

Table S1. Taxa, voucher information, infrageneric category, and GenBank accession numbers for ETS, *ndhF*, *rpl16*, and *trnH-psbA*, respectively. Sequences obtained for this study are indicated with an asterisk (*) and regions with no sequence data are indicated with a dash (-); herbarium acronyms follow [84].

Ingroup taxa (<i>Paspalum</i> L.)	Voucher	Subgenus	Informal group	ETS	<i>ndhF</i>	<i>rpl16</i>	<i>trnH-psbA</i>
<i>Paspalum acuminatum</i> Raddi	Argentina, Entre Ríos, O. Morrone 5367 (SI)	<i>Paspalum</i>	Dissecta	KF852793	KF852901	KF853013	–
<i>Paspalum acutifolium</i> León	Cuba, Matanzas, E.L. Ekman 18835 (NY)	<i>Paspalum</i>	Caespitosa	OP947795*	OP947821*	–	OP947843*
<i>Paspalum alnum</i> Chase	Argentina, Entre Ríos, O. Morrone 5287 (SI)	<i>Paspalum</i>	Alma	–	KF852933	KF853035	–
<i>Paspalum alstonii</i> Chase	Venezuela, Táchira, O. Morrone 4702 (SI)	<i>Harpostachys</i>		KF852779	KF852893	KF853004	–
<i>Paspalum atratum</i> Swallen	Bolivia, La Paz, O. Morrone 4858 (SI)	<i>Paspalum</i>	Plicatula	KF852788	KF852896	KF853008	–
<i>Paspalum bakeri</i> Hack.	The Bahamas, Great Abaco, D.S. Correll 47669 (NY)	<i>Paspalum</i>	Caespitosa	OP947796*	OP947822*	OP947815*	OP947844*
<i>Paspalum bertonii</i> Hack.	Argentina, Misiones, F.O. Zuloaga 7186 (SI)	<i>Paspalum</i>	Bertoniana	KF852787	KF852997	KF853007	OP947845*
<i>Paspalum biaristatum</i> Filg. & Davidse	Brazil, Goiás, G.H. Rua 636 (BAA)	<i>Ceresia</i>		KF852821	KF852929	KF853031	–
<i>Paspalum blodgettii</i> Chapm.	Cuba, Holguín, F.O. Zuloaga 9604 (SI)	<i>Paspalum</i>	Caespitosa	OP947797*	OP947823*	OP947816*	OP947846*
<i>Paspalum boscianum</i> Flügge	Puerto Rico, F.S. Axelrod & H. Stenzel 11108	<i>Paspalum</i>	Plicatula	KF852887	KF852989	KF853095	–
<i>Paspalum buchtienii</i> Hack.	Bolivia, La Paz, O. Morrone 4201 (SI)	<i>Ceresia</i>		–	KF852995	KF853099	OP947847*
<i>Paspalum caespitosum</i> Flügge (1)	Mexico, Quintana Roo, O. Morrone 3656 (SI)	<i>Paspalum</i>	Caespitosa	KF852849	KF852959	KF853059	–
<i>Paspalum caespitosum</i> (2)	Cuba, Guantánamo, F.O. Zuloaga 9607 (SI)	<i>Paspalum</i>	Caespitosa	OP947798*	OP947824*	–	OP947848*

<i>Paspalum campylostachyum</i> (Hack.) S. Denham	Venezuela, Táchira, O. Morrone 4702 (SI)	<i>Harpostachys</i>		KF852843 KF852952	KF853052	–
<i>Paspalum candidum</i> (Humb. & Bonpl. ex Flüggé) Kunth	Mexico, Oaxaca, F.O. Zuloaga 7396 (SI)	<i>Paspalum</i>	Racemosa	KF852803 KF852911	KF853019	–
<i>Paspalum capillifolium</i> Hack.	Cuba, Camaguey, F.O. Zuloaga 9630 (SI)	<i>Paspalum</i>	Rupestria	KF852862 KF852964	KF853072	–
<i>Paspalum ceresia</i> (Kuntze) Chase	Argentina, Jujuy, O. Morrone 4386 (SI)	<i>Ceresia</i>		KF852831 KF852940	KF853040	–
<i>Paspalum chacoense</i> Parodi (1)	Paraguay, Boquerón, C.L. Quarín 3630 (MO)	<i>Paspalum</i>	Caespitosa	KF852802 KF852910	KF853018	–
<i>Paspalum chacoense</i> (2)	Argentina, Formosa, A. Burkart 20258 (SI)	<i>Paspalum</i>	Caespitosa	–	OP947825* –	OP947849*
<i>Paspalum chaseanum</i> Parodi	Paraguay, R.H. Fortunato 8742 (BAB)	<i>Paspalum</i>	Plicatula	KF852799 KF852907	EU871098	–
<i>Paspalum cinerascens</i> (Döll) A.G. Burm. & C.N. Bastos	Paraguay, Amambay, F.O. Zuloaga 7305 (SI)	<i>Harpostachys</i>		KF852778 KF852997	KF853003	–
<i>Paspalum commune</i> Lillo	Argentina, Salta, F.O. Zuloaga 8480 (SI)	<i>Paspalum</i>	Macrophylla	KF852812 KF852920	EU871095	–
<i>Paspalum corcovadense</i> Raddi	Brazil, Rio de Janeiro, M. Nadruz 2164 (RB)	<i>Paspalum</i>	Corcovadensia	OP947799 OP947826* *	–	–
<i>Paspalum cordatum</i> Hack.	Brazil, Paraná, H.M. Longhi-Wagner 9441 (SI)	<i>Ceresia</i>		KF852830 KF852939	KF853039	–
<i>Paspalum coryphaeum</i> Trin.	Brazil, São Paulo, F.O. Zuloaga 8933 (SI)	<i>Paspalum</i>	Coryphaea	–	KF852919 EU871096	–
<i>Paspalum dasyleurum</i> Kuntze	Chile, Los Lagos, F.O. Zuloaga 7242 (SI)	<i>Paspalum</i>	Dilatata	KF852790 KF852898	KF853010	–
<i>Paspalum dasytrichium</i> Dusén ex Swallen	Brazil, O. Morrone 5381 (SI)	<i>Paspalum</i>	Coryphaea	KF852874 KF852976	EU871068	–
<i>Paspalum decumbens</i> Sw.	Bolivia, La Paz, O. Morrone 4231 (SI)	<i>Harpostachys</i>		KF852877 KF852979	KF853086 OP947851*	

<i>Paspalum denticulatum</i> Trin. (1)	Argentina, Formosa, C.L. Quarín 4196 (SI)	<i>Paspalum</i>	Livida	KF852808 KF852916	KF853024	–
<i>Paspalum denticulatum</i> (2)	Paraguay, Presidente Hayes, F.O. Zuloaga 7319 (SI)	<i>Paspalum</i>	Livida	KF852875 KF852977	KF853084	–
<i>Paspalum denticulatum</i> (3)	Argentina, Jujuy, F.O. Zuloaga 8607 (SI)	<i>Paspalum</i>	Livida	KF852850 KF852960	KF853060	–
<i>Paspalum distichum</i> L.	Uruguay, Río Negro, O. Morrone 5242 (SI)	<i>Paspalum</i>	Disticha	KF852780 KF852892	EU871051	–
<i>Paspalum distortum</i> Chase	Cuba, Pinar del Río, F.O. Zuloaga 9563 (SI)	<i>Paspalum</i>	Filiformia	KF852863 KF852965	KF853073	–
<i>Paspalum durifolium</i> Mez	Brazil, Rio Grande do Sul, J.F.M. Valls 12282 (MO)	<i>Paspalum</i>	Ungrouped	KF852801 KF852909	KF853017	–
<i>Paspalum ekmanianum</i> Henrard	Bolivia, Santa Cruz, O. Morrone 5061 (SI)	<i>Paspalum</i>	Lachnea	KF852796 KF852904	KF853016	OP947852*
<i>Paspalum equitans</i> Mez	Argentina, Misiones, F.O. Zuloaga 7154 (SI)	<i>Paspalum</i>	Ungrouped	KF852804 KF852912	KF853020	OP947853*
<i>Paspalum erianthum</i> Nees ex Trin.	Bolivia, Santa Cruz, O. Morrone 4291 (SI)	<i>Paspalum</i>	Eriantha	KF852825 KF852934	EU871067	–
<i>Paspalum eucomum</i> Nees ex Trin.	Brazil, Minas Gerais, H.M. Longhi-Wagner 9599 (ICN)	<i>Ceresia</i>		KF852869 KF852971	KF853079	–
<i>Paspalum fasciculatum</i> Willd. Ex Flüggé	Mexico, Oaxaca, F.O. Zuloaga 7417 (SI)	<i>Paspalum</i>	Fasciculata	KF852785 KF852895	KF853005	–
<i>Paspalum fimbriatum</i> Kunth (1)	Mexico, Quintana Roo, O. Morrone 3651 (SI)	<i>Paspalum</i>	Fimbriata	KF852798 KF852906	EU871065	–
<i>Paspalum fimbriatum</i> (2)	Venezuela, Miranda, O. Morrone 4664 (SI)	<i>Paspalum</i>	Fimbriata	KF852868 KF852970	KF853078	–
<i>Paspalum galapageium</i> Chase	Ecuador, Galapagos, L. Fowler 65 (MO)	<i>Paspalum</i>	Caespitosa	–	OP947827*	–
<i>Paspalum gardnerianum</i> Nees	Brazil, Distrito Federal, T.S.Filgueiras 3480 (FURB)	<i>Paspalum</i>	Gardneriana	KF852829 KF852938	KF853038	–
<i>Paspalum geminiflorum</i> Steud.	Bolivia, Santa Cruz, O. Morrone 4964 (SI)	<i>Paspalum</i>	Plicatula	KF852883 KF852985	KF853091	OP947855*

<i>Paspalum glabrinode</i> (Hack.) Morrone & Zuloaga	Argentina, Misiones, F.O. Zuloaga 6809 (SI)	<i>Paspalum</i>	Ungrouped	–	KF852894	EU871057	–
<i>Paspalum haumanii</i> Parodi	Argentina, Santa Fe, C.L. Quarín 3854 (SI)	<i>Paspalum</i>	Virgata	KF852816	KF852924	EU871080	–
<i>Paspalum heterotrichon</i> Trin.	Venezuela, Miranda, O. Morrone 4739 (SI)	<i>Ceresia</i>		KF852840	KF852949	KF853049	OP947856*
<i>Paspalum humboldtianum</i> Flügge	Argentina, Córdoba, O. Morrone 5165 (SI)	<i>Ceresia</i>		KF852871	KF852973	KF853081	OP947857*
<i>Paspalum hyalinum</i> Nees ex Trin.	Paraguay, Amambay, F.O. Zuloaga 7279 (SI)	<i>Paspalum</i>	Parviflora	KF852876	KF852978	KF853085	–
<i>Paspalum inaequivalve</i> Raddi	Argentina, Entre Ríos, F.O. Zuloaga 7035 (SI)	<i>Paspalum</i>	Inaequivalvia	KF852847	KF852957	KF853057	–
<i>Paspalum indecorum</i> Mez (1)	Argentina, Misiones, F.O. Zuloaga 7142 (SI)	<i>Paspalum</i>	Caespitosa	KF852867	KF852969	KF853077	–
<i>Paspalum indecorum</i> (2)	Argentina, Misiones, O. Morrone 1756 (SI)	<i>Paspalum</i>	Caespitosa	OP947800	OP947828	OP947817*	OP947858*
<i>Paspalum intermedium</i> Munro ex Morong & Britton	Argentina, A. Schinini 28857 (CETS)	<i>Paspalum</i>	Virgata	KF852817	KF852925	EU871081	–
<i>Paspalum ionanthum</i> Chase	Argentina, Corrientes, F.O. Zuloaga 7112 (SI)	<i>Paspalum</i>	Notata	KF852837	KF852946	KF853046	–
<i>Paspalum juergensii</i> Hack.	Bolivia, La Paz, O. Morrone 4188 (SI)	<i>Paspalum</i>	Paniculata	KF852873	KF852975	KF853083	OP947859*
<i>Paspalum lanciflorum</i> Trin.	Venezuela, Bolivar, O. Morrone 4760 (SI)	<i>Ceresia</i>		KF852841	KF852950	KF853050	–
<i>Paspalum laxum</i> Lam.	Mexico, Jalisco, R. McVaugh 19650 (NY)	<i>Paspalum</i>	Caespitosa	OP947801	OP947829	–	OP947860*
<i>Paspalum ligulare</i> Nees	Nicaragua, León, R.W. Pohl 12711 (MO)	<i>Paspalum</i>	Caespitosa	OP947802	OP947830	–	OP947861*
<i>Paspalum lindenianum</i> A. Rich.	Cuba, Guantánamo, F.O. Zuloaga 9614 (SI)	<i>Paspalum</i>	Filiformia	KF852864	KF852966	KF853074	–
<i>Paspalum lineare</i> Trin.	Bolivia, Santa Cruz, O. Morrone 4301 (SI)	<i>Paspalum</i>	Linearia	KF852846	KF852956	KF853056	–

<i>Paspalum longiaristatum</i> Filg. & Davidse	Brazil, Goiás, G.H. Rua 685 (CEN)	<i>Ceresia</i>		KF852820	KF852928	KF853030	–
<i>Paspalum macranthecium</i> Parodi	Paraguay, Amambay, F.O. Zuloaga 7261 (SI)	<i>Paspalum</i>	Plicatula	KF852886	KF852988	KF853094	–
<i>Paspalum macrophyllum</i> Kunth	Venezuela, Táchira, O. Morrone 4705 (SI)	<i>Paspalum</i>	Macrophylla	KF852828	KF852937	EU871073	–
<i>Paspalum maculosum</i> Trin.	Argentina, Misiones, F.O. Zuloaga 7216 (SI)	<i>Paspalum</i>	Maculosa	KF852823	KF852931	KF853033	OP947862*
<i>Paspalum malacophyllum</i> Trin.	Brazil, Santa Catarina, J.F.M. Valls 14411 (CEN)	<i>Anachyris</i>		KF852835	KF852944	KF853044	–
<i>Paspalum malmeanum</i> Ekman	Bolivia, Santa Cruz, O. Morrone 4991b (SI)	<i>Ceresia</i>		KF852839	KF852948	KF853048	–
<i>Paspalum maritimum</i> Trin.	Brazil, Rio de Janeiro, F.O. Zuloaga 8974 (SI)	<i>Paspalum</i>	Paniculata	KF852884	KF852986	KF853092	–
<i>Paspalum microstachyum</i> J. Presl	Venezuela, Cojedes, O. Morrone 4683 (SI)	<i>Paspalum</i>	Inaequivalvia	KF852805	KF852913	KF853021	OP947863*
<i>Paspalum minus</i> E. Fourn.	Argentina, Entre Ríos, F.O. Zuloaga 7040 (SI)	<i>Paspalum</i>	Notata	KF852824	KF852932	KF853034	–
<i>Paspalum modestum</i> Mez	Argentina, Corrientes, F.O. Zuloaga 6925 (SI)	<i>Paspalum</i>	Plicatula	KF852880	KF852982	KF853089	–
<i>Paspalum molle</i> Poir.	Venezuela, Trujillo, O. Morrone 4730 (SI)	<i>Paspalum</i>	Caespitosa	OP947803*	OP947831*	OP947818*	OP947864*
<i>Paspalum multicaule</i> Poir.	Venezuela, Portuguesa, O. Morrone 4686 (SI)	<i>Paspalum</i>	Parviflora	KF852889	KF852991	–	OP947865*
<i>Paspalum notatum</i> Alain ex Flügge (1)	Venezuela, Miranda, O. Morrone 4746 (SI)	<i>Paspalum</i>	Notata	KF852832	KF852941	KF853041	–
<i>Paspalum notatum</i> (2)	Argentina, Tucumán, A.M. Cialdella 138 (SI)	<i>Paspalum</i>	Notata	–	OP947832*	OP947819*	–
<i>Paspalum oligostachyum</i> Salzm. ex Steud.	Brazil, Bahia, F.O. Zuloaga 9043 (SI)	<i>Paspalum</i>	Paniculata	KF852865	KF852967	KF853075	–
<i>Paspalum orbiculatum</i> Poir.	Argentina, Entre Ríos, F.O. Zuloaga 7039 (SI)	<i>Paspalum</i>	Orbiculata	KF852792	KF852900	KF853012	OP947866*
<i>Paspalum ovale</i> Nees ex Steud.	Argentina, Misiones, F.O. Zuloaga 7123 (SI)	<i>Paspalum</i>	Ovalia	KF852822	KF852930	KF853032	–

<i>Paspalum pallens</i> Swallen	Bolivia, Santa Cruz, O. Morrone 5000 (SI)	<i>Paspalum</i>	Linearia	KF852833 KF852942	KF85304 2	–
<i>Paspalum palustre</i> Mez	Argentina, A, Bordon 110 (CTES)	<i>Paspalum</i>	Plicatula	KF852813 KF852921	EU87107 0	–
<i>Paspalum parviflorum</i> Rhode ex Flügge	Brazil, Bahia, F.O. Zuloaga 8997 (SI)	<i>Paspalum</i>	Parviflora	KF852882 KF852984	KF85309 0	OP94786 7*
<i>Paspalum pauciciliatum</i> (Parodi) Herter	Argentina, Misiones, F.O. Zuloaga 7191 (SI)	<i>Paspalum</i>	Dilatata	KF852807 KF852915	KF85302 3	–
<i>Paspalum penicillatum</i> Hook f.	Bolivia, La Paz, O. Morrone 4808 (SI)	<i>Paspalum</i>	Racemosa	KF852794 KF852902	KF85301 4	–
<i>Paspalum petilum</i> Chase	Venezuela, Bolivar, O. Morrone 4783 (SI)	<i>Ceresia</i>		KF852844 KF852953	KF85305 3	–
<i>Paspalum petrense</i> A.G. Burm.	Brazil, T.S. Filgueiras 3510	<i>Ceresia</i>		KF852870 KF852972	KF85308 0	–
<i>Paspalum pilosum</i> Lam.	Venezuela, Bolivar, O. Morrone 4778 (SI)	<i>Harpostachys</i>		KF852885 KF852987	KF85309 3	OP94786 8*
<i>Paspalum pleostachyum</i> Döll	Puerto Rico, Maricao, G.R. Proctor 43826 (US)	<i>Paspalum</i>	Caespitosa	OP947804 OP947833 * *	–	OP94786 9*
<i>Paspalum plicatulum</i> Michx.	Argentina, Salta, F.O. Zuloaga 8477 (SI)	<i>Paspalum</i>	Plicatula	KF852881 KF852983	EU87107 6	–
<i>Paspalum polyphyllum</i> Nees ex Trin.	Brazil, Paraná, H.M. Longhi-Wagner 9418 (ICN)	<i>Ceresia</i>		KF852836 KF852945	KF85304 5	–
<i>Paspalum procerum</i> S. Denham	Venezuela, Táchira, O. Morrone 4740 (SI)	<i>Harpostachys</i>		KF852842 KF852951	KF85305 1	OP94787 0*
<i>Paspalum prostratum</i> Scribn. & Merr.	Venezuela, Táchira, O. Morrone 4709 (SI)	<i>Paspalum</i>	Racemosa	KF852866 KF852968	KF85307 6	–
<i>Paspalum pubiflorum</i> Rupr. ex E. Fourn.	Mexico, Puebla, F.O. Zuloaga 7379 (SI)	<i>Paspalum</i>	Livida	KF852810 KF852918	KF85302 6	–
<i>Paspalum pulchellum</i> Kunth	Cuba, Pinar del Río, F.O. Zuloaga 9541 (SI)	<i>Paspalum</i>	Reimaria	KF852878 KF852980	KF85308 7	–
<i>Paspalum pumilum</i> Nees	Brazil, Paraná, O. Morrone 5383 (SI)	<i>Paspalum</i>	Notata	KF852838 KF852947	KF85304 7	OP94787 1*
<i>Paspalum pygmaeum</i> Hack.	Venezuela, Mérida, O. Morrone 4726 (SI)	<i>Paspalum</i>	Racemosa	KF852888 KF852990	–	–

<i>Paspalum quadrifarium</i> Lam.	Argentina, Buenos Aires, L.M. Giussani 320 (SI)	<i>Paspalum</i>	Quadrifaria	KF852797 KF852905	EU871055	–
<i>Paspalum rawitscheri</i> (Parodi) Chase ex G.H. Rua & Valls	Brazil, Rio Grande do Sul, G.H. Rua 728 (CEN)	Ungrouped		KF852819 KF852927	KF853029	–
<i>Paspalum redondense</i> Swallen (1)	Brazil, Paraná, J.F.M. Valls 11370 (CEN)	<i>Paspalum</i>	Caespitosa	KF852826 KF852935	KF853036	–
<i>Paspalum redondense</i> (2)	Brazil, Paraná, G. Hatschbach 50346 (NY)	<i>Paspalum</i>	Caespitosa	OP947805 OP947834 * *	–	OP947874*
<i>Paspalum redundans</i> Chase	Ecuador, Galapagos, J.T. Howell 9902 (SI)	<i>Paspalum</i>	Caespitosa	OP947806 OP947835 * *	–	OP947875*
<i>Paspalum regnellii</i> Mez	Argentina, A.I. Honfi 130 (SI)	<i>Paspalum</i>	Macrophylla	KF852800 KF852908	EU871090	–
<i>Paspalum repandum</i> (Nees) G.H. Rua & Valls	Brazil, Paraná, P.K.H. Dusén 10478 (NY)	Ungrouped		– OP947836 *	–	–
<i>Paspalum repens</i> P.J. Bergius	Argentina, Entre Ríos, O. Morrone 5193 (SI)	<i>Paspalum</i>	Dissecta	KF852789 KF852897	KF853009	–
<i>Paspalum restingense</i> Renvoize	Brazil, Bahia, F.O. Zuloaga 9014 (SI)	<i>Paspalum</i>	Corcovadensia	KF852848 KF852958	KF853058	–
<i>Paspalum robustum</i> S. Denham	Venezuela, Bolivar, O. Morrone 4787 (SI)	<i>Harpostachys</i>		KF852851 KF852961	KF853061	–
<i>Paspalum rufum</i> Nees ex Steud (1)	Argentina, Santa Fe, C.L. Quarín 3754 (SI)	<i>Paspalum</i>	Eriantha/Virgata	KF852815 KF852923	EU871089	OP947876*
<i>Paspalum rufum</i> (2)	Argentina, Corrientes, F.O. Zuloaga 7110 (SI)	<i>Paspalum</i>	Eriantha/Virgata	KF852814 KF852922	EU871077	–
<i>Paspalum rupestre</i> Nees	Cuba, Holgún, F.O. Zuloaga 9588 (SI)	<i>Paspalum</i>	Rupestria	KF852860 KF852962	KF853070	–
<i>Paspalum saccharoides</i> Nees ex Trin.	Bolivia, La Paz, O. Morrone 4211 (SI)	<i>Paspalum</i>	Saccharoidea	KF852795 KF852903	KF853015	–
<i>Paspalum sauetii</i> Chase	Cuba, Guantánamo, F.O. Zuloaga 9610 (SI)	<i>Paspalum</i>	Rupestria	KF852861 KF852963	KF853071	–
<i>Paspalum simplex</i> Morong	Argentina, Corrientes, O. Morrone 5311 (SI)	<i>Anachyris</i>		KF852872 KF852974	KF853082	OP947877*

<i>Paspalum squamulatum</i> E. Fourn.	Mexico, Oaxaca, F.O. Zuloaga 7389 (SI)	<i>Paspalum</i>	Paniculata	KF852791	KF852899	KF85301 1	OP94787 3*
<i>Paspalum stellatum</i> Humb. & Bonpl. ex Flügge	Venezuela, Miranda, O. Morrone 4745 (SI)	<i>Ceresia</i>		KF852818	KF852926	KF85302 8	–
<i>Paspalum subesquiglume</i> Döll	Brazil, Goiás, G.H. Rua 777 (BAA)	<i>Paspalum</i>	Gardneriana	KF852827	KF852936	KF85303 7	–
<i>Paspalum thrasyoides</i> (Trin.) S. Denham	Brazil, Distrito Federal, G.H. Rua 654 (SI)	<i>Harpostachys</i>		KF852879	KF852981	KF85308 8	–
<i>Paspalum trinitense</i> (Mez) S. Denham	Venezuela, O. Morrone 4776 (SI)	<i>Harpostachys</i>		KF852891	KF852992	–	–
<i>Paspalum umbrosum</i> Trin.	Argentina, Corrientes, O. Morrone 5313 (SI)	<i>Paspalum</i>	Paniculata	KF852806	KF852914	KF85302 2	OP94787 9*
<i>Paspalum unispicatum</i> (Scribn. & Merr.) Nash	Argentina, Salta, O. Morrone 4344 (SI)	<i>Harpostachys</i>		–	KF852954	KF85305 4	OP94787 8*
<i>Paspalum usteri</i> Hack.	Argentina, Misiones, F.O. Zuloaga 6588 (SI)	<i>Anachyris</i>		OP947807	OP947837	OP94782 0*	–
<i>Paspalum volcanense</i> Zuloaga, Morrone & S. Denham	Argentina, Jujuy, O. Morrone 4374 (SI)	<i>Anachyris</i>		KF852845	KF852955	KF85305 5	–
Outgroup taxa				ETS	ndhF	rpl16	trnH-psbA
<i>Anthraenantia lanata</i> (Kunth) Benth.	Uruguay, Río Negro, O. Morrone 5241 (SI)			–	MT18018	OP94780	OP94783
<i>Axonopus furcatus</i> (Flügge) Hitchc.	United States, Louisiana, R.D. Thomas 121389 (NY)			MT18024	MT18020	OP94780	–
<i>Axonopus obtusifolius</i> (Raddi) Chase	Brazil, São Paulo, W.D. Clayton 4665 (NY)			6	1	9*	–
<i>Hiladaea pallens</i> (Sw.) C. Silva & R.P. Oliveira	Argentina, Jujuy, O. Morrone 3209 (SI)			MT18025	MT18021	–	–
<i>Ichnanthus calvescens</i> (Nees ex Trin.) Döll	Brazil, Bahia, C. Silva 416 (HUEFS)			6	1	–	–
				KF852858	AY029638	KF85306 8	OP94784 0*
				–	KP878939	KP87900	KP87905
						0	3

<i>Hymenachne</i> <i>pernambucensis</i> (Spreng.) Zuloaga	Argentina, Corrientes, J.M. Acosta 506 (SI)	–	AY188478	OP94781 0*	–
<i>Ocellochloa stolonifera</i> (Poir.) Zuloaga & Morrone	Bolivia, Santa Cruz, O. Morrone 4268 (SI)	–	KP878959	OP94781 1*	OP94784 1*
<i>Plagiantha tenella</i> Renvoize	Brazil, Bahia, F.O. Zuloaga 6953 (SI)	–	OP947838 *	OP94781 2*	–
<i>Streptostachys asperifolia</i> Desv.	Brazil, Bahia, F.O. Zuloaga 9023 (SI)	MT18022 7	EU805483	OP94781 4*	OP94784 2*

Table S2. Descriptive statistics for each separate data partition and combined matrices used in parsimony analyses.

DNA region / dataset	ETS	<i>ndhF</i>	<i>rpl16</i>	<i>trnH-psbA</i>	Plastid	Total dataset
Ingroup (number of taxa)	125	121	93	39	118	119
Caespitosa (number of taxa)	13	13	7	12	13	13
Outgroup (number of taxa)	4	8	5	5	9	9
Alignment length (bp)	479	2062	1317	610	3989	4462
Parsimony	259	232	169	13	400	718
informative sites	(54.07%)	(11.25%)	(12.83%)	(2.13%)	(10.02%)	(16.09%)
Tree length	1599	521	453	21	1024	3195
Consistency index (CI)	0.328	0.543	0.510	0.667	0.497	0.370
Retention index (CR)	0.638	0.753	0.667	0.851	0.670	0.584

Table S3. Chromosome numbers known in taxa of the group Caespitosa of *Paspalum* L.

Species	Gametophytic count (<i>n</i>)		Sporophytic count (2 <i>n</i>)	
	Number	References	Number	References
<i>Paspalum blodgettii</i>	20	[73]	–	–
<i>Paspalum caespitosum</i>	10	[73]	–	–
<i>Paspalum chacoense</i>	–	–	20	[28,86]
<i>Paspalum indecorum</i>	10	[72]	20	[28,73,87,88]
<i>Paspalum laxum</i>	–	–	60	[89]
<i>Paspalum ligulare</i>	20	[85]	20, 40	[28]
<i>Paspalum pleostachyum</i>	–	–	20, 30, 40	[28]
<i>Paspalum redondense</i>	–	–	20, 40	[28]