

Table S2: Strain selection

Strain	Species	Sex	Genotype	Host	Origin	Reference
RK 028	<i>Macalpinomyces eriachnes</i>	n.a.	wt	<i>Eriachne sulcate</i>	Australia	this work
UMa704	<i>Melanopsichium pennsylvanicum</i>	n.a.	wt	<i>Persicaria lapathifolia</i>	Germany	Marco Thines
RK 023	<i>Sporisorium anthracoidesporum</i>	n.a.	wt	<i>Pseudoraphis spinescens</i>	Papua New Guinea	this work
RK 079	<i>S. bursum</i>	n.a.	wt	<i>Themeda quadrivalis</i>	India	this work
RK 133	<i>S. consanguineum</i>	n.a.	wt	<i>Aristida uruguayensis</i>	Argentina	this work
RK 033	<i>S. exsertum</i>	n.a.	wt	<i>Themeda triandra</i>	Australia	this work
RK 081	<i>S. mishrae</i>	n.a.	wt	<i>Apluda mutica</i>	India	this work
UMa695	<i>S. reilianum</i>	a1b1	wt	<i>Zea mays</i>	Germany	Jan Schirawski
UMa694	<i>S. reilianum</i>	a2b2	wt	<i>Zea mays</i>	Germany	Jan Schirawski
UMa696	<i>S. reilianum</i>	a3b2	wt	<i>Zea mays</i>	China	Jan Schirawski
UMa698	<i>S. scitamineum</i>	MAT1	wt	<i>Saccharum sp.</i>	South Africa	Jan Schirawski
UMa697	<i>S. scitamineum</i>	MAT2	wt	<i>Saccharum sp.</i>	South Africa	Jan Schirawski
RK 031	<i>S. walkeri</i>	a1b?	wt	<i>Themeda triandra</i>	Australia	this work
UMa693	<i>S. walkeri</i>	a3b?	wt	<i>Themeda triandra</i>	Australia	this work
RK 074	<i>Tranzscheliella hypodytes</i>	n.a.	wt	n.a.	n.a.	this work
RK 011	<i>Ustilago avenae</i>	diploid	wt	<i>Arrhenatherum elatius</i>	Germany	this work
UMa709	<i>U. cynodontis</i>	a1b?	wt	<i>Cynodon dactylon</i>	Spain	this work
UMa710	<i>U. cynodontis</i>	a3b?	wt	<i>Cynodon dactylon</i>	Spain	this work
UMa701	<i>U. filiformis</i>	a1b?	wt	<i>Glyceria fluitans</i>	Germany	this work
UMa700	<i>U. hordei</i>	MAT1	wt	<i>Hordeum vulgare</i>	USA	Jan Schirawski
UMa699	<i>U. hordei</i>	MAT2	wt	<i>Hordeum vulgare</i>	USA	Jan Schirawski
RK 058	<i>U. kollerii</i>	n.a.	wt	<i>Avena sativa</i>	n.a.	this work
FB1	<i>U. maydis</i>	a1b1	wt	<i>Zea mays</i>	USA	Banuett and Herskowitz, 1989
FB2	<i>U. maydis</i>	a2b2	wt	<i>Zea mays</i>	USA	Banuett and Herskowitz, 1989
UMa09	<i>U. maydis</i>	a1b1	Pmfa1-egfp-cbx	<i>Zea mays</i>	USA	Kaffarnik et al., 2003
UMa10	<i>U. maydis</i>	a2b2	Pmfa1-egfp-cbx	<i>Zea mays</i>	USA	this work
FB6b	<i>U. maydis</i>	a1b2	wt	<i>Zea mays</i>	USA	Banuett and Herskowitz, 1989
FB6a	<i>U. maydis</i>	a2b1	wt	<i>Zea mays</i>	USA	Banuett and Herskowitz, 1989
RK 032	<i>U. sparsa</i>	n.a.	wt	n.a.	India	this work
RK 089	<i>U. trichophora</i>	n.a.	wt	<i>Echinochloa colona</i>	India	this work
RK 075	<i>U. vetiveriae</i>	n.a.	wt	<i>Vetiveria zizanioides</i>	India	this work
RK 254	<i>U. williamsii</i>	diploid	wt	n.a.	USA	this work
UMa702	<i>U. xerochloae</i>	a1b?	wt	<i>Xerochloae imberbis</i>	Australia	this work
UMa703	<i>U. xerochloae</i>	a3b?	wt	<i>Xerochloae imberbis</i>	Australia	this work
UMa706	<i>Ustanciosporium gigantosporum</i>	a1b?	wt	<i>Rhynchospora alba</i>	Germany	this work
UMa708	<i>Us. gigantosporum</i>	a2b?	wt	<i>Rhynchospora alba</i>	Germany	this work
UMa707	<i>Us. gigantosporum</i>	a3b?	wt	<i>Rhynchospora alba</i>	Germany	this work
RK 087	<i>Us. standleyanum</i>	n.a.	wt	<i>Rhynchospora rugosa</i>	Ecuador	this work