret	Arecaceae	WE467	827.8	NDT2	23.44	34.09 ± 22.50	6.02	36.71 ± 13.35	18.55	56.06 ± 15.01			0.584	Recalcitrant	Family
Roystonea borinquena O.F.Cook	Arecaceae	WE423	425.1	DT	26.02	92.86 ± 0	3.98	86.42 ± 0	22.0	96.15 ± 5.44	0.07	vDTp	0.622	Recalcitrant(!)	Family

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germination (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Sabal domingensis Becc.	Arecaceae	WE419	398.2	DT	9.27	68.59 ± 20.84	3.01	73.21 ± 2.52	10.089	56.73 ± 25.84			0.005	Orthodox	Genus
Thrinax radiata Lodd. Ex Schult. & Schult.f.	Arecaceae	WE417	108	DT	12.5	3.84 ± 5.44	4.58	0	11.99	0			0.513	Recalcitrant	Family
Zombia antillarum (Descourt.) L.H.Bailey	Arecaceae	WA135	1459.9	DS	45.7	60.91 ± 29.57	5.7	0	44.7	56.82 ± 9.64			1	Recalcitrant	Species
Amphitecna latifolia (Mill.) A.H.Gentry	Bignoniaceae	WA133	1959.1	DS	45	47.43 ± 19.95	7.4	0	47.3	34.61 ± 16.31			0.285	Orthodox	Family
Ekmanianthe longiflora (Griseb.) Urb.	Bignoniaceae	WE565	17.2	DT	12.79	92.31 ± 10.87	7.58	73.48 ± 13.92	12.34	78.41 ± 4.82	0.20	vDTp	0.002	Orthodox	Family
Tabebuia berteroi (DC.) Britton	Bignoniaceae	WE463	12.5	DT	12	81.36 ± 12.21	4.84	64.61 ± 6.52	9.72	37.41 ± 1.48	0.21	vDTp	0.002	Orthodox	Genus
Tabebuia polyantha Urb. & Ekman	Bignoniaceae	WE560	14	DT	10	100 ± 0	3.70	83.46 ± 9.25	10.47	NA	0.17	vDTp	0.002	Orthodox	Genus
Cordia alliodora (Ruiz & Pav.) Oken	Boraginaceae	WA30	12.26	DT	11.74	69.7 ± 4.28	6.80	83.46 ± 9.25	8.17	78.89 ± 1.57	-0.20	vDTp	0	Orthodox	Species
Cordia sulcata A.DC.	Boraginaceae	WE424	42.4	DT	11.08	53.85 ±0	4.29	50.71 ± 29.29	11.71	31.25 ± 26.52	0.06	vDTp	0.003	Orthodox	Genus
Mammea americana L.	Calophyllaceae	WE446	33156	DS	40.70	95.83 ± 5.89	32.61	100 ± 0	38.45	100 ± 0			1	Recalcitrant	Species
Canella winterana (L.) Gaertn.	Canellaceae	WA48	45.25	NDT1	44.13	13.63 ± 6.43	5.30	0	42.02	0			0.016	Orthodox	Order
Canella winterana (L.) Gaertn.	Canellaceae	WE566	35.6	DT	26.97	0	8.18	NA	10.57	0			0.016	Orthodox	Order
Celtis trinervia Lam.	Cannabaceae	WA64	92.7	DT	9.3	100 ± 0	5.9	30.3 ± 4.28	6.5				0.003	Orthodox	Genus
Capparis amplissima Lam.	Capparaceae	WE416	178.7	DT	12.76	0	3.87	0	13.43	0			0.007	Orthodox	Genus
Quadrella cynophallophora (L.) Hutch.	Capparaceae	WE540	71.5	NDT1	34.96	85.41 ± 2.95	5.10	NA	11.59	0			0.073	Orthodox	Family
Crossopetalum rhacoma Crantz	Celastraceae	WE662	17.7	DT	7.3	69.61 ± 0.54	4.5	88.14 ±4.98	7.1	58.33 ± 11.79	-0.27	vDT	0.004	Orthodox	Family
Bucida buceras L.	Combretaceae	WA36	12.14	DT	10.38	7.15 ± 10.10	9.48	7.14 ±	7.78	0			0	Orthodox	Species

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germinatio n (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Alchornea latifolia Sw.	Euphorbiaceae	WA92	99.22	DT	6.7	73.10 ± 5.44	2.3	10.10 52.27 ± 3.22	5.1	78.33 ± 16.50	0.28	vDTp	0.069	Orthodox	Family
Alchornea latifolia Sw.	Euphorbiaceae	WE590	69	DT	7.10	45.45 ± 25.72	2.78	0	7.12	13.63 ± 19.28			0.069	Orthodox	Family
Juglans jamaicensis C.DC.	Junglandaceae	WE436	10231.2	NDT2	16.41	42.31 ± 16.32	3.16	12.5 ± 17.68	14.41	18.63 ± 12.21			0.012	Orthodox	Genus
Pseudocarpidium domingense (Urb. & Ekman)	Lamiaceae	WA20	38.12	DT	11.6	0	4.8	0	8.6	0			0.012	Orthodox	Family
Moldenke Beilschmiedia pendula (Sw.) Hemsl.	Lauraceae	WE432	1868.2	NDT2	28.96	0	5.98	0	44.77	0			1	Recalcitrant	Species
Licaria triandra (Sw.) Kosterm.	Lauraceae	WE564	907.9	NDT2	25.37	76.92 ± 0	5.14	0	15.11	0	1	vDS	0.891	Recalcitrant	Family
Ocotea leucoxydon (Sw.) Laness.	Lauraceae	WA05	221.56	NDT1	46.1	73.08 ± 16.32	10.4	0	44.7	0	1	vDS	0.844	Recalcitrant	Genus
Abarema oppositifolia (Urb.) Barneby & J.W.Grimes	Leguminosae	WA66	42.88	DT	9	57.86 ± 39.3	3.4	85.46 ± 7.7	11.5	78.34 ± 16.5			0.005	Orthodox	Family
Arcoa gonavensis Urb.	Leguminosae	WE569	67.9	DT	13.70	100 ± 0	7.60	63.49 ± 11.22	12.68	94.44 ± 7.86	0.37	vDTp	0.011	Orthodox	Family
Caesalpinia coriaria (Jacq.) Willd.	Leguminosae	WE451	34.9	DT	13.18	83.33 ± 23.57	7.22	84.66 ± 4.02	11.73	93.75 ± 8.84	-0.02	vDTp	0	Orthodox	Species
Cojoba arborea (L.) Britton & Rose	Leguminosae	WA124	237.9	NDT1	37.6	100 ± 0	10.4	0	38.6	0	1	vDS	1	Recalcitrant	Species
Cojoba zanonii (Barneby) Barneby & J.W.Grimes	Leguminosae	WE598	3409.5	DS	64.38	87.76 ± 4.45	11.12	0	58.93	9.09 ± 12.85	1	vDS	0.073	Orthodox(!)	Family
Inga laurina (Sw.) Willd.	Leguminosae	WA42	938.58	DS	50.90	100 ± 0	9.77	0	45.39	100 ± 0	1	vDS	0.985	Recalcitrant	Genus
Inga vera Willd.	Leguminosae	WE587	547	DS	34.31	91.61 ± 0.99	6.07	0	15.85	0	1	vDS	1	Recalcitrant	Species
Mora abbottii Britton & Rose	Leguminosae	WE427	58402	DS	32.72	86.42 ± 0	13.41	0	41.48	0	1	vDS	0.017	Orthodox(!)	Family

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germinatio n (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Peltophorum dubium var. berteroanum (Urb.) Barneby Senegalia skleroxyla (Tussac) Seigler & Ebinger	Leguminosae	WE685	31.5	DT	15.6	100 ± 0	3.6	100 ± 0	16.4	79.45 ± 13.36	0.00	vDT	0	Orthodox	Species
Magnolia hamorii Howard	Magnoliaceae	WE553	94.5	DT	19.47	83.33 ± 23.57	4.55	0	9.57	0	1.00	vDS(!)	0.054	Orthodox	Genus
Magnolia pallescens Urb. & Ekman	Magnoliaceae	WA51	79.6	DT	17.71	0	3.48	0	6.04	0			0.048	Orthodox	Genus
Bunchosia glandulosa (Cav.) DC.	Malpighiaceae	WE452	44.7	NDT1	45.41	68.18 ± 45.0	15.62	28.19 ± 7.26	25	14.09 ± 5.78			0.660	Recalcitrant	Family
Akrosida floribunda Fryxell & Clase	Malvaceae	WE468	1.7	DT	29.41	13.89 ± 3.93	7.14	16.66 ±23.57	20	16.66 ± 23.57			0.008	Orthodox	Family
Guazuma ulmifolia Lam.	Malvaceae	WE552	5.3	DT	13.21	44.23 ± 8.16	10.53	0	20.59	25.27 ± 24.87			0	Orthodox	Species
Mouriri spathulata Griseb.	Melastomatacea e	WA43	800.51	DS	53.1	73.07 ± 38.08	9.6	24.75 ± 3.60	6.4	26.13 ± 1.60			0.023	Orthodox	Family
Cedrela odorata L.	Meliaceae	WE578	18.4	DT	13.59	100 ± 0	5.64	100 ± 0	12.82	100 ± 0	0.00	vDT	0	Orthodox	Species
Guarea guidonia (L.) Sleumer	Meliaceae	WE408	511.5	DS	36.03	69.23 ± 21.76	3.98	0	37.55	71.68 ± 14.34			1	Recalcitrant	Species
Hyperbaena sp.	Menispermacea e	WE541	503.2	NDT2	20.28	0	17.31	0	11.53	10			0.023	Orthodox	Family
Maclura tinctoria (L.) D.Don ex Steud.	Moraceae	WE414	1.22	DT	8.197	86.46 ± 10.31	5.08	87.5 ± 2.53	10.34	90.4 ± 8.52	-0.01	vDT	0.116	Orthodox	Family
Maclura tinctoria (L.) D.Don ex Steud.	Moraceae	WE617	2.1	DT	23.81	81.66 ± 2.35	7.14	42.72 ± 3.85	9.09	59.6 ± 5.71	0.48	vDTp	0.116	Orthodox	Family
Eugenia domingensis O.Berg	Myrtaceae	WA137	1010	DS	58.2	100 ± 0	32.8	0	33.1	0			0.687	Recalcitrant	Genus
Eugenia domingensis O.Berg	Myrtaceae	WE461	760.5	DS	35.88	0	7.85	0	20.19	0			0.687	Recalcitrant	Genus
Eugenia domingensis	Myrtaceae	WE717	1443.8	DS	39.2	85 ± 21.21	10.6	0	35.5	0	1	vDS	0.687	Recalcitrant	Genus

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germination (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
O.Berg															
Eugenia foetida Pers.	Myrtaceae	WE548	163.2	DT	30	15.38 ± 10.88	14.4	0	27.1	0			0.953	Recalcitrant	Genus
Marlierea montana (Aubl.) Amshoff	Myrtaceae	WE535	63	NDT1	32.86	100 ± 0	5.12	0	15.93	7.69 ± 0	1	vDS	0.203	Orthodox	Family
Pimenta haitiensis (Urb.) Landrum	Myrtaceae	WE725	19.6	NDT1	48.5	0	5.3	0	8.9	0			0.121	Orthodox	Family
Pimenta racemosa var. ozua (Urb. & Ekman) Landrum	Myrtaceae	JBN1	38.7	DT	12.66	0	5.75	0	12.19	0			0.416	Orthodox	Family
Chionanthus ligustrinus (Sw.) Pers.	Oleaceae	WA61	20.79	DT	20.83	40.38 ± 13.60	4.12	51.39 ± 37.32	5.97	83.33 ± 23.57			0.040	Orthodox	Family
Coccoloba costata C.Wright	Polygonaceae	WE544	63.2	DT	18.51	92.31 ± 0	5.75	91.66 ± 11.79	20.28	87.12 ± 5.36	0.01	vDT	0.023	Orthodox	Family
Coccoloba fuertesii Urb.	Polygonaceae	WE559	80.3	DT	16.94	91.61 ± 0.99	19.13	96.15 ± 36.58	7.12	31.73 ± 9.52	-0.05	vDT	0.022	Orthodox	Family
Myrsine coriacea (Sw.) R.Br. Ex Roem. & Schult.	Primulaceae	WA59b	20.99	DT	20.39	0	4.70	0	9.29	0			0.009	Orthodox	Family
Myrsine nubicola Alain	Primulaceae	WA81	14.95	DT	13.4	100 ± 0	3.8	65.15 ± 2.14	8.7	83.33 ± 23.57	0.35	vDTp	0.010	Orthodox	Family
Colubrina arborescens (Mill.) Sarg.	Rhamnaceae	WE445	17.2	DT	8.72	35 ± 7.07	13.98	4.16 ± 5.89	15.88	71.53 ± 22.58			0	Orthodox	Species
Colubrina elliptica (Sw.) Brizicky & W.L.Stern	Rhamnaceae	WA47	14.98	DT	14.3	93.75 ± 8.84	17.2	5 ± 7.07	8.9	7.69 ± 10.87	0.95	vDS(!)	0	Orthodox	Species
Colubrina glandulosa G.Perkins	Rhamnaceae	WA16	23.35	DT	10.32	80.77 ± 5.44	3.96	89.28 ± 15.15	7.63	90.91 ± 0.0	-0.11	vDT	0	Orthodox	Species
Krugiodendron ferreum (Vahl) Urb.	Rhamnaceae	WE443	60.3	DT	25.87	69.23 ± 10.87	7.06	0	13.35	7.69 ± 10.87	1.00	vDS(!)	0.021	Orthodox	Family
Ziziphus rhodoxylon Urb.	Rhamnaceae	WA72	1512.77	DS	57.2	76.92 ± 10.88	39.7	81.66 ± 2.35	44.6	57.27 ± 3.85			0.007	Orthodox	Genus
Ziziphus rignonii Delponte	Rhamnaceae	WE454	223.3	DT	17.96	40.71 ± 27.27	5.91	42.31 ± 16.32	13.07 ± 18.59	28.52			0.008	Orthodox	Genus

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germinatio n (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Exostema caribaeum (Jacq.) Schult.	Rubiaceae	WA13	0.7	DT	10	47.22 ± 3.93	7.69	35 ± 35.35	18.18	39.09 ± 29.57			0	Orthodox	Species
Genipa americana L.	Rubiaceae	WE421	68.7	DT	12.81	50 ± 27.19	7.49	27.27 ± 38.57	15.54	0			0	Orthodox	Species
Spermacoce divaricata (Hook.f.) Kuntze.	Rubiaceae	WE661	20.2	DT	8.9	0	3.3	0	8.1	0			0.002	Orthodox	Genus
Stenostomum lucidum (Sw.) C.F.Gaertn.	Rubiaceae	WE534	39.7	DT	15.11	76.92 ± 10.88	3.98	84.16 ± 12.96	12.94	87.82 ± 6.35	-0.09	vDT	0.041	Orthodox	Family
Zanthoxylum elephantiasis Macfad.	Rutaceae	WE551	66.7	DT	12.60	31.73 ± 37.86	9.24	9.09 ± 12.85	12.70	5.55 ± 7.86			0.007	Orthodox	Genus
Cupania americana L.	Sapindaceae	WE596	318.4	NDT1	49.47	85.71 ± 20.20	10	0	43.62	65.53 ± 10.18	1	vDS	0.989	Recalcitrant	Genus
Melicoccus jimenezii (A. H. Liogier) Acev.- Rodr.	Sapindaceae	WA106	1884.0 3	DS	43.5	79.16 ± 29.46	9.7	0	43	34.97			0.541	Recalcitrant	Family
Sapindus saponaria L.	Sapindaceae	WE579	1057.4	NDT2	12.32	57.78 ± 3.14	6.93	12.5 ± 17.68	13.26	60 ± 14.14	0.78	vDSp	0.473	Orthodox(!)	Genus
Thyana trifoliata (Poit.) Ham.	Sapindaceae	WE458	8.3	DT	13.25	46.53 ± 12.77	8.11	76.39 ± 1.96	17.07	51.66 ± 25.93			0.541	Recalcitrant	Family
Chrysophyllum cainito L.	Sapotaceae	WA44	1115.6	DS	41.73	83.33 ± 23.57	5.99	3.85 ± 5.44	9.82	0	0.95	vDS	0.925	Recalcitrant	Family
Chrysophyllum oliviforme L.	Sapotaceae	WE550	409.7	DT	17.96	66.67 ± 0	4.67	40 ± 56.56	13.04	66.67 ± 0			1	Recalcitrant	Species
Manilkara valenzuelana (A.Rich.) T.D.Penn.	Sapotaceae	WE447	272.9	DT	26.46	3.84 ± 5.43	5.87	0	15.22	0			0.911	Recalcitrant	Family
Sideroxylon foetidissimum Jacq.	Sapotaceae	WE549	1010.6	NDT2	26.81	40.28 ± 21.61	6.05	50 ± 23.57	24.18	55.91 ± 36.64			0.269	Orthodox	Genus
Sideroxylon salicifolium (L.) Lam.	Sapotaceae	WE583	91	NDT1	30.99	0	6.25	0	14.15	0			0.873	Recalcitrant	Genus
Sideroxylon portori cense Urb.	Sapotaceae	WA54	682.64	DS	39.60	8.33 ± 11.79	4.66	0	36.21	66.67 ± 0			1	Recalcitrant	Species
Simarouba berteroana Krug &	Simaroubaceae	WE581	1186.4	NDT2	13.67	70 ± 28.28	4.68	57.69 ±	12.01	85 ± 21.21			0.028	Orthodox	Family

Name	Family	Code	TSW (g)	TSW-MC criteria prediction	100-seed test experimental results								BRT models (Wyse et Dickie, 2018)		
					Fresh MC (%)	Fresh germination (%)	Dry MC (%)	Dry germination (%)	Moist MC (%)	Moist germination (%)	VLI	Result	PoR	Likely category	Taxonomic level
Urb.								5.44							
Turpinia occidentalis (Sw.) G.Don	Staphyleaceae	WE431	60.8	DT	8.72	3.84 ± 5.44	3.80	0	15.76	0			0.018	Orthodox	Family
Phyllostylon rhamnoides (J.Poiss.) Taub.	Ulmaceae	WE580	53.3	DT	15.57	58.04 ± 4.94	6.72	75 ± 35.35	11.68	23.81 ± 13.46			0.013	Orthodox	Family
Guaiacum officinale L.	Zygophyllaceae	WE613	186.9	DT	20.22	84.92 ± 3.64	4.17	90.91 ± 12.85	13.80	100 ± 0	-0.07	vDT	0	Orthodox	Species
Guaiacum sanctum L.	Zygophyllaceae	WE415	169.3	NDT1	32.66	92.31 ± 10.87	3.83	76.92 ± 10.88	13.85	73.07 ± 5.44	0.17	vDTp	0	Orthodox	Species

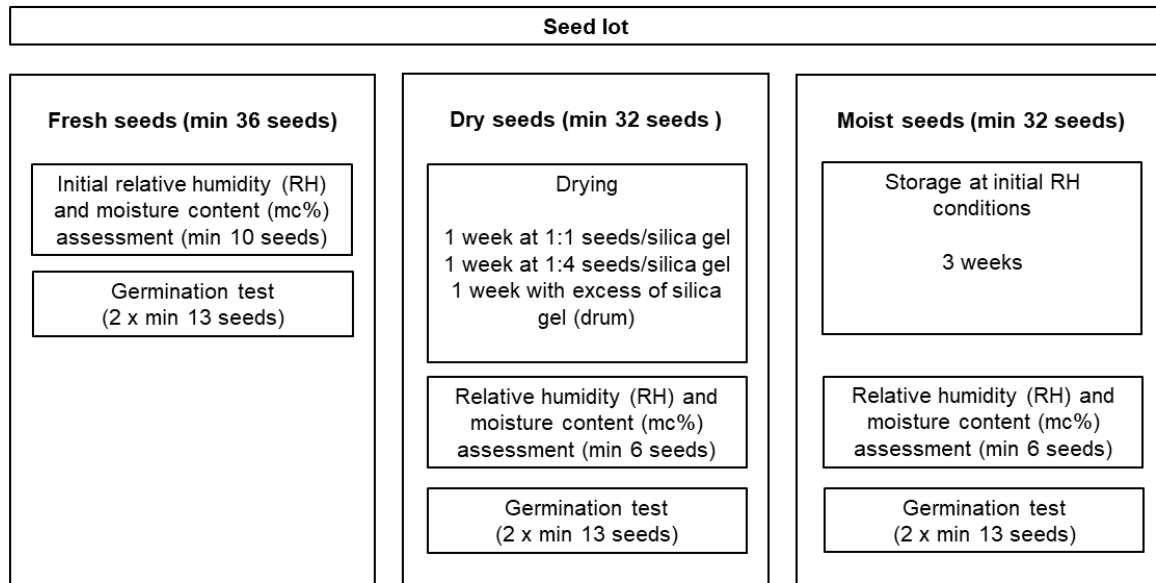


Figure S1 – Scheme of the “100 seed-test protocol” (Pritchard et al., 2004), modified by Gold and Hay (2014) as adapted for this study. See text for a detailed explanation.

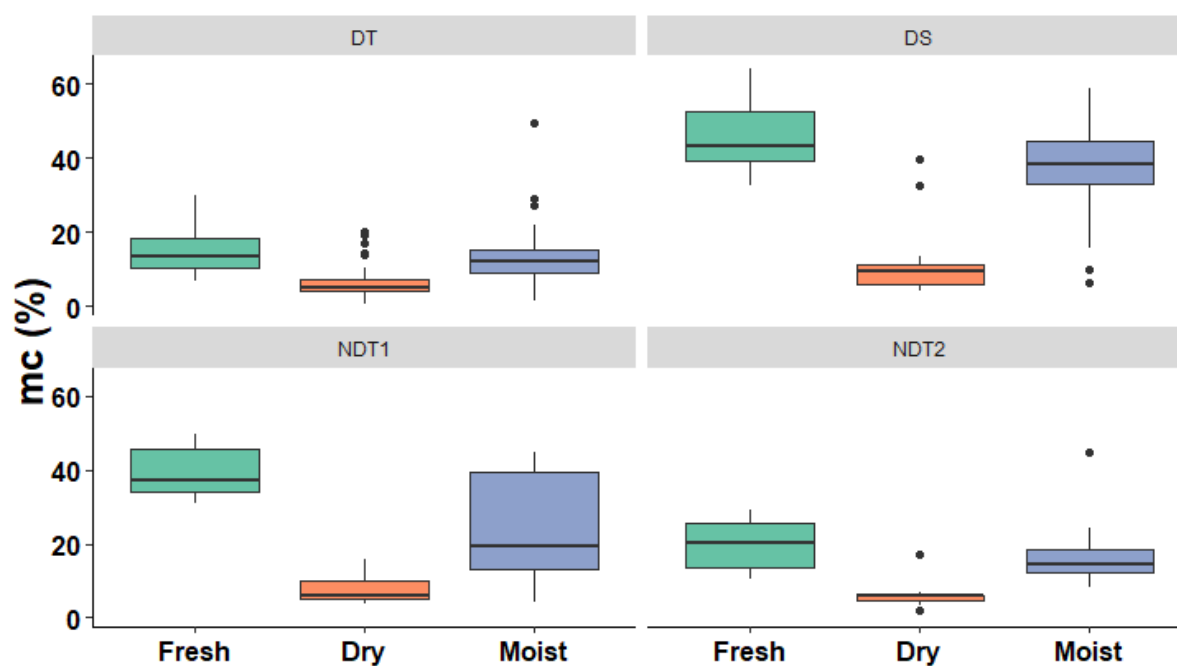


Figure S2 – Drying performances of the four seed storage categories identified a priori according to the TSW-MC model, using the 100-seed test protocol modified as detailed in this study. Data are the mean of 59, 17, 12 and 9 seed lots for DT, DS, NDT1 and NDT2, respectively.

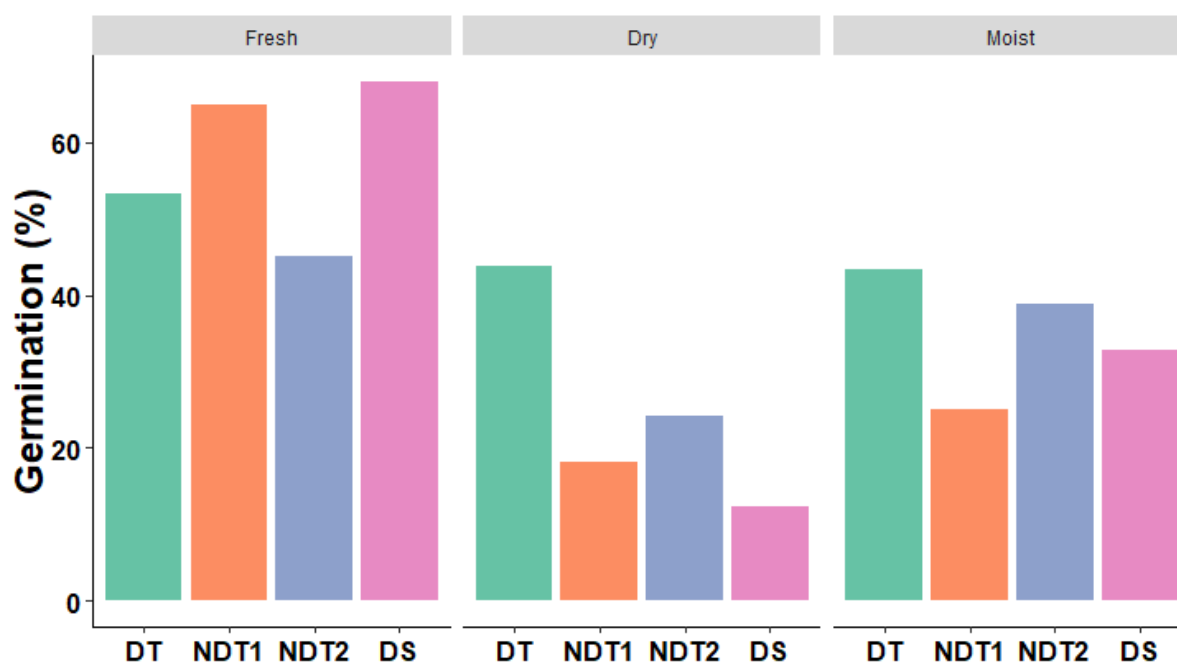


Figure S3 – Germination performances of the four seed storage categories identified a priori according to the TSW-MC model on fresh, dry and moist seeds, using the 100-seed test protocol modified as detailed in this study. Data are the mean of 59, 17, 12 and 9 seed lots for DT, DS, NDT1 and NDT2, respectively. SD is not showed for clarity, but it ranged from 24 to 39%.

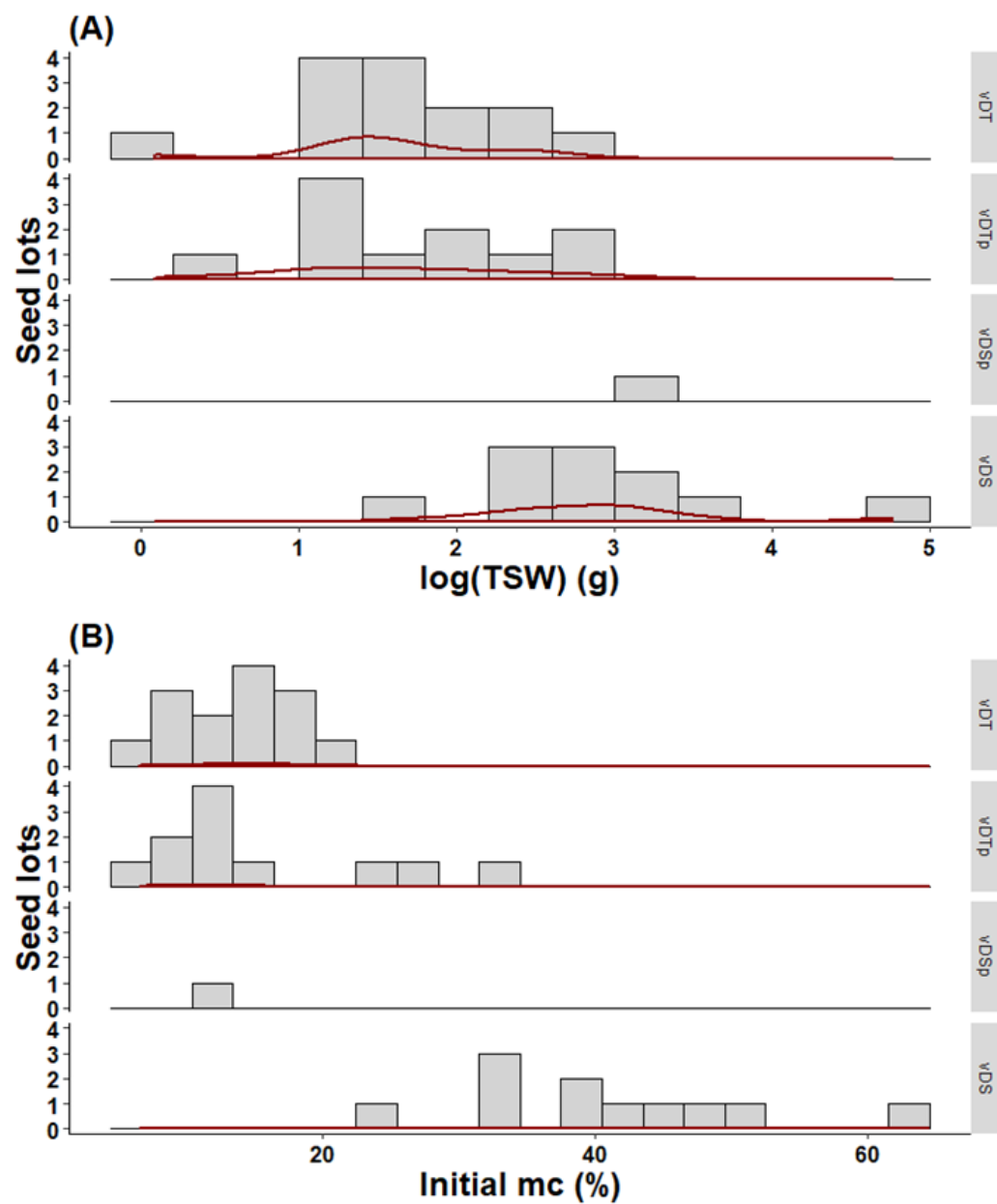


Figure S4 - Distribution frequency of (A) thousand seed weight (log scale) and (B) initial seed moisture content (%) of the four seed storage categories identified using the 100-seed test protocol modified as detailed in this study.