

Table S1. Specimens and GenBank accession numbers of DNA sequences used in this study

Species	Voucher	Host /Substrate	Country	GeneBank accession numbers			
				LSU	ITS	BTUB	RPB2
<i>Idriella lunata</i>	CBS 204.56*	<i>Fragaria chiloensis</i>	USA	KP858981	KP859044	—	—
<i>Microdochium albescent</i>	CBS 291.79	<i>Oryza sativa</i>	Ivory Coast	KP858932	KP858996	KP859059	KP859105
	CBS 243.83	<i>Oryza sativa</i>	Unknown country	KP858930	KP858994	KP859057	KP859103
<i>M. bolleyi</i>	CBS 540.92	<i>Hordeum vulgare</i>	Syria	KP858946	KP859010	KP859073	KP859119
<i>M. chrysanthemoides</i>	CGMCC3.17929* = LC5363	unnamed Karst Cave	China	KU746736	KU746690	—	—
	CGMCC3.17930* = LC5466	unnamed Karst Cave	China	KU746735	KU746689	—	—
<i>M. citrinidiscum</i>	CBS 109067*	<i>Eichhornia crassipes</i>	Peru	KP858939	KP859003	KP859066	KP859112
<i>M. colombiense</i>	CBS 624.94*	<i>Musa sapientum</i>	Colombia	KP858935	KP858999	KP859062	KP859108
<i>M. dawsoniorum</i>	BRIP 65649	<i>Sporobolus</i>	Australia	—	MK966337	—	—
<i>M. fisheri</i>	CBS 242.90*	<i>Oryza sativa</i>	UK	KP858951	KP859015	KP859079	KP859124
<i>M. hainanense</i>	SAUCC210781*	<i>Phragmites australis</i>	China	OM959323	OM956295	OM981146	OM981153
	SAUCC210782	<i>Phragmites australis</i>	China	OM959324	OM956296	OM981147	OM981154
<i>M. indocalami</i>	SAUCC1016*	<i>Indocalamus longiauritus</i>	China	MT199878	MT199884	MT435653	MT510550
<i>M. lycopodium</i>	CBS 146.68	Air sample	The Netherlands	KP858929	KP858993	KP859056	KP859102
	CBS 109397	<i>Phragmites australis</i>	Germany	KP858940	KP859004	KP859067	KP859113
	CBS 109398	<i>Phragmites australis</i>	Germany	KP858941	KP859005	KP859068	KP859114
<i>M. majus</i>	CBS 741.79	<i>Triticum aestivum</i>	Germany	KP858937	KP859001	KP859064	KP859110
<i>M. miscanthi</i>	SAUCC211092*	<i>Miscanthus sinensis</i>	China	OM957532	OM956214	OM981141	OM981148
	SAUCC211093	<i>Miscanthus sinensis</i>	China	OM957533	OM956215	OM981142	OM981149

	SAUCC211094	<i>Miscanthus sinensis</i>	China	OM957534	OM956216	OM981143	OM981150
<i>M. musae</i>	CBS 111018 = CPC 5380	<i>Musa cv. Cavendish</i>	Costa Rica	—	AY293061	—	—
	CBS 143499 = CPC 32809	<i>Musa</i> sp	Malaysia	MH107941	MH107894	—	—
	CBS 143500* = CPC 32689	<i>Musa</i> sp	Malaysia	MH107942	MH107895	—	MH108003
	CPC 11234	<i>Musa</i> sp	Mauritius	MH107943	MH107896	—	—
	CPC 11240	<i>Musa</i> sp	Mauritius	MH107944	MH107897	—	—
	CPC 16258	<i>Musa</i> sp	Mexico	MH107945	MH107898	—	—
	CPC 32681	<i>Musa</i> sp	Malaysia	MH107946	MH107899	—	—
<i>M. neoqueenslandicum</i>	CBS 445.95	<i>Juncus effusus</i>	The Netherlands	KP858933	KP858997	KP859060	KP859106
	CBS 108926*	<i>Agrostis</i> sp	New Zealand	KP858938	KP859002	KP859065	KP859111
<i>M. nivale</i>	CBS 116205*	<i>Triticum aestivum</i>	UK	KP858944	KP859008	KP859071	KP859117
<i>M. nivale</i> var. <i>nivale</i>	CBS 288.50	Unknown	Unknown country	MH868135	MH856626	—	—
<i>M. novae-zelandiae</i>	CBS 143847	From turf leaves (Poaceae)	New Zealand	—	LT990655	LT990608	LT990641
	CPC 29693	From turf leaves (Poaceae)	New Zealand	—	LT990656	LT990609	LT990642
<i>M. paspali</i>	HK-ML-1371	<i>Paspalum vaginatum</i>	China	—	KJ569509	KJ569514	—
	QH-BA-48	<i>Paspalum vaginatum</i>	China	—	KJ569510	KJ569515	—
	SY-LQG66	<i>Paspalum vaginatum</i>	China	—	KJ569511	KJ569516	—
	WC-WC-85	<i>Paspalum vaginatum</i>	China	—	KJ569512	KJ569517	—
	WN-BD-452	<i>Paspalum vaginatum</i>	China	—	KJ569513	KJ569518	—
<i>M. phragmitis</i>	CBS 285.71*	<i>Phragmites australis</i>	Poland	KP858949	KP859013	KP859077	KP859122
	CBS 423.78	<i>Phragmites communis</i>	Germany	KP858948	KP859012	KP859076	KP859121
<i>M. ratticaudae</i>	BRIP 68298	introduced giant rat's tail grasses	Australia	MW481666	MW481661	—	MW626890

<i>M. rhopalostylidis</i>	CPC 34449 = CBS 145125*	<i>Rhopalostylis sapida</i>	New Zealand	MK442532	MK442592	—	MK442667
<i>M. seminicola</i>	KAS3576 = CBS 139951 *	Maize kernels	Switzerland	KP858974	KP859038	KP859101	KP859147
	KAS1516 = CPC 26001	grain	Canada	KP858961	KP859025	KP859088	KP859134
	KAS3574 = DAOM 250155	Maize kernels	Switzerland	KP858973	KP859037	KP859100	KP859146
	KAS3158 = DAOM 250161	<i>Triticum aestivum</i>	Canada	KP858970	KP859034	KP859097	KP859143
	KAS1527 = DAOM 250165	grain	Canada	KP858966	KP859030	KP859093	KP859139
	KAS1473 = DAOM 250176	<i>Triticum aestivum</i>	Canada	KP858955	KP859019	KP859082	KP859128
<i>M. sinense</i>	SAUCC211097*	<i>Miscanthus sinensis</i>	China	OM959225	OM956289	OM981144	OM981151
	SAUCC211098	<i>Miscanthus sinensis</i>	China	OM959226	OM956290	OM981145	OM981152
<i>M. sorghi</i>	CBS 691.96	<i>Sorghum halepense</i>	Cuba	KP858936	KP859000	KP859063	KP859109
<i>Microdochium</i> sp.	SAUCC1017	<i>Indocalamus longiauritus</i>	China	MT199879	MT199885	MT435654	—
<i>M. tainanense</i>	CBS 269.76*	<i>Saccharum officinarum</i>	Taiwan	KP858945	KP859009	KP859072	KP859118
	CBS 270.76	<i>Saccharum officinarum</i>	Taiwan	KP858931	KP858995	KP859058	KP859104
<i>M. trichocladiopsis</i>	CBS 623.77*	<i>Triticum aestivum</i>	Unknown country	KP858934	KP858998	KP859061	KP859107
<i>M. yunnanense</i>	SAUCC1011*	<i>Indocalamus longiauritus</i>	China	MT199875	MT199881	MT435650	MT510547
	SAUCC1012	<i>Indocalamus longiauritus</i>	China	MT199876	MT199882	—	MT510548
	SAUCC1015	<i>Indocalamus longiauritus</i>	China	MT199877	MT199883	MT435652	MT510549
	SAUCC1018	<i>Indocalamus longiauritus</i>	China	MT199880	MT199886	MT435655	—

Isolates marked with “*” are ex-type, ex-epitype or ex-holotype strains.