Author	*Species*	Common Name	Growth Form	Deep Soil Water Contribution			GW Contribution			Total Use of Past Precip	Geographic Location	Latitude	Longitude	Elevation (m)	Water Table Depth (m)	Topographic Position		Geologic Setting	Soil Texture	Koppen-Geiger Water-Stress Class	Isotope Method	Source-3 vs. 4	Notes
				Dry Season	Wet Season	Growing season	Dry Season	Wet Season	Growing season							Upland	Lowland						
Antunes et al. 2018a	*Erica scoparia, Salix repens*	Besom heath, Creeping willow	Evergreen broadleaf shrub; Deciduous	0.27	0.15	0.21	0.40	0.12	0.26	0.47	Site-A-humidMed, Osso da Baleia, Portugal	40.0388	-8.8961	5	3.19-19.07		WT 3-5m accessible to plants		dune sand	Cs		3	WTD made little difference in the humidMed site, but deep water use is strongly correlated with WTD in the aridMed site, but data not given separating deep soil water and GW use
Antunes et al. 2018a	*Pinus pinaster, Pinus pinea*	maritime pine, stone pine	Evergreen needleleaf tree	0.10	0.16	0.13	0.14	0.16	0.15	0.28	Site-A-humidMed, Osso da Baleia, Portugal	40.0388	-8.8961	5	3.19-19.07		WT 3-5m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018a	*Corema album*	Portuguese Crowberry	Evergreen needleleaf shrub	0.10	0.11	0.21	0.13	0.10	0.12	0.33	Site-A-humidMed, Osso da Baleia, Portugal	40.0388	-8.8961	5	3.19-19.07		WT 3-5m accessible to plants		dune sand	Cs	O; MixSIAR for R, 4 members: 0.1m (same as Precip), 0.3m, 0.5m, GW	3	
Antunes et al. 2018a	*Erica scoparia, Salix repens*	Besom heath, Creeping willow	Evergreen broadleaf shrub; Deciduous	0.20	0.07	0.14	0.28	0.05	0.17	0.30	Site-B-aridMed, Biological Reserve of Doñana. SW Spain	36.9886	-6.4431	3	0.94-6.97	coastal dunes	WT 3-5m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018a	*Pinus pinaster, Pinus pinea*	maritime pine, stone pine	Evergreen needleleaf tree	0.22	0.33	0.28	0.38	0.20	0.29	0.57	Site-B-aridMed, Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	1.59-12.28		WT 3-5m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018a	*Corema album*	Portuguese Crowberry	Evergreen needleleaf shrub	0.00	0.12	0.14	0.00	0.06	0.03	0.17	Site-B-aridMed, Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.79-12.28		WT 3-5m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018b	*Juniperus phoenicea, Pinus pinea*	Phoenician juniper, stone pine	Evergreen needleleaf shrub, xeromorphyte	0.42		0.42	0.38		0.38	0.80	Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.8m spring, 3.9m mean		WT 2-4m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018b	*Quercus suber, Erica scoparia, Phillyrea*	cork oak, Besom heath, Narrow-leaved mock	Evergreen broadleaf tree/shrub,	0.44		0.44	0.25		0.25	0.69	Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.8m spring, 3.9m mean		WT 2-4m accessible to plants		dune sand	Cs	O; MixSIAR for R, 4 members: 0.1m (same as Precip), 0.3m, 0.5m, GW	3	14 species grouped in 5 water-relation groups; results give for groups only (values from Fig 1c trigram)
Antunes et al. 2018b	*Halimium halimifolium*	Spotted Yellow Sun Rose	Semi-deciduous broadleaf shrub, mesophytic	0.31		0.31	0.20		0.20	0.51	Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.8m spring, 3.9m mean	coastal dunes	WT 2-4m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018b	*Corema album, Cistus libanotis, Halimium*	Portuguese Crowberry, ??, Sunrose	Perennial desert shrub, small leaf, xerophytic (NXs)	0.10		0.10	0.00		0.00	0.10	Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.8m spring, 3.9m mean		WT 2-4m accessible to plants		dune sand	Cs		3	
Antunes et al. 2018b	*Lavandula stoechas, Cistus salviifolius, Ulex*	French lavender, ??, ??, ??	Semi-deciduous broadleaf shrub, spike/aphyllous	0.43		0.43	0.10		0.10	0.53	Biological Reserve of Doñana, SW Spain	36.9886	-6.4431	3	2.8m spring, 3.9m mean		WT 2-4m accessible to plants		dune sand	Cs		3	
Antunes et al. 2019	*Eugenia schuechiana*	??	Evergreen broadleaf tree				0.04	0.02	0.03	0.03	Coastal dunes, Serra do Mar State Park, restinga forest, Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Euterpe edulis*	juçara, palmiteiro	Palm tree				0.08	0.02	0.05	0.05	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Faramea pachyantha*	??	Evergreen broadleaf tree				0.14	0.05	0.10	0.10	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Guapira opposita*	??	Evergreen broadleaf tree				0.04	0.02	0.03	0.03	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Guarea macrophylla*	??	Evergreen broadleaf tree				0.03	0.01	0.02	0.02	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Guatteria sp4*	??	Evergreen broadleaf tree				0.03	0.01	0.02	0.02	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Jacaranda puberula*	??	Deciduous broadleaf tree				0.04	0.01	0.03	0.03	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am	O; MixSIAR for R, 4 members: 0.1m (same as Precip), 0.3m, 0.5m, GW	3	annual P=2753mm, no continuous dry season, but wetter and drier periods
Antunes et al. 2019	*Marlierea tomentosa*	??	Semi-deciduous broadleaf tree				0.07	0.01	0.04	0.04	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry	Coastal dunes	subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Maytenus littoralis*	??	Deciduous broadleaf tree				0.08	0.03	0.06	0.06	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Myrcia brasiliensis*	??	Evergreen broadleaf tree				0.07	0.02	0.05	0.05	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Myrcia multiflora*	??	Evergreen broadleaf tree				0.06	0.02	0.04	0.04	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Myrcia racemosa*	??	Evergreen broadleaf tree				0.05	0.03	0.04	0.04	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Pera glabrata*	??	Evergreen broadleaf tree				0.09	0.02	0.06	0.06	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Psychotria sp1*	wild coffee	Evergreen broadleaf shrub				0.04	0.01	0.03	0.03	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Antunes et al. 2019	*Psychotria sp2*	wild coffee	Evergreen broadleaf shrub				0.09	0.01	0.05	0.05	Coastal dunes, Serra do Mar State Park, restinga forest. Praia	-23.3561	-44.8508	6	mean 0.55m wet, 1.15m dry		subjected to seasonal or perennial		sandy Quartzenic Neosol	Am		3	
Berry et al. 2014	*Abies fraseri*	Fraser fir	Evergreen needleleaf tree			0.19			0.08	0.27	Pisgah National Forest, NC, US	35.7100	-82.2700	1510		on south-facing slope				Cf	H+O; IsoSource, 4 members: fog, shallow soil (0-25cm), deep soil (1.2-	3	lat-lon should be decimal
Berry et al. 2014	*Picea rubens*	red spruce	Evergreen needleleaf tree			0.24			0.09	0.33	Pisgah National Forest, NC, US	35.7100	-82.2700	1510		on south-facing slope		southern Appalachian mountains, on high slopes, with thin soil		Cf		3	
Berry et al. 2014	*Abies fraseri*	Fraser fir	Evergreen needleleaf tree			0.25			0.31	0.56	Mt Mitchell State Park, NC, US	35.7600	-82.2600	1960		on ridge				Df		3	Authors suggest that water table likely within

Berry et al. 2014	*Picea rubens*	red spruce	Evergreen needleleaf tree			0.28			0.24	0.52	Mt Mitchell State Park, NC, US	35.7600	-82.2600	1960		on ridge				Df	1.5m) and GW	3	
Bertrand et al. 2014	*Salix alba*	white willow	Deciduous broadleaf tree			0.25			0.48	0.73	site-1, Pfyn forest, Sierre, Wallis canton, CH	46.3000	7.5972	571	4.00				sand-silt	Cf		3	
Bertrand et al. 2014	*Prunus avium*	wild cherry, sweet cherry	Evergreen needleleaf tree			0.23			0.15	0.38	site-1, Pfyn forest, Sierre, Wallis canton, CH	46.3000	7.5972	571	4.00	1km from river, highest site			sand-silt	Cf		3	
Bertrand et al. 2014	*Populus nigra*	black poplar	Deciduous broadleaf tree			0.22			0.28	0.50	site-1, Pfyn forest, Sierre, Wallis canton, CH	46.3000	7.5972	571	4.00				sand-silt	Cf		3	
Bertrand et al. 2014	*Salix alba*	white willow	Deciduous broadleaf tree			0.39			0.12	0.51	site-2, Pfyn forest, Sierre, Wallis canton, CH	46.3057	7.5945	568	2.30				sand-silt	Cf		4	average fraction from 4 sampling dates thrugh the growing season (May to late Aug); 0-40cm assumed recent rain (S1), 40-80cm past rain (S2)
Bertrand et al. 2014	*Prunus avium*	wild cherry, sweet cherry	Deciduous broadleaf tree			0.53			0.12	0.65	site-2, Pfyn forest, Sierre, Wallis canton, CH	46.3057	7.5945	568	2.30				sand-silt	Cf	O+H; IsoSource, 5 members: 0-0.2, 0.2-0.4, 0.4-0.6, 0.6-0.8, GW	4	
Bertrand et al. 2014	*Populus nigra*	black poplar	Deciduous broadleaf tree			0.35			0.04	0.39	site-2, Pfyn forest, Sierre, Wallis canton, CH	46.3057	7.5945	568	2.30		mixed riverine	Rhone valley alluvium	sand-silt	Cf		4	
Bertrand et al. 2014	*Alnus glutinosa*	common alder, black alder, European alder	Deciduous broadleaf tree			0.37			0.18	0.55	site-2, Pfyn forest, Sierre, Wallis canton, CH	46.3057	7.5945	568	2.30				sand-silt	Cf		4	
Bertrand et al. 2014	*Pinus sylvestris*	Scots pine	Evergreen needleleaf tree			0.21			0.11	0.32	site-2, Pfyn forest, Sierre, Wallis canton, CH	46.3057	7.5945	568	2.30				sand-silt	Cf		4	
Bertrand et al. 2014	*Salix alba*	white willow	Deciduous broadleaf tree			0.42			0.35	0.77	site-3, Pfyn forest, Sierre, Wallis canton, CH	46.3059	7.5876	556	1.00				sandy with pebbles	Cf		4	
Bertrand et al. 2014	*Alnus glutinosa*	common alder, black alder, European alder	Deciduous broadleaf tree			0.19			0.03	0.22	site-3, Pfyn forest, Sierre, Wallis canton, CH	46.3059	7.5876	556	1.00		in gravel bar on river bed		sandy with pebbles	Cf		4	
Beyer et al. 2018	*Acacia erioloba (Vachellia eriolob)*	camel thorn, giraffe thorn	Deciduous broardleaf tree, legume	0.50		0.50	0.37		0.37	0.87	Elundu Forest, Elundu, NA	-17.5054	16.4739	1130	20.00				sand	BS		4	
Beyer et al. 2018	*Baikiaea plurijuga*	African teak, Mukusi, Rhodesian teak	Deciduous broardleaf tree, legume	0.96		0.96	0.00		0.00	0.96	Elundu Forest, Elundu, NA	-17.5054	16.4739	1130	20.00				sand	BS	H+O; and D labeling; MixSIAR, 5 members: surface, 0.2-0.5, 0.6-1, 1-4m, deep&GW	4	water table likely 15m, based on the max relief to the nearest lake
Beyer et al. 2018	*Combretum collinum*	bushwillow	Semi-deciduous broadleaf tree	0.88		0.88	0.00		0.00	0.88	Elundu Forest, Elundu, NA	-17.5054	16.4739	1130	20.00	well-drained on Kalahari sand		Kalahri Sand	sand	BS		4	
Beyer et al. 2018	*Salacia luebertii*	wild mango	Semi-deciduous broadleaf tree	0.82		0.82	0.01		0.01	0.83	Elundu Forest, Elundu, NA	-17.5054	16.4739	1130	20.00				sand	BS		4	
Beyer et al. 2018	*Terminalia sericea*	clusterleaf, silver cluster-leaf or silver	Deciduous broadleaf tree	0.67		0.67	0.02		0.02	0.69	Elundu Forest, Elundu, NA	-17.5054	16.4739	1130	20.00				sand	BS		4	
Brunel et al. 1995	*Eucalyptus sp. (mallee)*	mallee	Evergreen broadleaf tree			0.63				0.63	2HBD site, Vitoria, AU	-34.9176	141.9230	63	2.40		lower slope site, roots above WT	sand dune on 1m clay over deep sand aquifer	sand	BS	H+O; linear mixing model; 3 members: 0-0.4m, 0.4-0.8 for		using 2 members only, assuming GW too saline for plants
Brunel et al. 1995	*Eucalyptus sp. (mallee)*	mallee	Evergreen broadleaf tree			0.67				0.67	2HTD site, Vitoria, AU	-34.9172	141.9241	67	4.70		midslope site, roots above WT		sand	BS			
Brum et al. 2018	*Manilkara elata*		Evergreen broadleaf tree, canopy	0.69		0.69				0.69	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			Lat may be off by 1 degree, because LBA km-67 is 1 degree north; also the elevation does not match (166m at given site, -30m tree hight = 136m; at LBA km-67, 196-30=166m, closer to 185 reported by authors), but author reports recorded here; Sample collected in an extreme drought year 2005, in early Nov-Dec, begining of wet season; Endopleura uchi result not reported (n=1)
Brum et al. 2018	*Erisma uncinatum*		Evergreen broadleaf tree, canopy	0.90		0.90				0.90	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Pseudopiptadenia psilostachya*		Evergreen broadleaf tree, canopy	0.84		0.84				0.84	LBA km-67 site, Tapajos Nat For, Santarem. Para. Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Mezilaurus itauba*		Evergreen broadleaf tree, canopy	0.83		0.83				0.83	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau		tropical seasonal forest with deep weathered clay soil (but such clay soils form aggregates, giving high infiltration capacity)	tropical clay	Am	O, SIMMER in R, 2 members: shallow soil (enriched, variable, 0-1m), deep soil (light, stable, 1-12m)		
Brum et al. 2018	*Tachigali chrysophylla*		Evergreen broadleaf tree, canopy	0.74		0.74				0.74	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Chamaecrista xinguensis*		Evergreen broadleaf tree, subcanopy	0.76		0.76				0.76	LBA km-67 site, Tapajos Nat For, Santarem. Para. Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Protium apiculatum*		Evergreen broadleaf tree, subcanopy	0.15		0.15				0.15	LBA km-67 site, Tapajos Nat For, Santarem. Para. Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Coussarea albescens*		Evergreen broadleaf tree, subcanopy	0.30		0.30				0.30	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Miconia sp.*		Evergreen broadleaf tree, subcanopy	0.41		0.41				0.41	LBA km-67 site, Tapajos Nat For, Santarem. Para. Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Amphirrhox longifolia*		Evergreen broadleaf tree, understory	0.67		0.67				0.67	LBA km-67 site, Tapajos Nat For, Santarem. Para. Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Brum et al. 2018	*Rinorea pubiflora*		Evergreen broadleaf tree, understory	0.26		0.26				0.26	LBA km-67 site, Tapajos Nat For, Santarem, Para, Brazil	-3.8500	-54.9667	185	30-60 15km away	on well drained plateau			tropical clay	Am			
Chen et al. 2015	*Liana species*	??	Evergreen broadleaf liana	0.40	0.08	0.24				0.24	Karst forest (KF), Xishuangbanna Tropical Botanical	21.9202	101.2757	580		well-drained karst hill		shallow coarse calcareous	coarse, low WHC	Cw			3 members: 0-60cm, 60-1.5m, 1.5-2.5m; GW not included;
Chen et al. 2015	*Tree species*	??	Evergreen broadleaf tree	0.30	0.07	0.19				0.19	Karst forest (KF), Xishuangbanna Tropical Botanical	21.9202	101.2757	580		well-drained karst hill		shallow coarse calcareous	coarse, low WHC	Cw	H;		

Chen et al. 2015	*Liana species*	??	Evergreen broadleaf liana	0.39	0.09	0.24				0.24	Tropical seasonal forest (TSF), nat res, 8km to XTBG, Yunnan Prov, CN	21.9103	101.2163	750		well-drained hill		laterite soil over siliceous rocks	laterite (clay rich)	Cw	IsoSource, 3 members: 0-60, 61-150, 150-250 (GW for riparian site)		FPF site in the botanical garden is 3m above river, assumed WTD, and the deep uptake 1.5-2.5m assumed from GW capillary rise
Chen et al. 2015	*Pometia tomentosa, Terminalia*	??, East Indian almond	Evergreen broadleaf tree	0.28	0.13	0.21				0.21	Tropical seasonal forest (TSF), nat res, 8km to XTBG, Yunnan Prov, CN	21.9103	101.2163	750		well-drained hill		laterite soil over siliceous rocks	laterite (clay rich)	Cw			
Chen et al. 2015	*Liana species*	??	Evergreen broadleaf liana	0.22	0.20	0.21	0.66	0.67	0.67	0.88	Floodplain forest (FPF), XTBG, Yunnan Prov, CN	21.9198	101.2780	554	3.00		floodplain with shallow WT	deep rich soil with shallow WT		Cw		4	
Chen et al. 2015	*Tree species*	??	Evergreen broadleaf tree	0.14	0.20	0.17	0.65	0.78	0.72	0.89	Floodplain forest (FPF), XTBG, Yunnan Prov, CN	21.9198	101.2780	554	3.00		floodplain with shallow WT	deep rich soil with shallow WT		Cw		4	
Chen et al. 2016	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.40			0.28	0.68	Site 1.8, Lower Tarim R, Xinjiang Prov, CN	40.5651	87.6007	851	1.80		on river bank		sandy-loam with clay	BW		4	
Chen et al. 2016	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf tree			0.41			0.30	0.71	Site 1.8, Lower Tarim R, Xinjiang Prov, CN	40.5651	87.6007	851	1.80		on river bank		sandy-loam with clay	BW	O; IsoSource, max 6 members: 0-20, 20-75, 75-150, 150-375 (if above WT), 375-700cm (if above WT), and GW	4	the reach below Daxihaizi Reservoir; 3 sites are 20km apart, 0, 200, and 800m away from river; P=30mm/yr, soil >20cm assumed deep moisture from ealier flooding
Chen et al. 2016	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.84			0.15	0.99	Site 3.8, Lower Tarim R, Xinjiang Prov, CN	40.5133	87.8232	848	3.80		200m from river, WT within root	river bank stretches on alluvial fan deposit	sandy-loam with clay	BW		4	
Chen et al. 2016	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf tree			0.80			0.18	0.98	Site 3.8, Lower Tarim R, Xinjiang Prov, CN	40.5133	87.8232	848	3.80		200m from river, WT within root		sandy-loam with clay	BW		4	
Chen et al. 2016	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.68			0.30	0.98	Site 7.2, Lower Tarim R, Xinjiang Prov, CN	40.4473	88.0483	841	7.20		800m from river, WT within root		sandy-loam with clay	BW		4	
Chen et al. 2016	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf tree			0.64			0.34	0.98	Site 7.2, Lower Tarim R, Xinjiang Prov, CN	40.4473	88.0483	841	7.20		800m from river, WT within root		sandy-loam with clay	BW		4	
Chi et al. 2019	*Stipa grandis P. Smirn*	needlegrass	Perennial grass			0.06				0.06	Grassland Eco Res Sta, steppe, Inner Mongolia. China	43.6694	116.7520	1250		well-drained dune sand			loamy sand	Dw	H+O; Isotope, 2 member: summer rain vs. past season snow		Only control site; moved to z=1250m, scene matching photo in SI; P=305mm, only 7% as snow; snow drift site has har greater deep
Chi et al. 2019	*Agropyron cristatum*	crested wheatgrass	Perennial grass			0.06				0.06	Grassland Eco Res Sta, steppe, Inner Mongolia. China	43.6694	116.7520	1250		well-drained dune sand		fixed dunes	loamy sand	Dw			
Chi et al. 2019	*Artemisia frigida*	fringed sage brush, prairie sagewort, arctic	Evergreen needleleaf shrub			0.06				0.06	Grassland Eco Res Sta, steppe, Inner Mongolia, China	43.6694	116.7520	1250		well-drained dune sand			loamy sand	Dw			
Chimner & Resh 2014	*Quercus macrocarpa*	bur oak	Deciduous broadleaf tree			0.11			0.79	0.90	Homestead National Monument, South-central NE, US	40.2876	-96.8382	391	7.00		near a river	Quaternary eolian silt	silty loam, eolian silt	Cf	O; IsoSource, 3 member: 0-	3	average of 3 sites
Cook & O'Grady 2006	*Corymbia clarksoniana*	Clarkson's bloodwood, grey bloodwood	Evergreen broadleaf tree	0.00		0.00	1.00		1.00	1.00	Pioneer Valley, AU	-21.1496	149.1017	18	10.00		coasal plain with WT accessible		caly loam	Aw	O; observed isotope, sap flow and leaf-water-potential supporing a plant uptake model, continuous to 8.5m depth, then	4	all samples taken toward end of dry season; Based on the measured matric potential profile, authors assume that any soil water use from below 6.5
Cook & O'Grady 2006	*Lophostemon suaveolens*	swamp mahogany, swamp box	Evergreen broadleaf tree	0.85		0.85	0.15		0.15	1.00	Pioneer Valley, AU	-21.1496	149.1017	18	10.00		coasal plain with WT accessible	coastal plain deposit	caly loam	Aw		4	
Cook & O'Grady 2006	*Eucalyptus platyphylla*	poplar gum	Evergreen broadleaf tree	0.30		0.30	0.09		0.09	0.39	Pioneer Valley, AU	-21.1496	149.1017	18	10.00		coasal plain with WT accessible		caly loam	Aw		4	
Cook & O'Grady 2006	*Melaleuca viridiflora*	broad-leaved paperbark	Evergreen broadleaf tree, small	0.10		0.10	0.65		0.65	0.75	Pioneer Valley, AU	-21.1496	149.1017	18	10.00		coasal plain with WT accessible		caly loam	Aw		4	
Cramer et al. 1999	*Casuarina glauca*	swamp she-oak, swamp oak, grey oak, or	Evergreen broadleaf tree, small leaf				0.75	0.45	0.60	0.60	site-1, Kingaroy, Queensland, AU	-26.5309	151.8890	501	1.60		alluvial valley		10cm sandy clay over heavy clay	Cf		4	0.7m-WT is lumped into one layer, may
Cramer et al. 1999	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.53	0.46	0.50	0.50	site-2, Bell, Queensland, AU	-26.9216	151.4705	500	3.00		alluvial valley	valley alluvium	deep cracking clay	Cf	H+O; linear mixing model, 3 members: 0-0.3, 0.3-0.7, 0.7-WT	4	0.7m-WT is lumped into one layer, may
Cramer et al. 1999	*Casuarina glauca*	swamp she-oak, swamp oak, grey oak, or	Evergreen broadleaf tree, small leaf				0.48	0.21	0.35	0.35	site-3, Boonah, Queensland, AU	-27.9829	152.6946	141	2.90		alluvial valley		10cm sandy clay over heavy clay	Cf		4	0.7m-WT is lumped into one layer. may
Cramer et al. 1999	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.21	0.26	0.24	0.24	site-3, Boonah, Queensland, AU	-27.9829	152.6946	141	2.90		alluvial valley		10cm sandy clay over heavy clay	Cf		4	0.7m-WT is lumped into one layer, may
Cui et al. 2017	*Alhagi sparsifolia*	camelthorns, manna trees	Perennial desert shrub, small, legume, thorn			0.76				0.76	Saline-land site, Dunhuang, Hexi Corridor, Gansu Prov.	40.2017	94.7248	1110			saline soil indicate discharge		finer grained?	BW			Cool site excluded; authors wrote "No IsoSource solution was obtained for the water source of the 4 studied plant species in the Gobi habitat due to the mean d18O stem values were beyond the confine of those of potential water source in both 2011 and 2012"; author mention
Cui et al. 2017	*Elaeagnus angustifolia*	Russian olive, silver berry, oleaster	Deciduous broadleaf tree, small			0.97				0.97	Saline-land site, Dunhuang, Hexi Corridor. Gansu Prov.	40.2000	94.7200	1110			saline soil indicate discharge	saline soil	finer grained?	BW			
Cui et al. 2017	*Kalidium foliatum*	??	Perennial desert shrub, small, halophyte			0.21				0.21	Saline-land site, Dunhuang, Hexi Corridor. Gansu Prov.	40.2000	94.7200	1110			saline soil indicate discharge		finer grained?	BW	O; IsoSource, 6 members: 0-20, 20-40, 40-60, 60-80, 80-120, 120-200cm		
Cui et al. 2017	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf tree, small			0.93				0.93	Sandy-land site, unhuang, Hexi Corridor, Gansu Prov.	40.2131	94.6778	1108			WT too deep according to author		sandy	BW			
Cui et al. 2017	*Alhagi sparsifolia*	camelthorns, manna trees	Perennial desert shrub, small, legume. thorn			0.84				0.84	Sandy-land site, unhuang, Hexi Corridor. Gansu Prov.	40.2131	94.6778	1108			WT too deep according to author		sandy	BW			
Cui et al. 2017	*Elaeagnus angustifolia*	Russian olive, silver berry, oleaster	Deciduous broadleaf tree, small			0.57				0.57	Sandy-land site, unhuang, Hexi Corridor. Gansu Prov.	40.2131	94.6778	1108			WT too deep according to author	eolian sand	sandy	BW			
Cui et al. 2017	*Sophora alopecuroides*	??	Deciduous broadleaf tree, small, legume			0.84				0.84	Sandy-land site, unhuang, Hexi Corridor, Gansu Prov.	40.2131	94.6778	1108			WT too deep according to author		sandy	BW			
Dai et al. 2015	*Haloxylon ammodendron*	saxaul, black saxaul, sometimes	Deciduous broadleaf tree, small	0.08	0.05	0.07	0.90	0.10	0.50	0.57	valley-site, southern edge of Gurbantonggut Desert.	44.5583	87.7857	435	3.80		dune vlley	inland sand dunes	sand	BS	O; IsoSource, 5 members: 0-40, 40-100, 100-300, GW	4	1-3m deep soil water, this is a beautiful case to show hillslope effect
Dai et al. 2015	*Haloxylon persicum*	white saxaul	Perennial desert shrub, small leaf, succulent	0.90	0.25	0.58	0.08	0.06	0.07	0.65	crest-site, uthern edge of Gurbantonggut Desert. Xinjiang prov.	44.5384	87.8029	446	15.00	dune crest			sand	BS		4	

David et al. 2007	*Quercus ilex*	evergreen oak, holly oak, holm oak	Evergreen broadleaf tree				0.74		0.74	0.74	near Évora, Alentejo Prov, S. Portugal	38.5406	-8.0003	229	3.40		~400m from river course, WT accessible	1m sandy soil on granite	1m sand on bedrock	Cs	H; plus sapflow, soil and leaf water potential; linear	3	winter recharge to GW
David et al. 2007	*Quercus suber*	cork oak	Evergreen broadleaf tree				0.72		0.72	0.72	near Évora, Alentejo Prov, S. Portugal	38.5406	-8.0003	229	3.40		~400m from river course, WT accessible	rock	1m sand on bedrock	Cs		3	
David et al. 2013	*Quercus suber*	cork oak	Evergreen broadleaf tree	0.30		0.30	0.70	0.16	0.43	0.73	near Lisbon, PT	38.8425	-8.8642	15	4.50		coastal plain with WT accessible	coastal plain deposit	9m sand over clay	Cs	O; root-uptake model with	4	in root database; data in August (dry)
Dawson & Pate 1996	*Banksia prionotes*	acorn banksia or orange banksia	Evergreen broadleaf tree				0.60	0.43	0.52	0.52	Site-1, Yanchep, AU	-31.5500	115.6833	24	2.20		coastal plain with WT accessible	deep Bassendean sand on	sand	Cs	H; linear mixing model, 2 members: shallow soil water (depth not specified) and GW	4	based on Fig 2 and 5
Dawson & Pate 1996	*Eucalyptus globulus*	southern blue gum	Evergreen broadleaf tree				0.08	0.04	0.06	0.06	Site-2, Mt. Barker, AU	-34.7927	116.0706	59	4.50		coastal plain with WT accessible	deep sand on gravel, coastal plain	sand	Cs		4	
Dawson & Pate 1996	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.37	0.06	0.22	0.22	Site-2, Mt. Barker, AU	-34.7927	116.0706	59	4.50		coastal plain with WT accessible	deep sand on gravel, coastal plain	sand	Cs		4	based on table-2, GW saline
Dawson & Pate 1996	*Banksia grandis*	Bull Banksia, Giant Banksia, Mangite	Evergreen broadleaf tree				0.28	0.02	0.15	0.15	Site-2, Mt. Barker, AU	-34.7927	116.0706	59	4.50		coastal plain with WT accessible	deep sand on gravel, coastal plain	sand	Cs		4	
Deng et al 2015	*Cyclobalanopsis glauca (Quercus alauca)*	ring-cupped oak, Japanese blue oak	Evergreen broadleaf tree	0.18	0.09	0.14				0.14	on rock, Guling, Guangxi Prov, CN	23.5382	108.3410	606	80.00	karst ridge		Epikarst	none to very thin, gravely, calcareous	Cw	H+O; IsoSource, 3 members: rain, soil (3m in epikarst),		spring water assumed to represent deep source
Deng et al 2015	*Cyclobalanopsis glauca (Quercus alauca)*	ring-cupped oak, Japanese blue oak	Evergreen broadleaf tree	0.11	0.12	0.11				0.11	on thin soil, Guling, Guangxi Prov, CN	23.5382	108.3410	606	80.00	karst ridge		Epikarst	none to very thin, gravely, calcareous	Cw			
Donovan & Ehleringer 1994	*Artemisia tridentata*	big sagebrush, Great Basin sagebrush	Perennial desert shrub, evergreen, tiny	0.66		0.66				0.66	Tintic Range Experimental Station, Tintic Juntion UT, US	39.9231	-112.1824	1775		near headwater, well drained		Arid inter-mountain valley in Utah, near headwater, far above valley oases	sandy loam with caleche at 0.7m depth	Df	H; linear mixing model, 2 members: shallow (0-35cm) and deep (35-70cm) soil		longitude off by 10 degrees; 2-member mixing model applied to the Aug rain event
Donovan & Ehleringer 1994	*Chrysothamnus viscidiflorus*	yellow rabbitbrush, green	Perennial desert shrub, deciduous	0.72		0.72				0.72	Tintic Range Experimental Station, Tintic Juntion UT. US	39.9231	-112.1824	1775		near headwater, well drained			sandy loam with caleche at 0.7m deth	Df			
Donovan & Ehleringer 1994	*Gutierrezia sarothrae*	broom snakeweed	Perennial desert shrub	0.46		0.46				0.46	Tintic Range Experimental Station, Tintic Juntion UT. US	39.9231	-112.1824	1775		near headwater, well drained			sandy loam with caleche at 0.7m depth	Df			
Drake et al. 2011	*Eucalyptus gomphocephala*	tuart	Evergreen broadleaf tree				0.19	0.22	0.20	0.20	Site-1, Yalgorup NP, AU	-32.9652	115.6801	11	8.04	dune ridge		coastal plain sediments	sandy calcreous	Cs	H; linear mixing, 3 members: 0-1m (site-1) 0-0.5m (site-2), 1-8m	4	WT higher in wet season, why plants use more GW; GW at site-2 is saline, why
Drake et al. 2011	*Eucalyptus gomphocephala*	tuart	Evergreen broadleaf tree				0.02	0.15	0.09	0.09	Site-2, Yalgorup NP, AU	-32.8259	115.6660	5	2.30		dune valley near saline Lake Pollard		sandy calcreous	Cs		4	
Duan et al. 2008	*Nitraria tangutorum*	??	Perennial desert shrub, deciduous						0.83	0.83	desert ecosystem, Golmud, Tibetan Plateau, CN	36.4139	94.9431	2793	1.70		desert oasis	desert valley deposit	sandy	BW	H+O; linear mixing model; 3 members: not clear depths; sampling depths at 10, 30, 50, 70cm and 1m at	4	deep moisture and GW have same isotopes
Duan et al. 2008	*Salix rehderiana*	willow	Deciduous broadleaf shrub			0.51				0.51	shrub ecosystem, Lhasa, Tibetan Plateau, CN	29.6774	91.3197	3774			near a large braided river		coarse over bedrock at 0.7m	Cw			GW inaccessible in rocks; P>500m, local recharge
Duan et al. 2008	*Quercus aquifolioides*	oak	Evergreen broadleaf tree			0.79				0.79	forest ecosystem, Linzhi, Tibetan Plateau, CN	29.2270	94.2321	2958		on lower slope		on slopes with bedrock at 0.7m	coarse over bedrock at 0.7m	Cw			
Duan et al. 2008	*Pinus tabulaeformis*	Manchurian red pine, Southern Chinese pine	Evergreen needleleaf tree			0.08				0.08	forest ecosystem, Linzhi, Tibetan Plateau, CN	29.2270	94.2321	2958		on lower slope			coarse over bedrock at 0.7m	Cw			
Eggemeyer et al. 2009	*Pinus ponderosa*	Ponderosa pine	Evergreen needleleaf tree	0.70	0.20	0.45				0.45	Nebraska Nat. Forest, Halsey NE, US	41.8625	-100.3683	825	7.00	well-drained dunes			deep loose fine sand	Cf			assuming the deepest layer (0.9-3m) soil water is from past season rain; monthly P < 80mm, GW, although sampled, not included in endmembers
Eggemeyer et al. 2009	*Juniperus virginiana*	cedar, eastern redcedar, Virginian	Evergreen needleleaf tree	0.60	0.05	0.33				0.33	Nebraska Nat. Forest, Halsey NE, US	41.8625	-100.3683	825	7.00	well-drained dunes		Sandhills, Quaternary eolian sand deposit	deep loose fine sand	Cf	H+O; IsoSource, 3 members: 5-50, 50-90, 90-300cm		
Eggemeyer et al. 2009	*Schizachyrium scoparium*	little bluestem	Perennial grass	0.10	0.00	0.05				0.05	Nebraska Nat. Forest, Halsey NE, US	41.8625	-100.3683	825	7.00	well-drained dunes			deep loose fine sand	Cf			
Eggemeyer et al. 2009	*Panicum virgatum*	switchgrass	Perennial grass	0.10	0.00	0.05				0.05	Nebraska Nat. Forest, Halsey NE, US	41.8625	-100.3683	825	7.00	well-drained dunes			deep loose fine sand	Cf			
Ehleringer et al. 1991	*Ambrosia aeanthicarpa, Dicoria*	flatspine bur ragweed, desert twinbugs	Annual forb	0.00		0.00				0.00	north of Stud Horse Point, Glen Canyon National Recreation	37.0262	-111.6026	1200	5m?		near a dry channel, 5m above pond		coarse desert soil	BW	H; linear mixing, 2 members: summer rain, vs. winter rain (same as well water), soil water not sampled		winter vs. summer rain; reported 2 groups quant (herbacious Perennial, Woody species), rest from discussion; Evans 1994: the 2 woody species with deep roots are Chrysothmmus;
Ehleringer et al. 1991	*Yucca angustissima*	narrowleaf yucca	Perennial desert shrub, succulent	0.00		0.00				0.00	north of Stud Horse Point, Glen Canyon National Recreation	37.0262	-111.6026	1200	5m?		near a dry channel, 5m above pond		coarse desert soil	BW			
Ehleringer et al. 1991	*Astragalus mollissimus, Cordvlanthus*	wooly locoweed (legume), Wright's bird's	Perennial desert shrub, some legume	0.09		0.09				0.09	north of Stud Horse Point, Glen Canyon National Recreation	37.0262	-111.6026	1200	5m?		near a dry channel, 5m above pond	coarse desert valley sediment	coarse desert soil	BW			
Ehleringer et al. 1991	*Artemisia filifolia, Atriplex canescens,*	sand sagebrush, broom snakeweed	Perennial desert shrub, woody	0.43		0.43				0.43	north of Stud Horse Point, Glen Canyon National Recreation	37.0262	-111.6026	1200	5m?		near a dry channel, 5m above pond		coarse desert soil	BW			
Ehleringer et al. 1991	*Chrysothamnus nauseosus, Chrysothamnus*	Chamisa, rubber rabbitbrush, and gray	Perennial desert shrub, woody, deep rooted				0.90		0.90	0.90	north of Stud Horse Point, Glen Canyon National Recreation	37.0262	-111.6026	1200	5m?		near a dry channel, 5m above pond		coarse desert soil	BW		4	
Ellsworth and Sternberg 2015	*Lyonia ferruginea*	rusty staggerbush	Evergreen broadleaf shrub	0.32	0.3	0.31				0.31	Sandhill Long Unburned-1 (SHLU1), SC FL. US	27.1875	-81.3356	61	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Quercus geminata*	sand live oak	Evergreen broadleaf tree	0.69	0.41	0.55				0.55	Sandhill Long Unburned-1 (SHLU1), SC FL. US	27.1875	-81.3356	61	24.30	on high sand ridge		coastal plain; well-drained, acid, sands, very low nutrient and organic matter content	sand	Cf			
Ellsworth and Sternberg 2015	*Quercus myrtifolia*	myrtle oak	Evergreen broadleaf tree	0.63	0.26	0.44				0.44	Sandhill Long Unburned-1 (SHLU1), SC FL. US	27.1875	-81.3356	61	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Quercus laevis*	turkey oak	Semi-deciduous broadleaf tree	0.52	0.24	0.38				0.38	Sandhill Long Unburned-1 (SHLU1), SC FL. US	27.1875	-81.3356	61	24.30	on high sand ridge			sand	Cf			

Ellsworth and Sternberg 2015	*Carya floridana*	scrub hickory	Deciduous broadleaf tree	0.62	0.3	0.46				0.46	Sandhill Long Unburned-1 (SHLU1), SC FL, US	27.1875	-81.3356	61	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Lyonia ferruginea*	rusty staggerbush	Evergreen broadleaf shrub	0.33	0.26	0.30				0.30	Sandhill Long Unburned-2 (SHLU2), SC FL. US	27.1546	-81.3555	48	2.30		close to wetland		sand	Cf			deepest soil layer end member (0.5 - 1.5m) assumed to represent deep soil moisture. No GW endmember in study
Ellsworth and Sternberg 2015	*Quercus geminata*	sand live oak	Evergreen broadleaf tree	0.46	0.22	0.34				0.34	Sandhill Long Unburned-2 (SHLU2), SC FL. US	27.1522	-81.3555	48	2.30		close to wetland	coastal plain; well-drained, acid, sands, very low nutrient and organic matter content	sand	Cf	H+O; IsoSource, 3 members: 0-20, 20-50, 50-150cm		
Ellsworth and Sternberg 2015	*Quercus myrtifolia*	myrtle oak	Evergreen broadleaf tree	0.37	0.27	0.32				0.32	Sandhill Long Unburned-2 (SHLU2), SC FL. US	27.1522	-81.3555	48	2.30		close to wetland		sand	Cf			
Ellsworth and Sternberg 2015	*Quercus laevis*	turkey oak	Semi-deciduous broadleaf tree	0.56	0.43	0.49				0.49	Sandhill Long Unburned-2 (SHLU2), SC FL. US	27.1522	-81.3555	48	2.30		close to wetland		sand	Cf			
Ellsworth and Sternberg 2015	*Carya floridana*	scrub hickory	Deciduous broadleaf tree	0.40	0.3	0.35				0.35	Sandhill Long Unburned-2 (SHLU2), SC FL. US	27.1522	-81.3555	48	2.30		close to wetland		sand	Cf			
Ellsworth and Sternberg 2015	*Lyonia ferruginea*	rusty staggerbush	Evergreen broadleaf shrub	0.39	0.38	0.39				0.39	Sandhill Recently Burned (SHRB), SC. FL, US	27.1880	-81.3364	65	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Quercus geminata*	sand live oak	Evergreen broadleaf tree	0.45	0.36	0.40				0.40	Sandhill Recently Burned (SHRB), SC. FL, US	27.1880	-81.3364	65	24.30	on high sand ridge		coastal plain; well-drained, acid, sands, very low nutrient and organic matter content	sand	Cf			
Ellsworth and Sternberg 2015	*Quercus myrtifolia*	myrtle oak	Evergreen broadleaf tree	0.45	0.25	0.35				0.35	Sandhill Recently Burned (SHRB), SC. FL, US	27.1880	-81.3364	65	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Quercus laevis*	turkey oak	Semi-deciduous broadleaf tree	0.57	0.46	0.52				0.52	Sandhill Recently Burned (SHRB), SC. FL, US	27.1880	-81.3364	65	24.30	on high sand ridge			sand	Cf			
Ellsworth and Sternberg 2015	*Carya floridana*	scrub hickory	Deciduous broadleaf tree	0.49	0.41	0.45				0.45	Sandhill Recently Burned (SHRB), SC. FL, US	27.1880	-81.3364	65	24.30	on high sand ridge			sand	Cf			
Evaristo et al. 2016	*Swietenia mahagoni*	American mahogany, Cuban	Semi-deciduous broadleaf tree	0.53	0.27	0.40	0.14	0.26	0.20	0.60	ridge top, Luquillo, PR	18.3172	-65.7168	207		ridge top		highly permeable thin soil (56-130cm thick) over deep fractured volcanic ock	clay but hi-K soil on fractured rock	Am		3	
Evaristo et al. 2016	*Swietenia mahagoni*	American mahogany, Cuban	Semi-deciduous broadleaf tree	0.26	0.24	0.25	0.29	0.21	0.25	0.50	slope, Luquillo, PR	18.3227	-65.7167	183		midslope			clay but hi-K soil on fractured rock	Am	H+O; SIAR Bayesian mixing model, 4 members: 0-10, >20cm, rain, GW	3	
Evaristo et al. 2016	*Swietenia mahagoni*	American mahogany, Cuban	Semi-deciduous broadleaf tree	0.23	0.18	0.21	0.28	0.25	0.27	0.47	valley, Luquillo, PR	18.3231	-65.7167	160			riparian		clay but hi-K soil on fractured rock	Am		4	
Evaristo et al. 2016	*Swietenia macrophylla*	mahogany, Honduran mahogany, big-	Semi-deciduous broadleaf tree	0.25	0.32	0.29	0.35	0.23	0.29	0.58	ridge top, Susua, PR	18.0677	-66.9010	172		ridge top		highly permeable thin soil over serpentine rock	clay but hi-K soil on fractured rock	Aw		3	
Evaristo et al. 2016	*Swietenia macrophylla*	mahogany, Honduran mahogany, big-	Semi-deciduous broadleaf tree	0.22	0.28	0.25	0.40	0.30	0.35	0.60	valley, Susua, PR	18.0671	-66.9000	132			riparian		clay but hi-K soil on fractured rock	Aw		4	
Ewe et al. 2007	*Rhizophora mangle*	red mangrove	Evergreen broadleaf shrub				0.55	0.00	0.28	0.28	Everglades LTER, FL, US	25.2140	-80.6490	1	0.25		flooded grassland	coastalplain limestone marl with a shallow layer (<30 cm) of peat on surface of tree islands	1m marl (limey mud, w/ clay) on 1m marl (limey mud, w/ clay) on 1m marl (limey mud, w/ clay) on	Aw	H+O; linear mixing, 2 member: soil (5cm), GW (just above bedrock at 1m depth)	3	shllow GW fresh, deeper brackish
Ewe et al. 2007	*Cladium jamaicense*	saw grass	Perennial grass				0.00	0.00	0.00	0.00	Everglades LTER, FL, US	25.2140	-80.6490	1	0.25		flooded grassland			Aw		3	
Ewe et al. 2007	*Sesuvium portulacastrum*	sea purslane	Perennial forb				0.00	0.00	0.00	0.00	Everglades LTER, FL, US	25.2140	-80.6490	1	0.25		flooded grassland			Aw		3	
Ewe & Sternberg 2002	*Schinus terebinthifolius*	Brazilian peppertree, aroeira, rose	Evergreen broadleaf tree, small				0.94	0.72	0.83	0.83	Long-Pine-Key site (undisturbed), Everglades N. Pk, FL,	25.3910	-80.6300	3	0.12 (wet) - 1.54 (dry)		rocky wetland	part of Miami Rock Ridge, limestone outcrop extending from the coast of east Florida into the Florida Everglades; disturbed site is abandoned farm field, now covered by dense ivnasive Schinus; undistrubed site is natie rock pineland	Org soil holes /fractures	Aw		4	
Ewe & Sternberg 2002	*Myrica cerifera*	southern wax myrtle, southern	Evergreen broadleaf tree, small				0.96	0.64	0.80	0.80	Long-Pine-Key site (undisturbed), Everglades N. Pk. FL.	25.3910	-80.6300	3	0.12 (wet) - 1.54 (dry)		rocky wetland		Org soil holes /fractures	Aw		4	
Ewe & Sternberg 2002	*Baccharis halimifolia*	eastern baccharis, groundsel bush	Evergreen broadleaf shrub				0.82	0.59	0.71	0.71	Long-Pine-Key site (undisturbed), Everglades N. Pk, FL,	25.3910	-80.6300	3	0.12 (wet) - 1.54 (dry)		rocky wetland		Org soil holes /fractures	Aw		4	On GE, disturbed site has higher elevation, which may be related to its less use of GW (WT deeper)
Ewe & Sternberg 2002	*Rapanea punctata (Myrsine cubana)*	myrsine, colicwood	Evergreen broadleaf shrub				0.95	0.74	0.85	0.85	Long-Pine-Key site (undisturbed), Everglades N. Pk, FL,	25.3910	-80.6300	3	0.12 (wet) - 1.54 (dry)		rocky wetland		Org soil holes /fractures	Aw	O, linear mixig, 2 members: soil water and GW	4	
Ewe & Sternberg 2002	*Randia aculeata*	white indigoberry or white indigo	Evergreen broadleaf shrub				0.95	0.67	0.81	0.81	Long-Pine-Key site (undisturbed), Everglades N. Pk. FL.	25.3910	-80.6300	3	0.12 (wet) - 1.54 (dry)		rocky wetland		Org soil holes /fractures	Aw		4	
Ewe & Sternberg 2002	*Schinus terebinthifolius*	Brazilian peppertree, aroeira, rose	Evergreen broadleaf tree, small				0.82	0.39	0.61	0.61	Hole-in-Donut site (disturbed), Everglades Nat Park.	25.3879	-80.6319	6	0.12 (wet) - 1.54 (dry)		rocky wetland		thin org soil, plowed	Aw		3	
Ewe & Sternberg 2002	*Myrica cerifera*	southern wax myrtle, southern	Evergreen broadleaf tree, small				0.94	0.12	0.53	0.53	Hole-in-Donut site (disturbed), Everglades Nat Park,	25.3879	-80.6319	6	0.12 (wet) - 1.54 (dry)		rocky wetland		thin org soil, plowed	Aw		3	
Ewe & Sternberg 2002	*Baccharis halimifolia*	eastern baccharis, groundsel bush	Evergreen broadleaf shrub				0.50	0.06	0.28	0.28	Hole-in-Donut site (disturbed), Everglades Nat Park.	25.3879	-80.6319	6	0.12 (wet) - 1.54 (dry)		rocky wetland		thin org soil, plowed	Aw		3	
Feikema et al. 2010	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.22	0.00	0.11	0.11	Site-1, Kyabra, Vistoria, AU	-36.4342	145.2660	113	3.25		waterlogging in wet season		well-drained loam, clay then fine sand	Cf	O+H; monthly water balance aided by O+H isotopes and Cl	4	GW salinity prevents use, so the shallower the WT, the less GW use;WT rise lags 3mon after wet season
Feikema et al. 2010	*Eucalyptus grandis*	flooded gum or rose gum	Evergreen broadleaf tree				0.13	0.00	0.07	0.07	Site-2, Kyabra, Vistoria, AU	-36.4334	145.2663	114	2.80		waterlogging in wet season	valley alluvium	well-drained loam, clay then fine sand	Cf		4	
Feikema et al. 2010	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.80	0.00	0.40	0.40	Site-3, Kyabra, Vistoria, AU	-36.4328	145.2666	116	5.90	better drained			well-drained loam, clay then fine sand	Cf		4	
Gao et al. 2018	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, deciduous.			0.33				0.33	Central Loess Plateau, Shaanxi Prov, CN	37.2352	110.3354	1045	> 50m	NE-facing slope 16o,		Loess Plateau	silty loam	Dw	O+H; SIAR in R; 3 end members of		mean of 8 sampling dates; native

Gao et al. 2018	*Artemisia gmelinii*	Gmelin's wormwood	Perennial desert shrub, evergreen, small	0.39				0.39	Central Loess Plateau, Shaanxi Prov, CN	37.2352	110.3354	1045	> 50m	N-facing slope 13o,		Loess Plateau	silty loam	Dw	shallow, mid, deep soil 0.6-			(Artimesia) vs introduced species
Goedhart & Pataki 2011	*Distichlis spicata*	salt grass	Perennial grass				0.00	0.00	Owens Valley CA, US	37.4118	-118.4265	1276	0.30		access to WT	deep inter-mountain, desert basin deposit	loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Distichlis spicata*	salt grass	Perennial grass				0.24	0.24	Owens Valley CA, US	36.9998	-118.2263	1177	1.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Distichlis spicata*	salt grass	Perennial grass				0.81	0.81	Owens Valley CA, US	37.2915	-118.3172	1218	1.80		access to WT		loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Distichlis spicata*	salt grass	Perennial grass				0.60	0.60	Owens Valley CA, US	36.7842	-118.1645	1174	2.00		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Distichlis spicata*	salt grass	Perennial grass				0.37	0.37	Owens Valley CA, US	36.8000	-118.1600	1156	3.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.31	0.31	Owens Valley CA, US	36.9998	-118.2263	1177	1.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.70	0.70	Owens Valley CA, US	37.2915	-118.3172	1218	1.80		access to WT		loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.80	0.80	Owens Valley CA, US	36.7842	-118.1645	1174	2.00		access to WT		loam, sandy loam, silty loam soils	Cs	O; linear mixing mdoel, 2 memebers: surface soil water (0-50cm?), GW (well water)	4	site locations determined from Pataki 2008; desert valley recharged by snow from Sierra's	
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.70	0.70	Owens Valley CA, US	36.8000	-118.1600	1156	3.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.62	0.62	Owens Valley CA, US	36.8180	-118.1580	1153	4.10		access to WT		loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.80	0.80	Owens Valley CA, US	36.9473	-118.2535	1188	5.00		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Atriplex torreyi*	Torrey's saltbush	Perennial desert shrub, woody				0.75	0.75	Owens Valley CA, US	36.7082	-118.1430	1178	5.70		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.83	0.83	Owens Valley CA, US	37.2822	-118.3635	1230	1.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.96	0.96	Owens Valley CA, US	37.2915	-118.3172	1218	1.80		access to WT		loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.83	0.83	Owens Valley CA, US	36.7842	-118.1645	1174	2.00		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.84	0.84	Owens Valley CA, US	36.8000	-118.1600	1156	3.20		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.82	0.82	Owens Valley CA, US	36.8180	-118.1580	1153	4.10		access to WT		loam, sandy loam, silty loam soils	BS		4		
Goedhart & Pataki 2011	*Ericameria nauseosa*	rubber rabbitbrush	Perennial desert shrub, woody				0.92	0.92	Owens Valley CA, US	36.7082	-118.1430	1178	5.70		access to WT		loam, sandy loam, silty loam soils	Cs		4		
Grossiord et al. 2017	*Juniperus monosperma*	one-seed juniper	Evergreen needleleaf tree	0.18				0.18	Los Alamos Survival-Mortality site, Los Alamos, NM, US	35.8218	-106.3028	2175		on plateau		on a plateau of fractured volcanic rock	40-55cm clay loam soils on volcanic tuff	Cf	H+O; SIAR in R, 3 members: 0-15, 15-55cm, and bedrock			control case only; mean of 3 growing seasons; 4 end members: shallow, deep	
Grossiord et al. 2017	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree	0.13				0.13	Los Alamos Survival-Mortality site, Los Alamos. NM. US	35.8218	-106.3028	2175		on plateau			40-55cm clay loam soils on volcanic tuff	Cf					
Gu et al. 2015	*Cyclobalanopsis glauca (Quercus glauca)*	ring-cupped oak, Japanese blue oak	Evergreen broadleaf tree		0.13	0.08	0.11	0.11	Gantong, Guangxi Prov. CN	25.0493	110.3380	176	1.75	steep slope 15m above valley		Epikarst hill	1.5m thick epikasrt zone, soil in fracks	Cw	H+O; IsoSource, 5 members: 0-	3	the precise hill can be located on GE	
Guo et al. 2018	*Acacia greggii*	catclaw acacia, catclaw mesquite	Deciduous broadleaf tree, legume	0.83				0.83	Desert site, Sonora, AZ, US	34.1800	-112.1600	799		well drained slopes		Edge of Colorado Plteau; desert foothill deposit	35cm sandy loam on bedrock	BS					
Guo et al. 2018	*Dodonaea viscosa*	Hopbush	Evergreen broadleaf shrub	0.56				0.56	Desert site, Sonora, AZ, US	34.1800	-112.1600	799		well drained slopes			35cm sandy loam on bedrock	BS					
Guo et al. 2018	*Prosopis velutina*	velvet mesquite	Deciduous broadleaf tree, legume	0.77				0.77	Desert site, Sonora, AZ, US	34.1800	-112.1600	799		well drained slopes			35cm sandy loam on bedrock	BS					
Guo et al. 2018	*Simmondsia chinensis*	goat nut, deer nut, pignut, wild hazel, quinine	Evergreen broadleaf shrub	0.54				0.54	Desert site, Sonora, AZ, US	34.1800	-112.1600	799		well drained slopes			35cm sandy loam on bedrock	BS					
Guo et al. 2018	*Ziziphus obtusifolia*	lotebush, graythorn, gumdrop tree	Perennial desert shrub, thorn	0.32				0.32	Desert site, Sonora, AZ, US	34.1800	-112.1600	799		well drained slopes			35cm sandy loam on bedrock	BS					
Guo et al. 2018	*Arctostaphylos pungens*	pointleaf manzanita	Evergreen broadleaf shrub	0.27				0.27	Pinyon-juniper site, AZ, US	34.7600	-111.6300	1778		well drained slopes			clay	Cs				Authors state that sites are not riparian, no evidence of using GW; mean of June and Aug sampling; a great study	
Guo et al. 2018	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree	0.18				0.18	Pinyon-juniper site, AZ, US	34.7600	-111.6300	1778		well drained slopes		Edge of Colorado Plateau; S-facing slope	clay	Cs					
Guo et al. 2018	*Mahonia fremontii*	Frémont's mahonia	Evergreen broadleaf shrub	0.30				0.30	Pinyon-juniper site, AZ, US	34.7600	-111.6300	1778		well drained slopes			clay	Cs	O+H; Bayesian mixing model framework using the				
Guo et al. 2018	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree	0.12				0.12	Pinyon-juniper site, AZ, US	34.7600	-111.6300	1778		well drained slopes			clay	Cs					

Guo et al. 2018	*Pinus ponderosa*	Pondersora pine	Evergreen needleleaf tree			0.22			0.22	Ponderosa site, AZ, US	35.0200	-111.6600	2140		well drained slopes		Edge of Colorado Plateau; W-facing slope, near ridge	clay	Cs	'simmr' package; 3 emebers: 0-2cm, 19-36cm, below 36cm (deep soil, winter precip used)		showing as annual P increases with elevation, plants use less past winter's P; it also documented all site information - the most complete report!
Guo et al. 2018	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.31			0.31	Ponderosa site, AZ, US	35.0200	-111.6600	2140		well drained slopes			clay	Cs			
Guo et al. 2018	*Pinus ponderosa*	Pondersora pine	Evergreen needleleaf tree			0.21			0.21	Mixed-conifer site, AZ, US	35.3500	-111.7300	2590		well drained slopes			sandy loam	Ds			
Guo et al. 2018	*Pinus strobiformis*	southwestern white pine, Mexican white	Evergreen needleleaf tree			0.15			0.15	Mixed-conifer site, AZ, US	35.3500	-111.7300	2590		well drained slopes		Edge of Colorado Plateau; W-facing mid slope, base of a ski resort	sandy loam	Ds			
Guo et al. 2018	*Populus tremuloides*	quaking aspen, trembling aspen	Deciduous broadleaf tree			0.20			0.20	Mixed-conifer site, AZ, US	35.3500	-111.7300	2590		well drained slopes			sandy loam	Ds			
Guo et al. 2018	*Pseudotsuga menziesii*	Douglas fir	Evergreen needleleaf tree			0.21			0.21	Mixed-conifer site, AZ, US	35.3500	-111.7300	2590		well drained slopes			sandy loam	Ds			
Guo et al. 2018	*Abies lasiocarpa*	subalpine fir or Rocky Mountain fir	Evergreen needleleaf tree			0.19			0.19	Spruce-fir site, AZ, UA	35.3700	-111.6700	2965		well drained slopes			sandy loam	Ds			
Guo et al. 2018	*Picea engelmannii*	Engelmann spruce, white spruce	Evergreen needleleaf tree			0.17			0.17	Spruce-fir site, AZ, UA	35.3700	-111.6700	2965		well drained slopes		Edge of Colorado Plateau; N-facing slope, bnear summit	sandy loam	Ds			
Guo et al. 2018	*Pinus strobiformis*	southwestern white pine, Mexican white	Evergreen needleleaf tree			0.19			0.19	Spruce-fir site, AZ, UA	35.3700	-111.6700	2965		well drained slopes			sandy loam	Ds			
Guo et al. 2018	*Populus tremuloides*	quaking aspen, trembling aspen	Evergreen needleleaf tree			0.23			0.23	Spruce-fir site, AZ, UA	35.3700	-111.6700	2965		well drained slopes			sandy loam	Ds			
Hao et al. 2013	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree	0.16		0.16	0.84	0.84	1.00	northeastern edge Taklimakan Desert, Xinjiang Prov, CN	41.0611	86.6231	842	4.40		on banks of Tarim river	valley alluvium deposit	sandy/sandy loam	BW	O; IsoSoource, 4 members:	4	1-3m soil taken to represent Source-2 (it
Hasselquist & Allen 2009	*Grindelia fraxino-pratensis*	Ash Meadows gumweed	Perennial forb, meadow, shrub					0.58	0.58	Amargosa Valley, CA, US	36.3028	-116.4139	623	<1		desert valley floor	desert valley deposit	silts and clay	BW	H+O; IsoSource, 4 members: 0-10, 10-20, 20-30cm, GW	4	
Hasselquist & Allen 2009	*Nitrophila mohavensis*	Amargosa niterwort	Perennial forb, sucullent, halophyte					0.12	0.12	Amargosa Valley, CA, US	36.3028	-116.4139	623	<1		desert valley floor		silts and clay	BW		4	
Henschel et al. 2018	*Welwitschia mirabilis*	welwitschia	Evergreen broadleaf shrub, gymnosperm					0.00	0.00	Welwitschia Plain, coastal Namibia	-22.6711	14.9851	371	57-75	high Namibia desert plain		sand/gravel on gypsum on calcite/sand	sand/gravel	BW	H+O; no model used, but no root	3	GW use ruled out by WTD and isotopes; plants
Huang & Zhang 2015	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, deciduous.	0.60	0.51	0.56			0.56	Shapotou, SE Tengger Desert, Ningxia Prov, CN	37.5333	105.0333	1318	80.00	well-drained dunes		stablized sand dunes	sand	BW	H+O; IsoSource, 7 members: 5,10, 20, 60, 100, 150, 200cm		P=188mm, >1m considered deep recharge by large P events; mean of 4 age groups
Huang & Zhang 2015	*Artemisia ordosica*	sagebrush	Perennial desert shrub, evergreen, small	0.12	0.11	0.12			0.12	Shapotou, SE Tengger Desert, Ningxia Prov, CN	37.5333	105.0333	1318	80.00	well-drained dunes		stablized sand dunes	sand	BW			
Huo et al. 2018	*Ziziphus jujuba*	jujube, red date, Chinese date	Deciduous broadleaf tree			0.42			0.42	Central Loess Plateau, Shaanxi Prov, CN	37.2500	110.3000	1100	> 50m	well-drained loess		Loess Plateau	silt loam	Dw	H+O; IsoSource; 3 end		only mature stands; lon off (not 118)
Jespersen et al. 2018	*Betula nana*	dwarf birch	Deciduous broadleaf shrub			0.26			0.26	Toolik Field Sta, N foothill Brooks Range, AK, US	68.6298	-149.5778	760	0.50		on poorly drained permafrost.	thin (50cm) organic soil on	organic soil	Df	H+O; SIAR in R; 4 end members: tussock, 0–10cm, >10 cm, snowmelt		Frost table, not WT; snow depth manipulation did not change water source partition
Jespersen et al. 2018	*Salix pulchra*	diamondleaf willow, tealeaf willow, and thin	Deciduous broadleaf shrub			0.44			0.44	Toolik Field Sta, N foothill Brooks Range, AK, US	68.6298	-149.5778	760	0.50		on poorly drained permafrost.		organic soil	Df			
Jespersen et al. 2018	*Eriophorum vaginatum*	hare's-tail cottongrass, tussock	Perennial grass, tussock			0.11			0.11	Toolik Field Sta, N foothill Brooks Range, AK, US	68.6298	-149.5778	760	0.50		on poorly drained permafrost.		organic soil	Df			
Jespersen et al. 2018	*Rhododendron tomentosum (Ledum palustre)*	marsh Labrador tea, northern Labrador tea or	Evergreen broadleaf shrub			0.11			0.11	Toolik Field Sta, N foothill Brooks Range, AK, US	68.6298	-149.5778	760	0.50		on poorly drained permafrost.		organic soil	Df			
Jia et al. 2012	*Caragana intermedia*	pea shrub	Perennial forb, woody, legume					0.08	0.08	Site-1, 5yr-old, Gonghe Desert Ecosystem Research Station,	36.2336	100.2169	2890	<5		WT 3-5m accessible		sand	BS	H+O; IsoSource, 7 members: 10, 20, 30, 50, 100, 150, well water	3	locally recharged soil moisture; >1.5m assumed Source-2, based on soil moisture/root buldge above 1m
Jia et al. 2012	*Caragana intermedia*	pea shrub	Perennial forb, woody, legume			0.05		0.06	0.11	Site-2, 9yr-old, Gonghe Desert Ecosystem Research Station,	36.2501	100.2169	2870	<5		WT 3-5m accessible	sand dunes	sand	BS		3	
Jia et al. 2012	*Caragana intermedia*	pea shrub	Perennial forb, woody, legume			0.04		0.03	0.07	Site-3, 25yr-old, Gonghe Desert Ecosystem Research	36.2834	100.2667	2878	<5		WT 3-5m accessible		sand	BS		3	
Jiang et al. 2019	*Rhus chinensis*	Chinese sumac, nutgall tree	Deciduous broadleaf shrub, large	0.56	0.10	0.33			0.33	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Choerospondias axillaris*	Nepali hog plum	Deciduous broadleaf tree	0.51	0.18	0.35			0.35	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Michelia maudiae (Magnolia maudiae)*	Smiling Monkey Forest Tree	Evergreen broadleaf tree	0.64	0.13	0.39			0.39	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			all understory shrubs in a mature pine plantation; 3 soil layers as endmembers: 0-20cm, 20-60cm, 60cm-2m; deepest layer assumed to represent source-2; No site loction info, even in the
Jiang et al. 2019	*Adinandra millettii*	Millet's Adinandra	Evergreen broadleaf shrub, large	0.60	0.20	0.40			0.40	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Liquidambar formosana*	Chinese sweet gum, Formosan gum	Deciduous broadleaf tree	0.72	0.23	0.48			0.48	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Schima superba*	??	Evergreen broadleaf shrub	0.56	0.17	0.37			0.37	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102			many reserviors with water level only 1-2m below surface of		iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Camellia oleifera*	oil-seed camellia or tea oil camellia	Evergreen broadleaf shrub, large	0.65	0.26	0.46			0.46	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102				red tropical soil over rolling hills	iron-rich red soil (clay?)	Cf	O; IsoSource, 3 members: 0-20, 20-60,		

Jiang et al. 2019	*Quercus fabri*	Faber's oak	Deciduous broadleaf shrub	0.60	0.20	0.40				0.40	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102			surface of surounding hills		iron-rich red soil (clay?)	Cf	60-200cm		even in the Jiang et al 2018 paper on the same site; loction guessed to be a planation with 70% canopy cover on GE, to the east of Qianyanzhou;
Jiang et al. 2019	*Vaccinium bracteatum*	sea bilberry	Evergreen broadleaf shrub	0.55	0.20	0.38				0.38	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Symplocos confusa*	??	Evergreen broadleaf shrub	0.22	0.20	0.21				0.21	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Eurya muricata*	??	Evergreen broadleaf shrub	0.64	0.21	0.43				0.43	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Viburnum dilatatum*	linden arrowwood, linden viburnum	Deciduous broadleaf shrub	0.52	0.18	0.35				0.35	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jiang et al. 2019	*Rhaphiolepis indica*	Indian hawthorn, India hawthorn, Hong	Evergreen broadleaf shrub	0.33	0.20	0.27				0.27	Qianyanzhou, Eco Sta, Jiangxi Prov, CN	26.7457	115.0797	102					iron-rich red soil (clay?)	Cf			
Jobbagy et al. 2011	*Prosopis alpataco*	mesquite	Deciduous broadleaf shrub, legume				0.97	1.00	0.99	0.99	High, Site-C, Central Monte desert, Argentina	-32.3955	-68.0366	554	7.10		low interdune		sandy	BS	O, linear mixing, 2 members: local rain(soil, sampled to 2.5m in interdune), GW from the Andes	4	P=156mm, 80% Oct-Mar; shallow GW sourced from Andes P and Mendos river out of the Andes
Jobbagy et al. 2011	*Larrea divaricata*	chaparral	Evergreen broadleaf shrub, small leaf				0.95	0.71	0.83	0.83	High, Site-C, Central Monte desert, Argentina	-32.3955	-68.0366	554	7.10		low interdune		sandy	BS		4	
Jobbagy et al. 2011	*Capparis atamisquea*	??	Perennial desert shrub					0.61	0.61	0.61	High, Site-C, Central Monte desert, Argentina	-32.3955	-68.0366	554	7.10		low interdune	eoalian sandy plain near lower Medoza	sandy	BS		4	
Jobbagy et al. 2011	*Prosopis flexuosa*	algarrobo	Semi-deciduous broadleaf tree, legume				0.87	0.53	0.70	0.70	High, Site-C, Central Monte desert, Argentina	-32.3955	-68.0366	554	7.10		low interdune		sandy	BS		4	
Jobbagy et al. 2011	*Panicum urvilleanum*	desert panicgrass, silky panicgras	Perennial grass, stolons					0.25	0.25	0.25	High, Site-C, Central Monte desert, Argentina	-32.3955	-68.0366	554	7.10		low interdune		sandy	BS		4	
Kolb et al. 1997	*Acer negundo*	Box elder, boxelder maple, ash-leaved	Deciduous broadleaf tree				0.97	0.89	0.93	0.93	ephemeral stream site, Oak Creek Canyon, AZ, US	34.9925	-111.7443	1650	10.67		riparian	coarse valley alluvium	sandy-skeletal	Cs	O; linear mixing model, 2 members: shallow soil (0-30cm)	4	the 2 sites are 0.4km apart, at same eleation of 1650, and ephemeral steam is 0.2km
Kolb et al. 1997	*Acer negundo*	Box elder, boxelder maple, ash-leaved	Deciduous broadleaf tree				1.00	0.66	0.83	0.83	Perennial stream site, Oak Creek Canyon, AZ, US	34.9960	-111.7379	1650	10.67		riparian		sandy-skeletal	Cs		4	
Kurz-Besson 2006	*Quercus suber*	cork oak	Evergreen broadleaf tree				0.51		0.51	0.51	Herdade da Mitra, S. PT	38.5277	-8.0230	221	5.00		~70m from a river channel	sandy soil over Aplite and Gneise	sandy soil over Aplite and Gneise	Cs	O+H; 3 members: P, GW, stream	3	WTD from a well 500m away
Lefroy et al. 2001	*Chamaecytisus proliferus*	silky cytisus, tagasaste, tree lucerne, tree-	Evergreen broadleaf shrub, legume						0.61	0.61	Moora, 150km north of Perth, AU	-30.8594	116.4944	297	5.00		near salt crusted valleys	deep sand on coastal plain	sand	Cf	H; combining 2-member	3	very flat, hydrology is vertical
Li et al. 2013	*Artemisia desertorum*	budsage	Perennial desert shrub, deciduous, small	0.50	0.63	0.57	0.26	0.12	0.19	0.76	Hongjiannao Ecological Reserve, Shenmu Cty, N. Shaanxi Prov, CN	39.0724	109.8632	1224	1.00		100m from lake		loamy sand	BS		4	in a desert lake basin; local P=450mm;
Li et al. 2013	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, legume	0.28	0.41	0.35	0.26	0.13	0.20	0.54	Hongjiannao Ecological Reserve, Shenmu Cty, N. Shaanxi Prov. CN	39.0655	109.8903	1229	1.10		500m from lake		loamy sand	BS		4	author mention infiltration shallow; 50-100cm depth considered Source-2; although directly above WT, capilary rise is low in sand
Li et al. 2013	*Pinus tabuliformis*	Manchurian red pine, Southern Chinese pine	Evergreen needleleaf tree	0.58	0.56	0.57	0.37	0.19	0.28	0.85	Hongjiannao Ecological Reserve, Shenmu Cty, N. Shaanxi Prov. CN	39.0631	109.9001	1225	1.00		100m from lake	desert lake basin (Hongjian Lake)	loamy sand	BS	H; IsoSource, 4 members: 0-10, 10-50, 50-100cm, GW	4	
Li et al. 2013	*Populus simonii*	Simon poplar	Deciduous broadleaf tree	0.12	0.69	0.41	0.88	0.15	0.52	0.92	Hongjiannao Ecological Reserve, Shenmu Cty, N. Shaanxi Prov, CN	39.0699	109.8851	1228	1.05		1km fro lake		loamy sand	BS		4	
Li et al. 2013	*Salix psammophila*	sand willow	Deciduous broadleaf shrub	0.28	0.5	0.39	0.32	0.16	0.24	0.63	Hongjiannao Ecological Reserve, Shenmu Cty, N. Shaanxi Prov. CN	39.0677	109.9195	1224	1.00		100m from lake		loamy sand	BS		4	
Liu-H et al. 2015	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.66			0.32	0.98	Ulan Tug, Inner Mongolia, CN	42.0761	101.0379	928	2.90		riparian	desert floodplain deposit	thick sand and thin clay beds alternating	BW	O+H; IsoSource, 5 members: 0-	4	mean of mature and over-mature tree
Liu-J et al. 2019	*Fraxinus chinensis Roxb, Pagoda, etc*	Chinese ash	Evergreen broadleaf tree	0.61	0.28	0.45				0.45	Longche karst valley, near Chongqing, Sichuen Prov. CN	29.7102	106.4327	437		karst slope		50cm soil on karst rock	not given, likely coarse	Cw	H + O; IsoSource, 3 members: 0.2, 0.4, spring (rock water)		only tunnel-unaffected site; no WTD info, so spring water likely refers to deep infiltration
Liu-J et al. 2019	*Viburnum Chinshanense Graebn. etc*	viburnum	Evergreen broadleaf shrub	0.57	0.17	0.37				0.37	Longche karst valley, near Chongqing, Sichuen Prov. CN	29.7102	106.4327	437		karst slope			not given, likely coarse	Cw			
Liu-R et al. 2018	*Haloxylon ammodendron*	saxaul, black saxaul, sometimes	Evergreen needleleaf shrub						0.91	0.91	S edge Gurbantonggut Desert, Xinjiang Prov, CN	44.2914	87.9360	475	3.75		WT 3-5m accessible to plants	eolian sandy soil at foothills	eolian sandy	BS	O; IsoSource, 2 end	4	P=163mm, T recharged by snow runoff
Liu-W et al. 2010	*Pometia tomentosa*	??	Semi-deciduous broadleaf tree						0.64	0.64	Menglun, Yuennan Prov, CN	21.9554	101.2618	750	2.50		lower hill	tropical mountains SW China, yellow sand from purple sandstone	sand over fractured sandstone	Cw	O; 2-member linear mixing: shallow soil (0-60cm)	3	NE of town, z-750, between 2 hills E-W; Authors lumped >0.6m as deep water; soil at
Liu-W et al. 2010	*Gironniera subaequalis*	??	Evergreen broadleaf tree						0.39	0.39	Menglun, Yuennan Prov, CN	21.9554	101.2618	750	2.50		lower hill		sand over fractured sandstone	Cw		3	
Liu-W et al. 2014	*Celtis wightii*	??	Evergreen broadleaf tree	0.79		0.79				0.79	Xishuangbanna, Yuennan Prov, CN	21.8984	101.2394	700	10.00	on karst hill			0.4m skeletal soil on limestone	Cw	O+H; IsoSource, 3 members: fog, shallow soil (0-40cm), and bedrock water (40-140cm)		soil-rock sampled to 1.4m; plants use "rock moisture"; GW is deeper than sampling depth, not analyzed; SW facing 13o
Liu-W et al. 2014	*Cleistanthus sumatranus*	??	Evergreen broadleaf tree	0.63		0.63				0.63	Xishuangbanna, Yuennan Prov, CN	21.8984	101.2394	700	10.00	on karst hill		tropical, karst mountains of SW China	0.4m skeletal soil on limestone	Cw			
Liu-W et al. 2014	*Lasiococca comberi*	??	Evergreen broadleaf tree	0.85		0.85				0.85	Xishuangbanna, Yuennan Prov, CN	21.8984	101.2394	700	10.00	on karst hill			0.4m skeletal soil on limestone	Cw			
Liu-Z et al. 2017	*Platycladus orientalis*	Chinese thuja, Oriental arborvitae	Evergreen needleleaf tree	0.58	0.14	0.36				0.36	Jiufeng Nat For Park, SW Beijing, CN	40.0656	116.0888	236		well drained hills			clay with hi humus; increasing	Dw	H+O; IsoSource, 4 members: 0.2, 0.6, 1m		spring as deep water source, recharged in past season; summer rain infiltrated
Liu-Z et al. 2017	*Pinus tabuliformis*	Manchurian red pine, Southern Chinese pine	Evergreen needleleaf tree	0.20	0.06	0.13				0.13	Jiufeng Nat For Park, SW Beijing, CN	40.0656	116.0888	236		well drained hills		hilly terrain with <1m soil	clay with hi humus; increasing	Dw			

Liu-Z et al. 2017	*Robinia pseudoacacia*	black locust	Deciduous broadleaf tree, legume	0.05	0.19	0.12		0.12	Jiufeng Nat For Park, SW Beijing, CN	40.0656	116.0888	236		well drained hills		clay with hi humus; increasing	Dw	and spring (Deep rock water or winter rain)		infiltrated entire 1m soil, so the deepest soil layer use (0.6-1m) is not recorded;
Liu-Z et al. 2017	*Quercus variabilis*	Chinese cork oak	Deciduous broadleaf tree	0.12	0.41	0.27		0.27	Jiufeng Nat For Park, SW Beijing, CN	40.0656	116.0888	236		well drained hills		clay with hi humus; increasing	Dw			
Liu-Z et al. 2018	*Platycladus orientalis*	Chinese thuja, Oriental arborvitae	Evergreen needleleaf tree	0.14	0.18	0.16		0.16	National For Ecosys Res Sta, SW Beijing, CN	40.0505	116.0765	450		well drained hills		clay with hi humus; increasing	Dw	H+O; IsoSource, 4 members: 0.2, 0.6, 1m and spring (Deep rock water or winter rain)		spring as deep water source, recharged in past season; summer rain infiltrated entire 1m soil, so the deepest soil layer use (0.6-1m) is not recorded;
Liu-Z et al. 2018	*Quercus variabilis*	Chinese cork oak	Deciduous broadleaf tree	0.11	0.28	0.20		0.20	National For Ecosys Res Sta, SW Beijing, CN	40.0505	116.0765	450		well drained hills	hilly terrain with <1m soil over bedrock	clay with hi humus; increasing	Dw			
Liu-Z et al. 2018	*Vitex negundo L. var. heterophylla*	Chinese chaste tree, five-leaved chaste tree	Deciduous broadleaf shrub, large	0.16	0.13	0.15		0.15	National For Ecosys Res Sta, SW Beijing, CN	40.0505	116.0765	450		well drained hills		clay with hi humus; increasing	Dw			
Liu-Z et al. 2018	*Corylus heterophylla Fisch*	Asian hazel	Deciduous broadleaf shrub, large	0.10	0.07	0.09		0.09	National For Ecosys Res Sta, SW Beijing, CN	40.0505	116.0765	450		well drained hills		clay with hi humus; increasing	Dw			
McCole & Stern 2007	*Juniperus ashei*	Ashe juniper, post cedar, mountain cedar	Evergreen needleleaf tree	0.52	0.00	0.26		0.26	Site-1, Edwards Plateau, SC Texas	29.8572	-98.4787	347		well drained karst above channel head	karst plateau	0.4m soil over kasrt limestone	Cf	O+H; linear mixing, 2 members: soil water (0.1-0.2m), and deep		spring water assumed to epresents "deep" water
McCole & Stern 2007	*Juniperus ashei*	Ashe juniper, post cedar, mountain cedar	Evergreen needleleaf tree	0.44	0.00	0.22		0.22	Site-3, Edwards Plateau, SC Texas	29.8521	-98.4849	354		well drained karst above channel head		0.4m soil over kasrt limestone	Cf			
Moore et al. 2016	*Arundo donax*	giant cane, carrizo, arundo, Spanish cane	Perennial grass, giant, cane				0.55	0.55	lower Rio Grande, TX, US	29.2220	-100.7809	255	2.69	on floodplain	floodplain of lower Rio Grande	loamy fine sand, deep	BS	O+H; SIAR in R, 3 members:	4	14% from flooding water recharing GW;
Nardini et al. 2016	*Ostrya carpinifolia*	European hop-hornbeam	Deciduous broadleaf tree	0.30		0.30		0.30	Bac Cave, Trieste, NE IT	45.6333	13.8667	400		well-drained kast hill	karst limestone in NE Italy Apls (clay soil+roots in cave 16m deep).	thin or no soil on limestone	Cf	O; mixing model based o IsoSource, 2 members: shallow soil water (using rain water), deep cave		Clay soil in cave below site sampled; assumed to represent deep soil water; rain water used as shallow soil water
Nardini et al. 2016	*Quercus pubescens*	downy oak, pubescent oak	Deciduous broadleaf tree	0.55		0.55		0.55	Bac Cave, Trieste, NE IT	45.6333	13.8667	400		well-drained kast hill		thin or no soil on limestone	Cf			
Nardini et al. 2016	*Prunus mahaleb*	mahaleb cherry, St Lucie cherry	Deciduous broadleaf tree	0.68		0.68		0.68	Bac Cave, Trieste, NE IT	45.6333	13.8667	400		well-drained kast hill		thin or no soil on limestone	Cf			
Nie et al. 2011	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.05	0.03	0.04		0.04	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf	O+H; IsoSource, 6 members: rain, 0-5, 5-10, 10-20, 20-30, GW (spring)		location aquired from the research station website on Huanjiang Observation and Research Station for Karst Ecosystems, Chinese Academy of Sciences - China; since the sites are ner the ridges, and since WT depth is not known, plant use of spring water is best interpreted as using deep rock moisture
Nie et al. 2011	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.24	0.28	0.26		0.26	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		thin soil on dolostone	Cf			
Nie et al. 2011	*Ficus orthoneura*	Fig	Evergreen broadleaf shrub, large		0.96	0.96		0.96	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf			
Nie et al. 2011	*Radermachera sinica*	china doll, serpent tree, emerald tree	Evergreen broadleaf tree	0.99	0.37	0.68		0.68	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge	karst dolostone, SW China	dolostone outcrop	Cf			
Nie et al. 2011	*Radermachera sinica*	china doll, serpent tree, emerald tree	Evergreen broadleaf tree	0.87	0.59	0.73		0.73	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		thin soil on dolostone	Cf			
Nie et al. 2011	*Scheffera octophylla*	Ivy Tree	Evergreen broadleaf shrub, large		0.87	0.87		0.87	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf			
Nie et al. 2011	*Stercolia euosma*	??	Semi-deciduous broadleaf tree		0.88	0.88		0.88	Outcrop, Huanjiang, Guangxi Prov, CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf			
Nie et al. 2012	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.17		0.17		0.17	Site-1, Outcrop, Huanjiang, Guanxi Prov. CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf	O; IsoSource, 6 members, rain, spring (GW), 0-5, 5-10, 10-20, 20-30cm for site-1, 0-5, 5-20, 20-30, 30-1m at site-2		since the sites are ner the ridges, and since WT depth is not known, plant use of spring water is best interpreted as using deep rock moisture
Nie et al. 2012	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.22		0.22		0.22	Site-1, Thin soil, Huanjiang, Guanxi Prov. CN	24.7570	108.3144	390		near ridge		thin soil on dolostone	Cf			
Nie et al. 2012	*Radermachera sinica*	china doll, serpent tree, emerald tree	Evergreen broadleaf tree	0.58		0.58		0.58	Site-1, Outcrop, Huanjiang, Guanxi Prov, CN	24.7570	108.3144	390		near ridge		dolostone outcrop	Cf			
Nie et al. 2012	*Radermachera sinica*	china doll, serpent tree, emerald tree	Evergreen broadleaf tree	0.49		0.49		0.49	Site-1, Thin soil, Huanjiang, Guanxi Prov. CN	24.7570	108.3144	390		near ridge	karst dolostone, SW China	thin soil on dolostone	Cf			
Nie et al. 2012	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.06		0.06		0.06	Site-2, Outcrop, Huanjiang, Guanxi Prov. CN	24.7580	108.3123	340		near ridge		dolostone outcrop	Cf			
Nie et al. 2012	*Alchornea trewioides*	??	Deciduous broadleaf shrub	0.09		0.09		0.09	Site-2, Thin soil, Huanjiang, Guanxi Prov, CN	24.7580	108.3123	340		near ridge		thin soil on dolostone	Cf			
Nie et al. 2012	*Radermachera sinica*	china doll, serpent tree, emerald tree	Evergreen broadleaf tree	0.21		0.21		0.21	Site-2, Outcrop, Huanjiang, Guanxi Prov, CN	24.7580	108.3123	340		near ridge		dolostone outcrop	Cf			
Nippert & Knapp 2007	*Andropogon gerardii*	big bluestem	Perennial grass	0.08	0.47	0.28		0.28	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375		near stream	Flint Hills of E Kansas; thin soil over chert-bearing shales and limestones; lowland soil can be 2m deep	thin soil on shale/ limestone	Cf	O; IsoSource, 2 members: 0-30cm soil, deep soil (using winter P)		winter P used as proxy for deep soil water; soil sampled to 30cm depth due to rocks; June 2004 is the only month with no water stress; unfortunately the results are averaged by species and month, but
Nippert & Knapp 2007	*Schizachyrium scoparium*	little bluestem	Perennial grass	0.04	0.44	0.24		0.24	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375		near stream		thin soil on shale/ limestone	Cf			
Nippert & Knapp 2007	*Sorghastrum nutans*	Indiangrass	Perennial grass	0.07	0.38	0.23		0.23	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375		near stream		thin soil on shale/ limestone	Cf			
Nippert & Knapp 2007	*Ceanothus americanus*	New Jersey tea	Deciduous broadleaf shrub	0.12	0.76	0.44		0.44	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375		upland		thin soil on shale/ limestone	Cf			
Nippert & Knapp 2007	*Amorpha canescens*	leadplant	Deciduous broadleaf shrub	0.14	0.61	0.38		0.38	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375		near stream		thin soil on shale/ limestone	Cf			

Nippert & Knapp 2007	*Lespedeza capitata*	roundhead lespedeza	Perennial forb	0.10	0.56	0.33				0.33	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375			near stream		thin soil on shale/ limestone	Cf			averaged over the three topo position, athough authors note significant
Nippert & Knapp 2007	*Vernonia baldwinii*	Baldwin's ironweed	Perennial forb	0.15	1.00	0.58				0.58	Konza Prairie Biological Station, KS, US	39.0833	-96.5833	375			near stream		thin soil on shale/ limestone	Cf			
Palacio et al. 2017	*Helianthemum squamatum*	rock rose, sunrose, rushrose, or	Evergreen needleleaf shrub (extracting				0.00	0.00	0.00	0.00	Hilltop, gypsum outcrop, Alfajarin, NE Spain	41.6300	-0.6878	315		on hilltop			coarse desert gypsum soil	BS			
Palacio et al. 2017	*Helianthemum syriacum*	rock rose, sunrose, rushrose, or	Evergreen needleleaf shrub				0.00	0.00	0.00	0.00	Hilltop, gypsum outcrop, Alfajarin, NE Spain	41.6300	-0.6878	315		on hilltop		gypsum outcrop	coarse desert gypsum soil	BS			strong dependence on crystaline gypsum water
Palacio et al. 2017	*Lepidium subulatum*	??	Perennial desert shrub				0.00	0.00	0.00	0.00	Hilltop, gypsum outcrop, Alfajarin, NE Spain	41.6300	-0.6878	315		on hilltop			coarse desert gypsum soil	BS			
Palacio et al. 2017	*Linum suffruticosum*	??	Perennial desert shrub				0.00	0.00	0.00	0.00	Hilltop, gypsum outcrop, Alfajarin, NE Spain	41.6300	-0.6878	315		on hilltop			coarse desert gypsum soil	BS	H + O, SIAR for R; 4 end members: 0-10cm, 10-20cm, gypsum crystal water, and GW (springs)		
Palacio et al. 2017	*Gypsophila struthium subsp. hispanica*	??	Perennial desert shrub				0.83	0.60	0.72	0.72	Foothill, gypsum outcrop, Alfajarin, NE Spain	41.6302	-0.6882	305			access to WT		coarse desert gypsum soil	BS		4	
Palacio et al. 2017	*Ononis tridentata*	restharrows	Perennial forb, legume				0.56	0.50	0.53	0.53	Foothill, gypsum outcrop, Alfajarin, NE Spain	41.6302	-0.6882	305			access to WT		coarse desert gypsum soil	BS		4	WT depth not given; spring water used as surrogate; rooting depth data available; wonderful illustration
Palacio et al. 2017	*Artemisia herba-alba*	white wormwood	Evergreen needleleaf shrub				0.12	0.32	0.22	0.22	Plain, gypsum outcrop, Alfajarin, NE Spain	41.6314	-0.6891	280			access to WT	soil with clay and marl	coarse desert gypsum soil	BS		4	
Palacio et al. 2017	*Salsola vermiculata*	Mediterranean saltwort	Perennial desert shrub				0.70	0.62	0.66	0.66	Plain, gypsum outcrop, Alfajarin, NE Spain	41.6314	-0.6891	280			access to WT		coarse desert gypsum soil	BS		4	
Palacio et al. 2017	*Atriplex halimus*	Mediterranean saltbush, Sea orache, Shrubby	Evergreen broadleaf shrub				0.70	0.75	0.73	0.73	Salin depression, gypsum outcrop, Alfajarin, NE Spain	41.6321	-0.6896	265			access to saline WT		coarse desert gypsum soil	BS		4	
Palacio et al. 2017	*Suaeda vera*	alkali seepweed, shrubby sea-blite	Evergreen needleleaf shrub				0.65	0.90	0.78	0.78	Salin depression, gypsum outcrop, Alfajarin, NE Spain	41.6321	-0.6896	265			access to saline WT		coarse desert gypsum soil	BS		4	
Phillips and Ehleringer 1995	*Acer grandidentatum*	Bigtooth Maple, Big-toothed Maple, Uvalde	Deciduous broadleaf tree	0.98		0.98				0.98	Slope-site, Red Butte Canyon Res Area, SLC, Utah, US	40.7963	-111.7790	1890		on S-facing slope 60m above main		mountain slope	sandy-gravely loam over shale-	Ds	H; linear mixing model, 2 members: winter-spring P and summer P, no soil water samples		end members are winter-spring P and summer P, no soil water samples
Phillips and Ehleringer 1995	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree	1.00		1.00				1.00	Slope-site, Red Butte Canyon Res Area, SLC, Utah, US	40.7963	-111.7790	1890		on S-facing slope 60m above main			sandy-gravely loam over shale-	Ds			
Phillips and Ehleringer 1995	*Acer grandidentatum*	Bigtooth Maple, Big-toothed Maple, Uvalde	Deciduous broadleaf tree	1.00		1.00				1.00	Stream-site, Red Butte Canyon Res Area, SLC, Utah, US	40.7827	-111.8004	1680			nwithin 3m of Perennial stream	mountain valley	sandy-gravely floodplain alluvium	Ds			
Phillips and Ehleringer 1995	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree	1.00		1.00				1.00	Stream-site, Red Butte Canyon Res Area, SLC, Utah, US	40.7827	-111.8004	1680			nwithin 3m of Perennial stream		sandy-gravely floodplain alluvium	Ds			
Qian et al. 2017	*Ginkgo biloba*	Gingko, maidenhair tree	Deciduous broadleaf tree				0.25	0.13	0.19	0.19	W. Shore of Taihu Lake, Jiangsu Prov, CN	31.4569	120.0007	5	2.00		lake riparian	clay lake depo	clay loam	Cf	H + O; IsoSource; 8 members	3	2-way GW-lake flow; mean of 3 very close sites
Qiu et al. 2019	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, legume			0.25				0.25	Gulang, N slope of Qilian Mountains, NE Tibet	37.4833	102.9000	2072		N slope, away from rivers			coarse alpine cold desert soil	BS			This again shows that large P and deep infiltration actually encourage deep uptake; countary to that when there is
Qiu et al. 2019	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, legume			0.10				0.10	Wushaoling, ridge of Qilian Mountains, NE Tibet	37.2000	102.8667	3045		near ridge		thin alpine soil on bedrock	coarse alpine cold desert soil	Dw	H + O; IsoSource, 4 members		
Qiu et al. 2019	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, legume			0.15				0.15	Tianzhu, S slope of Qilian Mountains, NE Tibet	36.9833	103.1833	2485		S slope, away from rivers			coarse alpine cold desert soil	Dw			
Querejeta et al. 2007	*Cordia dodecandra*	Ziricote	Semi-Deciduous broadleaf tree	0.38		0.38	0.03		0.03	0.41	Kampepén, N Yucatan, MX	20.8333	-89.6528	11	9.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw		3	
Querejeta et al. 2007	*Enterolobium cyclocarpum*	guanacaste, caro caro, monkey-ear	Deciduous broadleaf tree, legume	0.80		0.80	0.11		0.11	0.91	Kampepén, N Yucatan, MX	20.8333	-89.6528	11	9.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw	O+H; IsoSource, 4 members: soil (0-15cm), shallow bedrock (15-70), deep bedrock (0.7-3m), groundwater	3	plants using rock moisture; shallow and deep rock layers combined here; annual P=1m, 4-6 dry season, GW likely locally recharged in wet season
Querejeta et al. 2007	*Brosimum alicastrum*	breadnut or Maya nut	Evergreen broadleaf tree, large	0.82		0.82	0.11		0.11	0.93	Kampepén, N Yucatan, MX	20.8333	-89.6528	11	9.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw		3	
Querejeta et al. 2007	*Talisia olivaeformis*	??	Evergreen broadleaf tree	0.89		0.89	0.08		0.08	0.97	Kampepén, N Yucatan, MX	20.8333	-89.6528	11	9.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw		3	
Querejeta et al. 2007	*Ficus cotinifolia*	fig	Evergreen broadleaf tree	0.12		0.12	0.01		0.01	0.13	Santa Cruz, N Yucatan, MX	20.8792	-89.6533	14	9.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw		3	
Querejeta et al. 2007	*Spondias purpurea*	Jocote, red mombin, plum, purple mombin	Deciduous broadleaf tree	0.22		0.22	0.01		0.01	0.23	Hocabá, N Yucatan, MX	20.8156	-89.2450	14	20.00	well drained		shallow karst soil	thin, skeletal, rocky, hi organic	Aw		3	
Rong et al. 2011	*Pyracantha fortuneana*	Graber's Pyracantha	Evergreen broadleaf shrub	1.00	0.06	0.53				0.53	Bush-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov. CN	26.5205	106.3498	1306		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Viburnum utile*	Eskimo viburnum, Service	Evergreen broadleaf shrub	1.00	0.15	0.58				0.58	Bush-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov. CN	26.5205	106.3498	1306		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Rhamnus davurica*	Dahurian buckthorn	Deciduous broadleaf shrub	1.00	0.00	0.50				0.50	Bush-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov. CN	26.5205	106.3498	1306		well-drained			thin soil (0.4-0.6m) on karst	Cw	H+O; linear mixing model, 3 members: upper soil (0-0.1m), lower soil		
Rong et al. 2011	*Platycarya longipes*	??	Deciduous broadleaf shrub	0.94	0.29	0.62				0.62	Bush-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov. CN	26.5205	106.3498	1306		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Carpinus pubescens*	a hornbeam	Deciduous broadleaf tree		0.24	0.24				0.24	Bush-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov. CN	26.5205	106.3498	1306		well-drained		karst plateau in SW China, humid	thin soil (0.4-0.6m) on karst	Cw			3 end members: 0-0.1m, 0.1-0.5m, subcutaneous

Rong et al. 2011	*Pyracantha fortuneana*	Graber's Pyracantha	Evergreen broadleaf shrub	0.84	0.45	0.65				0.65	Forest-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov,	26.5142	106.3400	1353		well-drained		humid (1206mm/yr P)	thin soil (0.4-0.6m) on karst	Cw	(0.1-0.5m), subcutaneous water (deep rock water, using spring water as proxy)		subcutaneous zone (rock water, using springs)
Rong et al. 2011	*Viburnum utile*	Eskimo viburnum, Service	Evergreen broadleaf shrub	1.00	0.23	0.62				0.62	Forest-site, Wangjiazhai, Qingzhen Plateau. Guizhou Prov.	26.5142	106.3400	1353		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Rhamnus davurica*	Dahurian buckthorn	Deciduous broadleaf shrub	0.86	0.22	0.54				0.54	Forest-site, Wangjiazhai, Qingzhen Plateau. Guizhou Prov.	26.5142	106.3400	1353		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Platycarya longipes*	??	Deciduous broadleaf shrub		0.12	0.12				0.12	Forest-site, Wangjiazhai, Qingzhen Plateau, Guizhou Prov,	26.5142	106.3400	1353		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Rong et al. 2011	*Carpinus pubescens*	a hornbeam	Deciduous broadleaf tree	0.00	0.22	0.11				0.11	Forest-site, Wangjiazhai, Qingzhen Plateau. Guizhou Prov.	26.5142	106.3400	1353		well-drained			thin soil (0.4-0.6m) on karst	Cw			
Saha et al. 2015	*Capparis flexuosa*	falseteeth	Evergreen broadleaf tree	0.42	0.40	0.41	0.36	0.10	0.23	0.64	Buttonwood Hammock, Everglades Nat Park. Florida. US	25.1751	-80.9218	0.5	0.38	everglades wetland			clay marl on limestone	Aw		3	
Saha et al. 2015	*Eugenia foetida*	Spanish stopper, boxleaf stopper	Evergreen broadleaf tree	0.35	0.98	0.67	0.30	0.00	0.15	0.82	Buttonwood Hammock, Everglades Nat Park, Florida, US	25.1751	-80.9218	0.5	0.38	everglades wetland			clay marl on limestone	Aw		3	
Saha et al. 2015	*Piscidia piscipula*	Florida fishpoison tree, Jamaican	Evergreen broadleaf tree	0.30	0.00	0.15	0.40	0.95	0.68	0.83	Buttonwood Hammock, Everglades Nat Park. Florida. US	25.1751	-80.9218	0.5	0.38	everglades wetland			clay marl on limestone	Aw		3	difficult to read the graph Fig 4 for soruce proportions - the 3 sources don't add up to 100%; mean water table is below sea level??? Where GE shows =1m, the site is raised to 0.5m (GE round to 1m)
Saha et al. 2015	*Chromolae frustrata*	Cape Sable false thoroughwort, Cape Sable	Perennial forb	0.05	0.90	0.48	0.02	0.01	0.02	0.49	Buttonwood Hammock, Everglades Nat Park. Florida. US	25.1751	-80.9218	0.5	0.38	everglades wetland			clay marl on limestone	Aw	O; IsoSource, 3 members: shallow soil (0-5cm), deep soil (5-30), groundwater	3	
Saha et al. 2015	*Conocarpus erectus*	buttonwood or button mangrove	Evergreen broadleaf shrub, mangrove	0.50	0.70	0.60	0.40	0.00	0.20	0.80	Buttonwood Hammock, Everglades Nat Park, Florida, US	25.1751	-80.9218	0.5	0.38	everglades wetland	Everglade wetlands on limestone platform		clay marl on limestone	Aw		3	
Saha et al. 2015	*Eugenia foetida*	Spanish stopper, boxleaf stopper	Evergreen broadleaf tree	0.30	0.05	0.18	0.40	0.00	0.20	0.38	Buttonwood Priarie, Everglades Nat Park, Florida. US	25.1383	-80.9723	0.4	0.33	everglades wetland			clay marl on limestone	Aw		3	
Saha et al. 2015	*Piscidia piscipula*	Florida fishpoison tree, Jamaican	Deciduous broadleaf tree	0.70	0.25	0.48	0.10	0.02	0.06	0.54	Buttonwood Priarie, Everglades Nat Park, Florida, US	25.1383	-80.9723	0.4	0.33	everglades wetland			clay marl on limestone	Aw		3	
Saha et al. 2015	*Batis maritima*	saltwort or beachwort	Perennial forb, succulent, halophyte, shrub	0.25	0.50	0.38	0.35	0.05	0.20	0.58	Hardwood Hammock, Everglades Nat Park, Florida, US	25.1779	-80.9070	0.5	0.31	everglades wetland			clay marl on limestone	Aw		3	
Saha et al. 2015	*Conocarpus erectus*	buttonwood or button mangrove	Evergreen broadleaf shrub, mangrove	0.30	0.40	0.35	0.35	0.30	0.33	0.68	Hardwood Hammock, Everglades Nat Park, Florida, US	25.1779	-80.9070	0.5	0.31	everglades wetland			clay marl on limestone	Aw		3	
Schachtschneider & February 2010	*Acacia erioloba (Vachellia eriolob)*	camel thorn, giraffe thorn	Deciduous broardleaf tree, legume	0.41	0.70	0.56	0.36	0.11	0.24	0.79	Gobabeb Training and Research Centre, coastal Nmibia	-23.5644	15.0404	398	4.50	desert riparian	Desert floodplain, riparian, gravel plain on north side, and dunes on south side of river	coarse sand/gravel	BW	O+H; IsoSource, 4 members: shallow soil (0-1m), deep soil (1.5-3m), GW, fog	4	All trees within 50m of active channel, rely on GW recharged by flash flooding from upland cachments
Schachtschneider & February 2010	*Tamarix usneoides*	wild tamarisk	Evergreen broadleaf shrub, small leaf	0.34	0.45	0.40	0.47	0.22	0.35	0.74	Gobabeb Training and Research Centre, coastal Nmibia	-23.5644	15.0404	398	4.50	desert riparian		coarse sand/gravel	BW		4	
Schachtschneider & February 2010	*Faidherbia albida*	apple-ring acacia, white acacia, ana tree	Deciduous broadleaf tree, legume	0.19	0.49	0.34	0.63	0.11	0.37	0.71	Gobabeb Training and Research Centre, coastal Nmibia	-23.5644	15.0404	398	4.50	desert riparian		coarse sand/gravel	BW		4	
Si et al. 2014	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.82			0.00	0.82	Riverside-site1, Ejina Oasis, Inner Mongolia,CN	41.9490	101.0774	943	1.80	river side	floodplain alluvium	coarse desert alluvium	BW	O; IsoSource, 6-8 members: 0.4, 0.6, 0.8, 1, 1.2, 1.4, 1.6, GW (site 1.8), 0.6, 0.8, 1, 1.2, 1.6, 1.8, GW (site 2.0), 0.2-0.6,	4	Desert oasis; local P=42mm/yr; shallow GW recharged by seeps from river sourced in the mountains
Si et al. 2014	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.33			0.53	0.86	Riverside-site2, Ejina Oasis, Inner Mongolia,CN	41.9516	101.0783	944	2.00	river side	floodplain alluvium	coarse desert alluvium	BW		4	
Si et al. 2014	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.56			0.18	0.74	Dune-site, Ejina Oasis, Inner Mongolia,CN	41.9557	101.2684	931	3.25	dune field farther	sand dune	sand	BW		4	
Si et al. 2014	*Populus euphratica*	Euphrates poplar, desert poplar	Deciduous broadleaf tree			0.64			0.24	0.88	Gobi-site, Ejina Oasis, Inner Mongolia,CN	42.0394	101.3102	924	3.80	Gobi desert even farther	Gobi desert, coarse	coarse desert alluvium	BW		4	
Slavich et al. 1999	*Atriplex nummularia*	Old man saltbush, bluegreen	Perennial desert shrub, salt-tolerant,				0.51	0.03	0.27	0.27	Plantation H & M, Green Gully, old bed of R. Murray	-37.6648	144.7771	132	2.2-1.6	in depression	lower Murray valley	loamy-clay on sandy clay at 2m	Cf	H, linear mixing, 2 members:	4	lat-lon guessed by finding Green Gully and
Snyder & Williams 2000	*Populus fremontii*	Fremont's cottonwood or the Alamo	Deciduous broadleaf tree				1.00	0.92	0.96	0.96	Lewis Springs site, San Pedro R., AZ, US	31.6285	-110.1762	1207	1.80	along Perennial reach of San			BS	O; linear mixing, 2 member: soil water (0-50cm), GW	4	
Snyder & Williams 2000	*Prosopis velutina*	velvet mesquite	Deciduous broadleaf tree, legume				1.00	1.00	1.00	1.00	Lewis Springs site, San Pedro R., AZ, US	31.6285	-110.1762	1207	1.80	along Perennial reach of San		coarse desert alluvium	BS		4	
Snyder & Williams 2000	*Salix gooddingii*	Goodding's willow, or Goodding's	Deciduous broadleaf tree				1.00	1.00	1.00	1.00	Lewis Springs site, San Pedro R., AZ, US	31.6285	-110.1762	1207	1.80	along Perennial reach of San		coarse desert alluvium	BS		4	WT stable along main valley, variable at ephemeral site; site location based on elevation given in 2003 paper, and GE for Boquillas site
Snyder & Williams 2000	*Populus fremontii*	Fremont's cottonwood or the Alamo	Deciduous broadleaf tree					0.91	0.91	0.91	Boquillas Ranch site, San Pedro R, AZ, US	31.7848	-110.2203	1140	2.61	alongintermittent reach of San Pedro	secondary fluvial terrace	coarse desert alluvium	BS		4	
Snyder & Williams 2000	*Prosopis velutina*	velvet mesquite	Deciduous broadleaf tree, legume					0.70	0.70	0.70	Boquillas Ranch site, San Pedro R, AZ, US	31.7848	-110.2203	1140	2.61	alongintermittent reach of San Pedro		coarse desert alluvium	BS	O+H; linear mixing, 3 members: soil water, shallow GW, deep GW	4	
Snyder & Williams 2000	*Populus fremontii*	Fremont's cottonwood or the Alamo	Deciduous broadleaf tree				1.00	0.74	0.87	0.87	Escapule Wash site, San Pedro R, AZ, US	31.6240	-110.1390	1250	4.26	on ephemeral tributary to San Pedro		coarse desert alluvium	BW		4	
Snyder & Williams 2000	*Prosopis velutina*	velvet mesquite	Deciduous broadleaf tree, legume				1.00	0.48	0.74	0.74	Escapule Wash site, San Pedro R, AZ, US	31.6240	-110.1390	1250	4.26	on ephemeral tributary to San Pedro		coarse desert alluvium	BW		4	
Snyder & Williams 2000	*Salix gooddingii*	Goodding's willow, or Goodding's	Deciduous broadleaf tree				1.00	1.00	1.00	1.00	Escapule Wash site, San Pedro R, AZ, US	31.6240	-110.1390	1250	4.26	on ephemeral tributary to San Pedro		coarse desert alluvium	BW		4	
Sohel 2019	*Agathis atropurpurea*	black kauri or blue kauri (conifer)	Evergreen broadleaf tree	0.34		0.34				0.34	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			

Sohel 2019	*Agathis robusta*	Queensland kauri pine, smooth-barked	Evergreen broadleaf tree	0.35	0.35		0.35	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Alangium villosum*	muskwood, black muskheart	Evergreen broadleaf tree	0.67	0.67		0.67	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Aleurites moluccana*	candlenut, candleberry, Indian walnut	Evergreen broadleaf tree	0.40	0.40		0.40	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Alloxylon wickhamii*	ink Silky oak; Satin Silky oak; Satin Oak Tree	Evergreen broadleaf tree	0.89	0.89		0.89	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Anthocarapa nitidula*	Incensewood; Jimmy Jimmy; Incense Cedar;	Evergreen broadleaf tree	0.36	0.36		0.36	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Aphananthe philippinensis*	Wild Holly; Rough Leaved Hickory; Rough	Evergreen broadleaf tree	0.37	0.37		0.37	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Argyrodendron peralatum*	Red Crowsfoot; Oak, Red Tulip; Red Tulip Oak;	Evergreen broadleaf tree	0.74	0.74		0.74	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Argyrodendron trifoliolatum*	Brown Booyong; Brown Crowsfoot;	Evergreen broadleaf tree	0.29	0.29		0.29	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Arytera divaricata*	Rose Tamarind; Tamarind, Rose; Gap Axe;	Evergreen broadleaf tree	0.17	0.17		0.17	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Castanospermum australe*	Moreton Bay chestnut or blackbean	Evergreen broadleaf tree	0.32	0.32		0.32	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Castanospora alphandii*	Brown Tamarind; Native Chestnut	Evergreen broadleaf tree	0.18	0.18		0.18	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Celtis paniculata*	native celtis, silky celtis, native	Deciduous broadleaf tree	0.54	0.54		0.54	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Cryptocarya triplinervis*	three veined laurel, three veined	Evergreen broadleaf tree	0.12	0.12		0.12	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Daphnandra repandula*	northern sassafras, scentless	Evergreen broadleaf tree	0.17	0.17		0.17	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Dendrocnide photinophylla*	shining-leaved stinging tree, fibrewood	Evergreen broadleaf tree	0.42	0.42		0.42	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Diospyros hebecarpa*	Scrub Ebony; Ebony, Scrub; Tulican	Evergreen broadleaf tree	0.14	0.14		0.14	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Diploglottis diphyllostegia*	Wild Tamarind; northern Tamarind	Evergreen broadleaf tree	0.16	0.16		0.16	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Doryphora aromatica*	Net Sassafras, northern sassafras	Evergreen broadleaf tree	0.33	0.33		0.33	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Dysoxylum oppositifolium*	Pink Mahogany	Evergreen broadleaf tree	0.33	0.33		0.33	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Dysoxylum schiffneri* (Dysoxylum	yellow Mahogany	Evergreen broadleaf tree	0.32	0.32		0.32	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Elaeocarpus grandis* (Elaeocarpus	blue marble tree, blue fig or blue quandong	Evergreen broadleaf tree	0.56	0.56		0.56	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained	Atherton Tableland, basalt from Pliocene to Holocene lava flows; upland setting, ~370m from lake, 70m above lake level	sandy-clay loam	Aw	O+H, MixSIAR, 5 members: 0-0.2m, 0.2-1m, 1-2m, 2-3m, 3-4m		P=1680mm, 60% Dec-Feb (summer), Jul-ug-Sep-Oct each <50mm (winter dry season); All samples collected in 22-23 July 2016 (late dry season); soil water content increases with depth from 5-10% at surface to 25-30% at 1m depth; ET=150mm in July, P=40mm; assuming 0.2 field capacity, and all P comes as a single pulse, without canopy intercetion, then 40mm will wet only 0.2m, so it is safe to assume here that >0.2m soil depth is recharged by past season rain
Sohel 2019	*Endiandra longipedicellata*	Buff Walnut	Evergreen broadleaf tree	0.39	0.39		0.39	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Ficus spp.*	Fig	Evergreen broadleaf tree	0.19	0.19		0.19	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Ficus hispida*	Hairy Fig	Evergreen broadleaf tree	0.84	0.84		0.84	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Ficus leptoclada*	Atherton Fig; Figwood	Evergreen broadleaf tree	0.29	0.29		0.29	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Flindersia schottiana*	Mountain Ash; Stavewood; Southern Silver	Evergreen broadleaf tree	0.24	0.24		0.24	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Glochidion ferdinandi*	Water Gum, Cheese Tree, Pencil Cedar	Evergreen broadleaf tree	0.78	0.78		0.78	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Gmelina fasciculiflora*	Grey Teak; North Queensland	Evergreen broadleaf tree	0.46	0.46		0.46	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Homalium circumpinnatum*	Shuttlecock Plant; Brown Boxwood	Evergreen broadleaf tree	0.25	0.25		0.25	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Mallotus philippensis*	kamala tree, red kamala, kumkum tree	Evergreen broadleaf tree	0.11	0.11		0.11	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				
Sohel 2019	*Mallotus polyadenos*	Kamala	Evergreen broadleaf tree	0.33	0.33		0.33	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748	70m above lake, well-drained		sandy-clay loam	Aw				

Sohel 2019	*Memecylon pauciflorum*	Memecylon	Evergreen broadleaf tree	0.08		0.08				0.08	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Mischocarpus pyriformis*	pear fruited tamarind	Evergreen broadleaf tree	0.33		0.33				0.33	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Myristica insipida*	Australian Nutmeg; Nutmeg; Native	Evergreen broadleaf tree	0.41		0.41				0.41	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Phaleria clerodendron*	Scented Phaleria; Scented	Evergreen broadleaf tree	0.38		0.38				0.38	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Polyscias elegans*	Silver Basswood; Black Pencil Cedar;	Evergreen broadleaf tree	0.22		0.22				0.22	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Pouteria obovoidea (Planchonella*	Yellow Boxwood; Northern Yellow	Evergreen broadleaf tree	0.69		0.69				0.69	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Pouteria xerocarpa*	Northern Coondoo; Coondoo; Blush	Evergreen broadleaf tree	0.15		0.15				0.15	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Pseudoweinmannia lachnocarpa*	Scrub Rosewood; Marara;	Evergreen broadleaf tree	0.16		0.16				0.16	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Stenocarpus sinuatus*	firewheel tree, White Beefwood	Evergreen broadleaf tree	0.32		0.32				0.32	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Streblus brunonianus*	whalebone tree, white handlewood	Evergreen broadleaf tree	0.16		0.16				0.16	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Syzygium claviflorum*	Grey Satinash; Trumpet Satinash;	Evergreen broadleaf tree	0.75		0.75				0.75	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Terminalia sericocarpa*	Bandicoot; Sovereignwood; Damson Plum;	Evergreen broadleaf tree	0.26		0.26				0.26	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Toona ciliata*	red cedar, toon or toona, Australian red	Deciduous broadleaf tree	0.81		0.81				0.81	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Sohel 2019	*Zanthoxylum ovalifolium*	Thorny Yellowwood; Oval-leaf Yellow	Evergreen broadleaf tree	0.22		0.22				0.22	Danbulla State Forest, Queensland, NE Australia	-17.1755	145.5877	748		70m above lake, well-drained		sandy-clay loam	Aw			
Song et al. 2014	*Pinus sylvestris*	Scots pine	Evergreen needleleaf tree			0.32			0.15	0.47	Daqinggou Ecological Station, NE Inner Mongolia, CN	42.9695	122.3510	260	2.30	flat, with many ponds nearby	eolian sand deposit	sand	Dw	O; IsoSource, 4 members: 0-	3	averaged over 14 sampling dates over 2
Song et al. 2016	*Pinus sylvestris*	Scots pine	Evergreen needleleaf tree						0.11	0.11	Zhanggutai, Liaoning Prov, SE Keerqin sand, CN	42.7167	122.3667	262	5.45	on dune, GW accessible	eolian sand	sand	Dw	O; linear mixing, 2 members:	3	z=152m; cannot find 162m in the region;
Stratton et al. 2000	*Metrosideros polymorpha*	ʻōhiʻa lehua	Evergreen broadleaf tree (invasive)	1.00		1.00				1.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			"Soil water δD values ranged from –20‰ near the surface to –48‰ at 130 cm depth. Metrosideros polymorpha, an evergreen species, and Reynoldsia sandwicensis, a drought-deciduous species, had xylem sap δD values of about –52‰, and appeared to obtain their water largely from deeper
Stratton et al. 2000	*Reynoldsia sandwicensis*	'ohe makai	Deciduous broadleaf tree, drought	1.00		1.00				1.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Stratton et al. 2000	*Nestegis sandwicensis*	Hawai'i olive, olopua	Evergreen broadleaf tree	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Stratton et al. 2000	*Schinus terebinthifolius*	Brazilian peppertree, aroeira, rose	Evergreen broadleaf tree, small	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As	H; no mixing model, inferred from authors (see notes) and Figure 4		
Stratton et al. 2000	*Nesoluma polynesicum*	keahi, island nesoluma	Evergreen broadleaf shrub	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Stratton et al. 2000	*Diospyros sandwicensis*	lama	Evergreen broadleaf tree	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Stratton et al. 2000	*Myoporum sandwicense*	naio, bastard sandalwood or false	Evergreen broadleaf shrub	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Stratton et al. 2000	*Pouteria sandwicensis*	ʻĀlaʻa, Āulu and ʻĒlaʻa	Evergreen broadleaf tree	0.00		0.00				0.00	Nature Conservancy of Hawaii's Kanepu'u Dry Forest Preserve. Lanai	20.8745	-156.9816	530		well-drained basaltic ridge	volcanic plateau	silty-clay loam, well-drained. 4-5m	As			
Sun et al. 2011	*Juglans regia*	Persian walnut, English walnut, Carpathian	Deciduous broadleaf tree	0.53	0.32	0.43				0.43	south aspect of Tai-hang Mountain, Jiyuan, Henan Prov, CN	35.0167	112.4667	310		gravely, well-drained	weathered limestone + eolian	gravely on limestone with eolian	Cw	H; linear mixing, 2 members: 0-		<0.3m considered shallow soil; 0.3-
Swaffer et al. 2014	*Eucalyptus diversifolia*	soap mallee, coastal white mallee	Evergreen broadleaf tree						0.48	0.48	Site-1, borehole ULE101, Eyre Peninsula, S Aus, AU	-34.7700	135.5400	13	3.70	coastal dunes	po-closed, internal-drained, fresh GW lense; 30cm soil over limestone	skeletal calcareous aeolianite	Cs	H + O; IsoSource with 3 members: surface, soil, GW	3	3 sites (including a bare ground) were chosen to likely use GW, but with elevation diff
Swaffer et al. 2014	*Allocasuarina verticillata*	drooping she-oak	Evergreen broadleaf tree						0.49	0.49	Site-2, borehole ULE099, Eyre Peninsula, S Aus, AU	-34.7890	135.5390	17	4.20	coastal dunes		skeletal calcareous aeolianite	Cs		3	
Swaffer et al. 2014	*Eucalyptus diversifolia*	soap mallee, coastal white mallee	Evergreen broadleaf tree						0.76	0.76	Site-2, borehole ULE099, Eyre Peninsula, S Aus, AU	-34.7890	135.5390	17	4.20	coastal dunes		skeletal calcareous aeolianite	Cs		3	
Tang et a. 2018	*Pinus tabuliformis*	Manchurian red pine, Southern Chinese pine	Evergreen needleleaf tree	0.16	0.09	0.13				0.13	Ansai, Shannxi Prov, CN	38.8746	109.3299	1231		well drained loess	Loess Plateau, deep soil 50-150m	silt loam	BS	H only; IsoSource 3 members: 0-0.2, 0.2-1, 1-2m		soil mositure profiles shows decreasing water content with depth; same with root
Tang et a. 2018	*Hippophae rhamnoides*	sea-buckthorn	Deciduous broadleaf shrub, thorn	0.45	0.14	0.30				0.30	Ansai, Shannxi Prov, CN	38.8746	109.3299	1231		well drained loess		silt loam	BS			
Thorburn et al. 1993	*Eucalyptus largiflorens*	black box	Evergreen broadleaf tree				1.00	0.72	0.86	0.86	BH site, Monoman Island, AU	-33.9767	140.8636	26	5.00	floodplain of R. Murray, South AU		swelling clay on deep sand	BS	H+O; the	4	Authors discuss shallow infiltration,

Thorburn et al. 1993	*Eucalyptus largiflorens*	black box	Evergreen broadleaf tree				0.83	0.51	0.67	0.67	BT site, Monoman Island, AU	-33.9725	140.8608	27	5.20		floodplain of R. Murray, South AU	Floodplain of River Murray	swelling clay on deep sand	BS	mixing line method, 2 members: shllow soil water, GW (0.5m to WT)	4	assuming >50cm comes from GW cap rise; WTD inferred from Fig 6; P=260mm/yr, shallow valley
Thorburn et al. 1993	*Eucalyptus camaldulensis*	river red gum	Evergreen broadleaf tree				0.81	0.58	0.70	0.70	RM site, Monoman Island, AU	-33.9690	140.8763	28	4.00		floodplain of R. Murray, South AU		swelling clay on deep sand	BS		4	
Thorburn et al. 1993	*Eucalyptus largiflorens*	black box	Evergreen broadleaf tree				1.00	1.00	1.00	1.00	BM site, Chowilla Island, AU	-33.9802	140.8906	30	4.10		floodplain of R. Murray, South AU		swelling clay on deep sand	BS		4	
Tobella et al. 2017	*Vitellaria paradoxa*	Shea tree	Deciduous broadleaf tree	0.52	0.05	0.29	0.32	0.04	0.18	0.47	near Ouagadougou, Burkina Faso, West Africa	12.0781	-1.5697	327	4.5 (wet) - 6.5 (dry)		WT accessible	low relief fluvial plain	sandy-loam on laterite at 0.5-1.5m	BS	O; IsoSource, 3 members: 0-	3	distinct wet-dry season difference; low-
Valentini et al. 1992	*Juniperus oxycedrus*	Cade, cade juniper, prickly juniper, prickly	Evergreen needleleaf shrub				0.00		0.00	0.00	Montalto di Castro, IT	42.3512	11.5256	2	1.50		on dune nearest to shore		sand	Cs		4	Authors did not apply mixing model; based on Fig 2, a simple 2-member (rain and GW) inference can be made based on the relative distance of xylem to these end members; WT not given (D smple taken at 12m depth), but estimated from
Valentini et al. 1992	*Pistacia lentiscus*	lentisk, mastic	Evergreen broadleaf tree, small				0.00		0.00	0.00	Montalto di Castro, IT	42.3518	11.5759	4	3.00		dune crest		sand	Cs	D, no mixing model, inference from Fig 2 base on distance from rain nd GW	4	
Valentini et al. 1992	*Phillyrea angustifolia*	narrow-leaved mock privet	Evergreen needleleaf tree				0.00		0.00	0.00	Montalto di Castro, IT	42.3521	11.5258	5	3.50		dune crest	sandy coastal plain Tirrenian coast, Italy	sand	Cs		4	
Valentini et al. 1992	*Quercus ilex*	evergreen oak, holly oak, holm oak	Evergreen broadleaf tree				0.20		0.20	0.20	Montalto di Castro, IT	42.3515	11.5274	4	2.70		dune bottom, WT shallow		sand	Cs		4	
Valentini et al. 1992	*Quercus pubescens*	downy oak, pubescent oak	Deciduous broadleaf tree				0.80		0.80	0.80	Montalto di Castro, IT	42.3515	11.5274	4	2.70		dune bottom, WT shallow		sand	Cs		4	
Valentini et al. 1992	*Quercus cerris*	Turkey oak or Austrian oak	Deciduous broadleaf tree				0.90		0.90	0.90	Montalto di Castro, IT	42.3515	11.5274	4	2.70		dune bottom, WT shallow		sand	Cs		4	
Voltas et al. 2015	*Pinus halepensis*	Aleppo pine, Jerusalem's pine	Evergreen needleleaf tree	0.86	0.4	0.63				0.63	Castellon, east coast Spain	39.8247	-0.5728	640		well-drained slope		coastal hills of eastern Spain	40cm skeletal soil on calcified	Cs	O+H, SIAR in R, 3 members: 0-		unlikely that the seedlings can reach the water
Wang-J et al. 2017	*Stipa bungeana*	feather grass, needle grass, and spear grass	Perennial grass, tussock			0.21				0.21	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope		Loess Plateau, China	silty loam, 50-200m deep loess	Dw	H+O, MixSIAR, 3 members: 0-40, 40-120, 120-300cm		3 soil zones: 0-40cm, 40-120cm, 120-300cm; deepest layer considered deep soil water here; GW too deep
Wang-J et al. 2017	*Artemisia gmelinii*	Gmelin's wormwood	Perennial desert shrub, evergreen			0.20				0.20	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope			silty loam, 50-200m deep loess	Dw			
Wang-J et al. 2017	*Vitex negundo*	Chinese chaste tree, five-leaved chaste tree	Deciduous broadleaf shrub, large			0.25				0.25	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope			silty loam, 50-200m deep loess	Dw			
Wang-J et al. 2019a	*Sophora viciifolia*	Sophora	Deciduous broadleaf tree, small, legume			0.35				0.35	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope		Loess Plateau, China	silty loam, 50-200m deep loess	Dw	O+H; IsoSource recorded, 3		comparing 4 models: IsoSource,SIAR,
Wang-J et al. 2019b	*Spiraea pubescens*	Downy Spirea	Deciduous broadleaf shrub, hardy			0.50				0.50	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope		Loess Plateau, China	silty loam, 50-200m deep loess	Dw	H+O, MixSIAR, 3 members: 0-40, 40-120, 120-300cm		same site as 2017, 2019a, but new species
Wang-J et al. 2019b	*Hippophae rhamnoides*	sea-buckthorn	Deciduous broadleaf shrub, thorny,			0.47				0.47	Yangjuangou, C. Loss Plateau, Shanxi Prov, CN	36.7125	109.5292	1194	40-100	well-drained loess slope			silty loam, 50-200m deep loess	Dw			
Wang-P et al. 2019	*Celtis sinensis*	Chinese hackberry	Evergreen broadleaf tree	0.26	0.09	0.18				0.18	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Pterocarya tonkinensis*	Tonkin wingnuts	Deciduous broadleaf tree	0.18	0.05	0.12				0.12	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Bombax ceiba*	red cotton tree	Deciduous broadleaf tree	0.22	0.13	0.18				0.18	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Broussonetia papyrifera*	paper mulberry	Deciduous broadleaf tree	0.52	0.13	0.33				0.33	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Ficus callosa*	Asian species of fig tree	Evergreen broadleaf tree	0.38	0.16	0.27				0.27	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Streblus asper*	Siamese rough bush, toothbrush tree	Evergreen broadleaf tree	0.27	0.20	0.24				0.24	Floodplain, Xishuangbanna Tropical Botanical	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Piper aduncum*	spiked pepper	Evergreen broadleaf tree	0.03	0.16	0.10				0.10	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Humulus scandens*	Japanese hop	Deciduous broadleaf liana	0.17	0.1	0.14				0.14	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Chromolaena odorata*	Siam weed, Christmas bush, devil weed	Perennial forb	0.05	0.15	0.10				0.10	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			Authors state that the wter table is too deep, but these are river floodplain sites. The lower site is about 2m above river level, and the terrace may be 6m above river level; if both sites experience flooding, WT cannot be too
Wang-P et al. 2019	*Tithonia diversifolia*	tree marigold, Mexican tournesol	Annua or Perennial forb, shrub	0.08	0.07	0.08				0.08	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Merremia vitifolia*	woodroses	Deciduous broadleaf liana	0.05	0.07	0.06				0.06	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw	H + O; MixSIAR, 6 members: 0-5, 5-15, 15-30, 30-50, 50-80, 80-110cm; deepest layer ahs similar signture to	
Wang-P et al. 2019	*Mallotus barbatus*	??	Evergreen broadleaf tree, small	0.02	0.13	0.08				0.08	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Ricinus communis*	Castor Oil Plant	Perennial forb, shrub	0.18	0.14	0.16				0.16	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally	alluvium in karst valleys	sandy (higher sand content)	Cw			
Wang-P et al. 2019	*Ficus racemosa*	cluster fig tree, Indian fig tree or goolar (gular)	Evergreen broadleaf tree	0.46	0.14	0.30				0.30	Floodplain, XTBG, Yunnan Prov, CN	21.9329	101.2467	541			river floodplain, seasonally		sandy (higher sand content)	Cw			

Wang-P et al. 2019	*Celtis sinensis*	Chinese hackberry	Evergreen broadleaf tree	0.17	0.14	0.16				0.16	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw	river water esp in dry season		deep. GW was not reached at 1.1m sampling depth, so GW is not included in samping and the MixSIAR as an end member
Wang-P et al. 2019	*Pterocarya tonkinensis*	Tonkin wingnuts	Deciduous broadleaf tree	0.29	0.05	0.17				0.17	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Bombax ceiba*	red cotton tree	Deciduous broadleaf tree	0.30	0.04	0.17				0.17	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Broussonetia papyrifera*	paper mulberry	Deciduous broadleaf tree	0.32	0.04	0.18				0.18	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Ficus callosa*	Asian species of fig tree	Evergreen broadleaf tree	0.23	0.13	0.18				0.18	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Streblus asper*	Siamese rough bush, toothbrush tree	Evergreen broadleaf tree	0.30	0.09	0.20				0.20	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Piper aduncum*	spiked pepper	Evergreen broadleaf tree	0.28	0.06	0.17				0.17	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Pseuderanthemum crenulatum*	??	Evergreen broadleaf shrub	0.06	0.07	0.07				0.07	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Alangium chinense*	??	Evergreen broadleaf tree	0.10	0.06	0.08				0.08	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Cinnamomum burmanni*	Indonesian cinnamon	Evergreen broadleaf tree	0.17	0.12	0.15				0.15	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wang-P et al. 2019	*Ficus cyrtophylla*	fig	Evergreen broadleaf tree	0.06	0.07	0.07				0.07	Terrace, XTBG, Yunnan Prov, CN	21.9322	101.2472	548			river terrace, seldom flooded		finer (lower sand content)	Cw			
Wei-L et al. 2013	*Avicennia marina*	grey mangrove, white mangrove	Evergreen broadleaf tree, mangrove. tall	0.87	0.99	0.93	0.00	0.00	0.00	0.93	Creek front mangrove site, Tinchi Tamba Wetland Reserve,	-27.2947	153.0383	6	6		creek front mangrove		??	Cf	O+H, IsoSource, 4 members: shallow soil water (30cm?), tidal water, rain-water, GW	3	P=656-1305mm/yr; WTD not given, estimated to be at sea level owning to the short distance to shoreline; it is likely shallower
Wei-L et al. 2013	*Avicennia marina*	grey mangrove, white mangrove	Evergreen broadleaf tree, mangrove, tall	0.00	0.63	0.32	0.91	0.00	0.46	0.77	Intertidal scrub mangrove site, Tinchi Tamba Wetland	-27.2959	153.0396	3	3		intertidal scrub mangrove	coastal plain deposit	??	Cf		3	
Wei-L et al. 2013	*Casuarina glauca*	swamp she-oak, swamp oak, grey oak, or	Evergreen broadleaf tree, small leaf	0.77	0.89	0.83	0.01	0.02	0.02	0.85	Inland forest site, Tinchi Tamba Wetland Reserve, Moreton Bay,	-27.2980	153.0414	11	11		inland forest		??	Cf		3	
Wei-L et al. 2013	*Melaleuca quinquinervia*	broad-leaved paperbark, paper bark tea	Evergreen broadleaf tree	1.00	1.00	1.00		0.00	0.00	1.00	Inland forest site, Tinchi Tamba Wetland Reserve, Moreton Bay,	-27.2980	153.0414	11	11		inland forest		??	Cf		3	
Wei-Y et al. 2012	*Pinus sylvestris*	Scots pine	Evergreen needleleaf tree						0.09	0.09	Naiman Desert Res Stn, Inner Mongolia, China	42.9072	120.7045	364	8.20	well-drained		desert alluvial plain	sand, thick, loose and coarse	BS	D, IsoSource, 7 members: 0-	3	P=366mm/yr, flat land, locally recharged
Williams and Ehleringer 2000	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree			0.82				0.82	Site-1, Tooele, UT, US	40.5027	-112.2636	1980		intermountain hills		hills S of Great Salt Lake,	silt loam	Df			
Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.93				0.93	Site-1, Tooele, UT, US	40.5027	-112.2636	1980		intermountain hills		intermountain valley	silt loam	Df			P=448mm
Williams and Ehleringer 2000	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree			0.77				0.77	Site-2, Birdseye, UT, US	39.9196	-111.5356	1860		valley slope			clay loam	Cf			
Williams and Ehleringer 2000	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree			0.73				0.73	Site-2, Birdseye, UT, US	39.9196	-111.5356	1860		valley slope		valley slope behind Wasatch Front	clay loam	Cf			P=368mm/yr
Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.97				0.97	Site-2, Birdseye, UT, US	39.9196	-111.5356	1860		valley slope			clay loam	Cf			
Williams and Ehleringer 2000	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree			0.70				0.70	Site-3, Zion NP, UT, US	37.2382	-112.8957	2000		mesa			clay	Cs	D, linear mixing model, 2 members: summer rain, deep soil water (50cm, or winter rain); the sites are along Monson gradient, with stronger summer rain in the south		
Williams and Ehleringer 2000	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree			0.72				0.72	Site-3, Zion NP, UT, US	37.2382	-112.8957	2000		mesa		sandstone mesa in S Utah	clay	Cs			P=374mm/yr
Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.94				0.94	Site-3, Zion NP, UT, US	37.2382	-112.8957	2000		mesa			clay	Cs			
Williams and Ehleringer 2000	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree			0.59				0.59	Site-4, Grand Canyon NP, AZ, US	36.0556	-112.1257	2120		canyon rim			clay loam	Cs			
Williams and Ehleringer 2000	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree			0.55				0.55	Site-4, Grand Canyon NP, AZ, US	36.0556	-112.1257	2120		canyon rim		southern rim of Grand Canyon	clay loam	Cs			P=367mm/yr
Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.93				0.93	Site-4, Grand Canyon NP, AZ, US	36.0556	-112.1257	2120		canyon rim			clay loam	Cs			
Williams and Ehleringer 2000	*Juniperus osteosperma*	Utah juniper	Evergreen needleleaf tree			0.48				0.48	Site-5, Pinedale, AZ, US	34.3108	-110.2514	1970		intermountain hills			clay	Cs			
Williams and Ehleringer 2000	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree			0.49				0.49	Site-5, Pinedale, AZ, US	34.3108	-110.2514	1970		intermountain hills		intermountain slopes of AZ	clay	Cs			P=427mm/yr
Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.62				0.62	Site-5, Pinedale, AZ, US	34.3108	-110.2514	1970		intermountain hills			clay	Cs			
Williams and Ehleringer 2000	*Pinus edulis*	Colorado pinyon, two-needle piñon	Evergreen needleleaf tree			0.58				0.58	Site-6, Blue, AZ, US	33.6350	-109.0841	1980		intermountain hills		intermountai	clay	Cs			490mm/yr

Williams and Ehleringer 2000	*Quercus gambelii*	Gambel oak, scrub oak, oak brush, and	Deciduous broadleaf tree			0.46				0.46	Site-6, Blue, AZ, US	33.6350	-109.0841	1980		intermountai n hills		n slopes of AZ	clay	Cs			450mm/yr
Wu-H et al. 2016a	*Hippophae rhamnoides*	sea-buckthorn	Deciduous broadleaf shrub, thornv.	0.42		0.42				0.42	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	36.7667	100.7667	3232		sand, well-drained		drifting sand dunes being stablized; near shore, sites >20m above lake level	sand	Dw	O, IsoSource, 3 members: 0-0.3, 0.3-0.6, 0.6-1.2m; the deepest recorded here		P=368mm/yr; 3 soil layer end members: <0.3m, 0.3-0.6, 0.6>1.2m; the deepest recorded here; results are mean of 7 sampling dates over the
Wu-H et al. 2016a	*Artemisia oxycephala*	a sagebrush	Perennial desert shrub, smll, deciduous.	0.14		0.14				0.14	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	36.7667	100.7667	3232		sand, well-drained			sand	Dw				
Wu-H et al. 2016a	*Carex moorcroftii*	a sedge	Perennial grass, rhizomatous	0.14		0.14				0.14	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	36.7667	100.7667	3232		sand, well-drained			sand	Dw				
Wu-H et al. 2016a	*Astragalus adsurgens*	Prairie Milkvetch	Perennial forb	0.07		0.07				0.07	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	36.7667	100.7667	3232		sand, well-drained			sand	Dw				
Wu-H et al. 2016b	*Achnatherum splendens*	a needle grass	Perennial grass, rhizomatous	0.62	0.16	0.39				0.39	lower Shaliu R. basin, north of Qinghai Lake, Qinghai Prov. CN	37.2476	100.2344	3213		well-drained sand			silty loam	Dw				
Wu-H et al. 2016b	*Heteropappus altaicus*	aster	Perennial forb	0.16	0.2	0.18				0.18	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	37.2476	100.2344	3213		well-drained sand		eolian-lacustrine depo of desert lake basin, sites 15m above lake level	silty loam	Dw	H, IsoSource, 3 members: 0-0.1, 0.1-0.3, 0.3-0.6m (recorded here)		P=400mm, WTD not given, but site 4m above nearest water body; authors mention GW signal in xylem; drought periods as dry season
Wu-H et al. 2016b	*Allium tanguticum*	Chinese wild onion	Perennial forb, bulb	0.09	0.16	0.13				0.13	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	37.2476	100.2344	3213		well-drained sand			silty loam	Dw				
Wu-H et al. 2016b	*Leymus chinensis*	Chinese rye grass	Perennial grass, rhzome	0.15	0.13	0.14				0.14	Ketu Exp Range, shore of Qinghai Lake, Qinghai Prov. CN	37.2476	100.2344	3213		well-drained sand			silty loam	Dw				
Wu-Y et al. 2014	*Nitraria tangutorum*	??	Perennial desert shrub, deciduous				0.65	0.22	0.44	0.44	Fukang, Gurbantunggut Desert, Xinjiang Prov, CN	44.2903	87.9404	475	5.00	desert valley oasis		Gurbantunggut Desert eolian/fluvial deposit	silty clay loam on valley deposit, saline	BS	O, IsoSource, 3 members: shllow (0-50), middle (50-180), deep (180-300cm, GW)	4	annaul P=160mm, shallow WT from mountains to the south
Wu-Y et al. 2014	*Reaumuria songarica*	??	Perennial desert shrub, deciduous					0.39	0.39	0.39	Fukang, Gurbantunggut Desert, Xinjiang Prov, CN	44.2903	87.9404	475	5.00	desert valley oasis			silty clay loam on valley deposit, saline	BS		4		
Wu-Y et al. 2014	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf shrub				0.88	0.31	0.60	0.60	Fukang, Gurbantunggut Desert, Xinjiang Prov, CN	44.2903	87.9404	475	5.00	desert valley oasis			silty clay loam on valley deposit, saline	BS		4		
Xu et al. 2011	*Abies fargesii-faxoniana*	Farges' fir	Evergreen needleleaf tree						0.68	0.68	Wolong Nat Rev., W. Sichuan Prov, CN	30.9451	103.0777	2849		on north facing slope		at the eastern rim of the Tibet Plateau, subalpine altitude	??	Cw	H, linear mixing, 2 members: recent rain, GW (from spring nearby)	3	P=884mm, WTD=1.5 at nearby spring, but unknown undner site; soil smpled at 0-20, 20-40, 40-60, 60-80cm to obtain recent rain
Xu et al. 2011	*Betula utilis*	Himalayan birch, bhojpatra	Deciduous broadleaf tree						0.46	0.46	Wolong Nat Rev., W. Sichuan Prov, CN	30.9451	103.0777	2849		on north facing slope			??	Cw		3		
Xu et al. 2011	*Bashania fangiana*	an east Asian bamboo	Perennial grass, tall, bamboo						0.41	0.41	Wolong Nat Rev., W. Sichuan Prov, CN	30.9451	103.0777	2849		on north facing slope			??	Cw		3		
Yang et al. 2015	*Pinus massoniana/Pinus*	Masson's pine, Chinese red pine, horsetail	Evergreen needleleaf tree	0.45	0.29	0.37				0.37	Qianyanzhou, ChinaFLUX site, Jiangxi Prov, CN	26.7440	115.0599	102		mid slope, ~10m above nearest			red soil on sandstone /mudstone	Cf	O+H, IsoSource, 3 soil		P=1377mm; discrapancy btw O and H results;
Yin et al. 2015	*Salix matsudana*	Chinese willow	Deciduous broadleaf tree				0.45	0.80	0.63	0.63	Mu Us Desert, Yulin, Shaanxi Prov, CN	38.3905	109.1957	1255	1.40	WT accesible		40m thick eolian sand dune field	sand	BS	O, IsoSource, 3 members: 0-	3	WT rise after P-locally recharged
Young-Robertson et al. 2017	*Betula nana*	dwarf birch	Deciduous broadleaf shrub			0.44				0.44	Stable site, University of Alaska Fairbanks campus, AK, US	64.8661	-147.8564	155	thaw depth 0.6m max	on poorly drained permafrost			organic soil, thaw to 34-55cm	Df				frost-table here; no long-term thawing trend; here the deep soil moisture refers to P fallen in previous summer and frozen until spring/summer thaw; summer P low, insufficient to support ET with degredation - thawing; here the deep soil moisture refers to P fallen in previous summer and frozen until spring/summer thaw; summer P low, insufficient to support ET
Young-Robertson et al. 2017	*Picea mariana*	black spruce	Evergreen needleleaf tree			0.43				0.43	Stable site, University of Alaska Fairbanks campus, AK, US	64.8661	-147.8564	155	thaw depth 0.6m max	on poorly drained permafrost			organic soil, thaw to 34-55cm	Df				
Young-Robertson et al. 2017	*Ledum palustre (Rhododendron tomentosum)*	marsh Labrador tea, northern Labrador tea or willow	Evergreen broadleaf shrub			0.39				0.39	Stable site, University of Alaska Fairbanks campus, AK, US	64.8661	-147.8564	155	thaw depth 0.6m max	on poorly drained permafrost			organic soil, thaw to 34-55cm	Df				
Young-Robertson et al. 2017	*Salix sp.*		Deciduous broadleaf shrub			0.45				0.45	Stable site, University of Alaska Fairbanks campus, AK, US	64.8661	-147.8564	155	thaw depth 0.6m max	on poorly drained permafrost			organic soil, thaw to 34-55cm	Df				
Young-Robertson et al. 2017	*Vaccinium uliginosum*	bog bilberry, bog blueberry [2]	Deciduous broadleaf shrub, small			0.45				0.45	Stable site, University of Alaska Fairbanks campus, AK, US	64.8661	-147.8564	155	thaw depth 0.6m max	on poorly drained permafrost		organic layer over mineral soil over permafrost with seasonal thaw	organic soil, thaw to 34-55cm	Df				
Young-Robertson et al. 2017	*Betula nana*	dwarf birch	Deciduous broadleaf shrub			0.40				0.40	Unstable site, University of Alaska Fairbanks campus, AK.	64.8675	-147.8580	156	thaw depth 0.8m max	on poorly drained permafrost			organic soil, thaw to 40-60cm	Df	O+H, a hierachical Byesian model using a suit of data, 2 members: summer rain, melt of past-season ice		
Young-Robertson et al. 2017	*Picea mariana*	black spruce	Evergreen needleleaf tree			0.37				0.37	Unstable site, University of Alaska Fairbanks campus. AK.	64.8675	-147.8580	156	thaw depth 0.8m max	on poorly drained permafrost			organic soil, thaw to 40-60cm	Df				
Young-Robertson et al. 2017	*Ledum palustre (Rhododendron tomentosum)*	marsh Labrador tea, northern Labrador tea or willow	Evergreen broadleaf shrub			0.35				0.35	Unstable site, University of Alaska Fairbanks campus, AK.	64.8675	-147.8580	156	thaw depth 0.8m max	on poorly drained permafrost			organic soil, thaw to 40-60cm	Df				
Young-Robertson et al. 2017	*Salix sp.*		Deciduous broadleaf shrub			0.40				0.40	Unstable site, University of Alaska Fairbanks campus. AK.	64.8675	-147.8580	156	thaw depth 0.8m max	on poorly drained permafrost			organic soil, thaw to 40-60cm	Df				
Young-Robertson et al. 2017	*Vaccinium uliginosum*	bog bilberry, bog blueberry [2]	Deciduous broadleaf shrub, small			0.39				0.39	Unstable site, University of Alaska Fairbanks campus, AK.	64.8675	-147.8580	156	thaw depth 0.8m max	on poorly drained permafrost			organic soil, thaw to 40-60cm	Df				
Zencich et al. 2002	*Banksia ilicifolia*	holly-leaved banksia	Evergreen broadleaf tree	0.20	0.30	0.25	0.80	0.20	0.50	0.75	Damp-land site, N Swan Coastal Plain, NE of Perth, Western	-31.7556	115.9609	48	2.50	damp-land embankment			coarse sand	Cs		4		
Zencich et al. 2002	*Banksia ilicifolia*	holly-leaved banksia	Evergreen broadleaf tree	0.50	0.40	0.45	0.40	0.20	0.30	0.75	Lower-slope site, site, N Swan Coastal Plain, NE of Perth. Western	-31.7574	115.9590	51	4.00	lower slope			coarse sand	Cs		4		
Zencich et al. 2002	*Banksia attenuata*	candlestick banksia, slender banksia or biara	Evergreen broadleaf tree	0.40	0.40	0.40	0.60	0.40	0.50	0.90	Lower-slope site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7574	115.9590	51	4.00	lower slope			coarse sand	Cs	H, linear mixig, 3 members: 0-0.4, 0.4-4, 4-8m; GW included in	4		
Zencich et al. 2002	*Banksia attenuata*	candlestick banksia, slender banksia or biara	Evergreen broadleaf tree	0.65	0.60	0.63	0.25	0.20	0.23	0.85	Upper-slope site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7550	115.9558	53	9.00	upper slope		deep highly	coarse sand	Cs		4	Below the Darling Scarp, a topo high ridge to the east:	

Zencich et al. 2002	*Banksia attenuata*	candlestick banksia, slender banksia or biara	Evergreen broadleaf tree	0.90	0.50	0.70	0.00	0.00	0.00	0.70	Dune-crest site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7573	115.9545	69	30.00	dune crest		leached coarse sand on coastal plain	coarse sand	Cs	one of deeper 2 zones; assuming no GW access at dune crest (WT=30m)	4	which likely contribute to local GW; a nice case showing topo and WT gradient
Zencich et al. 2002	*Hibbertia hypericoides*	yellow buttercups	Perennial forb, shrub	0.60	0.30	0.45	0.40	0.10	0.25	0.70	Damp-land site, N Swan Coastal Plain, NE of Perth, Western	-31.7556	115.9609	48	2.50		damp-land embankment		coarse sand	Cs		4	
Zencich et al. 2002	*Hibbertia hypericoides*	yellow buttercups	Perennial forb, shrub	0.80	0.50	0.65	0.08	0.08	0.08	0.73	Lower-slope site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7574	115.9590	51	4.00		lower slope		coarse sand	Cs		4	
Zencich et al. 2002	*Hibbertia hypericoides*	yellow buttercups	Perennial forb, shrub	0.80	0.50	0.65	0.10	0.10	0.10	0.75	Upper-slope site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7550	115.9558	53	9.00	upper slope			coarse sand	Cs		4	
Zencich et al. 2002	*Hibbertia hypericoides*	yellow buttercups	Perennial forb, shrub	0.60	0.50	0.55	0.00	0.00	0.00	0.55	Dune-crest site, site, N Swan Coastal Plain, NE of Perth, Western	-31.7573	115.9545	69	30.00	dune crest			coarse sand	Cs		4	
Zhang-Cicheng et al. 2017	*Reaumuria songarica*	??	Perennial desert shrub, deciduous			0.30			0.00	0.30	High-P site, mid-low Heihe River basin, Gansu Prov. CN	39.4000	100.1200	1442	12.00	well-drained		desert valley, on edge /foothill of oasis of Heihe River	coarse sandy loam	BW	O + H; IsoSource, 4 members: 0-30, 30-80, 80cm-2m, GW	3	P=112mm; 80% in warm season
Zhang-Cicheng et al. 2017	*Nitraria sphaerocarpa*	??	Perennial desert shrub, deciduous			0.25			0.00	0.25	High-P site, mid-low Heihe River basin, Gansu Prov. CN	39.4000	100.1200	1442	12.00	well-drained			coarse sandy loam	BW		3	
Zhang-Cicheng et al. 2017	*Reaumuria songarica*	??	Perennial desert shrub, deciduous			0.72			0.00	0.72	Mid-P site, mid-low Heihe River basin, Gansu Prov. CN	39.8800	98.9900	1413	14.00	well-drained			coarse sandy loam	BW		4	
Zhang-Cicheng et al. 2017	*Nitraria sphaerocarpa*	??	Perennial desert shrub, deciduous			0.38			0.00	0.38	Mid-P site, mid-low Heihe River basin, Gansu Prov. CN	39.8800	98.9900	1413	14.00	well-drained			coarse sandy loam	BW		4	P=65mm;
Zhang-Cicheng et al. 2017	*Reaumuria songarica*	??	Perennial desert shrub, deciduous			0.17			0.65	0.82	Low-P site, mid-low Heihe River basin, Gansu Prov. CN	42.0400	101.0100	940	3.25		WT access		coarse sandy loam	BW		4	P=35mm;
Zhang-Congzhi et al. 2011	*Zea mays*	maize, corn	Annual grass						0.16	0.16	Agro-ecological Exp Stat, Fengqiu, Henan Prov, CN	35.0161	114.3996	72	1-2m in growing season		near cannal, 15km from Yellow River	Huang-Huai-Hai River Plain	sandy loam on silty-clay loam, on	Cw	H, linear mixing, 4 members:	3	P=615mm, mean of 6 samples; site
Zhang-Jinhu et al. 2018	*Tamarix laxa*	a saltceder	Deciduous broadleaf shrub			0.36				0.36	Mega dunes, Badain Jaran Desert, Inner Mongolia, CN	39.7708	102.1383	1344	> 100m	site nearly 200msteeply above lake		mega sand duens	dune sand	BW	O + H; IsoSource, 3 end		location of P1 recorded; results given as
Zhang-Yiping et al. 2018	*Larix principis-rupprechtii*	Prince Rupprecht's larch	Deciduous needleleaf tree			0.39				0.39	near summit Luya Mountain, Shanxi Prov, CN	38.7534	111.9264	2685		ridge top		shallow 50cm soil on fractured	well-drained sandy loam	Dw	O + H; SIAR, 3 end members:		deep soil water recharged by previous yr
Zhao-P et al. 2018	*Platycladus orientalis*	Chinese thuja, Oriental arborvitae	Evergreen needleleaf tree			0.31			0.34	0.65	Yanting Ct, SiChuan Prov. CN	31.2667	105.4667	522	2.70		shallow perched WT	hilly headwater catchment on mudstone/sandstone bedrok at 50cm depth, 50% terraced farmland	silty loam, 50cm thick, on mudtone	Cw	O+H, SIAR in R, 4 members: shallow soil (0-20), deep soil (20-50), GW, P	3	
Zhao-P et al. 2018	*Vitex negundo*	Chinese chaste tree, five-leaved chaste tree	Deciduous broadleaf shrub, large			0.28			0.21	0.49	Yanting Ct, SiChuan Prov. CN	31.2667	105.4667	522	2.70		shallow perched WT		silty loam, 50cm thick, on mudtone	Cw		3	P=826, 85% in summer-fall
Zhao-P et al. 2018	*Zea mays*	maize, corn	Annual grass			0.00			0.00	0.00	Yanting Ct, SiChuan Prov. CN	31.2667	105.4667	522	2.70		shallow perched WT		silty loam, 50cm thick, on mudtone	Cw			
Zhao-L et al. 2019	*Caragana korshinskii*	Korshinsk pea shrub	Perennial desert shrub, legume, deciduous			0.32				0.32	fixed dunes, Shapotou, SE edge of Tengger Desert. Ningxia Prov..	37.4697	105.0040	1339	80.00	deep dune sands		fixed sand dunes	dune sand	BW	O only; IsoSource, 7 soil depth members to 3.8-4m, 2.6-2.8m (AO)		P=182mm; GW too deep for plants; mean of May and August
Zhao-L et al. 2019	*Artemisia ordosica*	sgebrush	Perennial desert shrub, evergreen			0.39				0.39	fixed dunes, Shapotou, SE edge of Tengger Desert. Ningxia Prov..	37.4697	105.0040	1339	80.00	deep dune sands		fixed sand dunes	dune sand	BW			
Zhao-L et al. 2019	*Hedysarum scoparium*	sweetvetch	Perennial desert shrub, legume, deciduous			0.37				0.37	fixed dunes, Shapotou, SE edge of Tengger Desert. Ningxia Prov..	37.4697	105.0040	1339	80.00	deep dune sands		fixed sand dunes	dune sand	BW			
Zhou-H et al. 2013	*Tamarix ramosissima*	saltcedar	Deciduous broadleaf shrub						0.93	0.93	near Changji, Xinjiang Prov, CN	44.1167	87.1000	475	5.00		foothill oases, GW access	desert oasis at (northern) foothill of Tian Shan Mountains	alkaline desert soils, cracking clay	BS	O+H, IsoSource, 5 members: 0-20, 20-50, 50-90, 90-180cm, GW	4	in Chinese; P=168mm, GW fed by rivers from the mountains; located at foothill of mountains
Zhou-H et al. 2013	*Nitraria sibirica*	??	Perennial desert shrub						0.53	0.53	near Changji, Xinjiang Prov, CN	44.1167	87.1000	475	5.00		foothill oases, GW access		alkaline desert soils, cracking clay	BS		4	
Zhou-H et al. 2013	*Reaumuria songarica*	??	Perennial desert shrub						0.13	0.13	near Changji, Xinjiang Prov, CN	44.1167	87.1000	475	5.00		foothill oases, GW access		alkaline desert soils, cracking clay	BS		4	
Zhou-H et al. 2015	*Nitraria sibirica*	??	Perennial desert shrub				0.80	0.46	0.63	0.63	Fukang, Gurbantunggut Desert, Xinjiang Prov, CN	44.2903	87.9404	475	5.00		desert oasis	Gurbantunggut Desert eolian/fluvial	sline-alkaline	BS	O, linear mixing, 2 members:	4	annaul P=160mm, shallow GW
Zhou-H et al. 2017	*Haloxylon ammodendron*	saxaul, black saxaul, sometimes	Evergreen needleleaf shrub			0.13			0.71	0.84	20yr old, Oasis at S edge of Badain Jaran Desert, foothill of	39.3786	100.1475	1388	4.40		foothill oases, GW access	desert oasis at foothill of Quilian Mt	sandy	BW	O, IsoSource, 4 members: 0-0.5, 0.05-1.5, 1.5-3m, GW	4	4 end-members: 0-0.5, 0.05-1.5-1.5-3m, GW; last 2 recorded; 110mm annual
Zhou-H et al. 2017	*Haloxylon ammodendron*	saxaul, black saxaul, sometimes	Evergreen needleleaf shrub			0.07			0.88	0.95	40yr old, Oasis at S edge of Badain Jaran Desert, foothill of	39.3495	100.1328	1386	4.56		foothill oases, GW access		sandy	BW		4	
Zhou-H et al. 2018	*Caragana microphylla*	Littleleaf Peashrub	Perennial desert shrub, legume			0.35			0.39	0.74	Badain Jaran Desert, Linze Res Sta, Gansu Prov. CN	39.3500	100.1167	1374	5.00		foothill oases, GW access	desert oasis, dunes, fixed and mobile	coarse loose texture	BW	O, IsoSource, 4 members:	4	P=117mm, GW from mountains
Zhu-Jinfang et al. 2016	*Ziziphus jujuba*	jujube, red date, Chinese date	Deciduous broadleaf tree				0.14	0.12	0.13	0.13	Yellow Rvr Delta, Shandong Prov, CN	38.2278	117.9456	3	3.00		flooded grassland	coastal plain sand w/ shells	coarse sand	BS	O, IsoSource, 6 members: 0-	3	P=552mm, summer rain, WT locally
Zhu-Lin et al. 2016	*Medicago sativa*	alfafa, lucerne	Perennial forb, legume						0.67	0.67	Hillslope position-1 (low), Yanchi, Ningxia Prov, CN	37.9018	107.4839	1316	3.70		lower topo position	hilly transition among Loess Plateau, Ordos Highland, Mu Us desert	higher clay; gengle hilly alluvium more sand/gravel, gentle hilly more sand/gravel, gentle hilly	BS	O, IsoSource, 3 members: 0-0.2, 0.2-3.5, 3.5-4.5m (GW)	3	fat-ion given not right; not on farm lands; elevation outside range; mean of 4 samples; >3.5m assumed GW use; local GW
Zhu-Lin et al. 2016	*Medicago sativa*	alfafa, lucerne	Perennial forb, legume						0.40	0.40	Hillslope position-2 (mid), Yanchi, Ningxia Prov, CN	37.8852	107.4681	1324	6.10	mid				BS		3	
Zhu-Lin et al. 2016	*Medicago sativa*	alfafa, lucerne	Perennial forb, legume						0.47	0.47	Hillslope position-3 (high), Yanchi, Ningxia Prov, CN	37.8679	107.4690	1328	7.70	higher topo position				BS		3	
Zhu-Yajuan et al. 2016	*Salix psammophila*	sand willow	Deciduous broadleaf shrub			0.13			0.14	0.27	Qinghai Gonghe Desert Ecosys Res Sta, Qinghai Prov, CN	36.2729	100.2658	2874	<5m		inter-dune, access to WT	high inter-mountain valley oasis	inter-dune sandy loam	BS	O+H, IsoSource, 7 members: 0.1, 0.25, 0.5, 0.75, 1, 1.5m, GW	4	GW from 5m deep well; deep soil = >1.5m
Zhu-Yajuan et al. 2016	*Salix cheilophila*	black willow	Deciduous broadleaf tree, small			0.30			0.15	0.45	Qinghai Gonghe Desert Ecosys Res Sta, Qinghai Prov, CN	36.2729	100.2658	2874	<5m		inter-dune, access to WT		inter-dune sandy loam	BS		4	

Zunzunegui et al. 2017	*Argania spinosa*	Argan, endemic	Evergreen broadleaf tree, small, small-leaf	0.92	0.56	0.74		0.74	inland-site, near Agadir city, Morocco	30.3377	-9.4691	37	50.00	dry river terrace		terrace of broad alluvial valley	0.8m coarse soil on silty-limestone	BS	O only; MixSIAR in R, 4 members: P, 0.25+0.5, 1, 1.5m		authors excluded GW (10m deep); dry-season from summer, wet from spring
Zunzunegui et al. 2017	*Argania spinosa*	Argan, endemic	Evergreen broadleaf tree, small, small-leaf	0.96	0.31	0.64		0.64	coastal site, near Agadir city, Morocco	30.6021	-9.7760	8	15.00		coastal dune	coastal dunes	0.5m coarse soil on limestone	BS			
528 measurements	*>331 speices in >228 genera*																	11 water-stress types			