

SUPPLEMENTARY MATERIAL

Table S1. Coordinates of the *Lessingianthus* species studied.

Species, long, lat
ade,-43.590278,-18.201944
ade,-43.586944,-18.213333
ade,-47.439998626709,-19.8652992248535
ade,-52.566389,-14.748611
ade,-43.754444,-18.298056
ade,-43.603333,-18.215556
ade,-43.593056,-18.138889
ade,-43.6002998352051,-18.2493991851807
ade,-43.567778,-18.156389
ade,-43.700278,-18.266667
ade,-43.812483,-17.915733
ade,-43.335583,-18.195067
ade,-43.95,-19.67
ade,-56.4460983276367,-14.4085998535156
ade,-43.35359,-18.08209
ara,-49.31,-25.3247
ara,-49.115,-25.2061
ara,-50.258325,-24.565469
ara,-49.713647,-24.340602
ara,-49.7058,-24.2511
ara,-49.4636,-24.1128
ara,-49.34,-24.11
ara,-49.8028,-23.8739
ast,-49.948600769043,-24.5261001586914
ast,-50.4136009216309,-24.5093994140625
ast,-49.7057991027832,-24.2511005401611
ast,-49.264722,-24.265
ast,-50,-25.416667
ast,-50.260917,-24.583861
ast,-50.000578,-25.239622
ast,-50.044722,-25.222694
eit,-47.6133,-16.7686
eit,-48.05,-16.05
eit,-47.9,-15.930833
eit,-48.18333,-15.91667
eit,-47.847222,-15.8725

Table S1. Continuation

eit,-47.85,-15.866667
eit,-47.9297,-15.7797
eit,-47.984167,-15.693333
eit,-47.863333,-15.665833
eit,-47.874111,-15.648667
eit,-48.075,-15.628611
eit,-47.55,-15.533333
exi,-46.3657989501953,-20.2453002929688
exi,-50.258611,-24.565833
exi,-45.8333015441895,-18.3383007049561
exi,-50.0064010620117,-25.4293994903564
exi,-50.1618995666504,-25.0949993133545
exi,-50.258564,-24.565908
exi,-49.996778,-25.241111
exi,-46.3657989501953,-20.2453002929688
irw,-46.3658,-20.2453
irw,-47.44,-19.8653
irw,-48.53,-16.75
irw,-47.77671,-15.7833
irw,-47.9297,-15.7797
irw,-47.926944,-15.731111
irw,-48.031944,-15.641389
irw,-47.624444,-15.573056
irw,-47.509167,-14.0725
pum,-44.1719,-17.7575
pum,-49.995472,-25.240389
pum,-44.2,-17.8
pum,-49.37,-24.1
pum,-50.1618995666504,-25.0949993133545
pum,-49.7057991027832,-24.2511005401611
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pum,-44.1721992492676,-17.7574996948242
pum,-50.1618995666504,-25.0949993133545
sto,-47.70192,-14.1167

Table S1. Continuation

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sto,-47.801167,-13.666833
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sto,-44.1721992492676,-17.7574996948242
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sto,-44.9852981567383,-21.7222003936768
sto,-43.7449989318848,-19.513599395752
sto,-47.525278,-14.102222
sto,-43.7449989318848,-19.513599395752
sto,-44.198299407959,-19.9678001403809
ven,-43.694722,-19.035278
ven,-51.711944,-17.900278
ven,-48.202222,-16.347777
ven,-47.916667,-15.95
ven,-48,-15.916111
ven,-47.933333,-15.883333
ven,-48.872778,-15.796389
ven,-48.918889,-15.760556
ven,-47.875,-15.758
ven,-48.00933,-15.70606
ven,-47.3344,-15.5372
ven,-55.7494,-15.4608
ven,-47.525556,-14.042222

Table S1. Continuation

ven,-60.099174,-12.694217
ven,-61.02,-12.216667
zuc,-46.63,-23.5403
zuc,-47.43,-15.4
zuc,-47.1025,-15.30964
zuc,-51.81666667,-17.1071
zuc,-52.03,-16.4
zuc,-48.2,-14.36667
zuc,-48.625,-17.7417
zuc,-47.33583,-16.21056
zuc,-48.456388,-16.320277
zuc,-42.974722,-16.358611
zuc,-49.010555,-15.101111
zuc,-48.5072,-16.0822
zuc,-43.937801361084,-19.9207992553711
zuc,-44.065601348877,-20.6707992553711
zuc,-44.0950012207031,-22.1494007110596
zuc,-48.539444,-16.172778
zuc,-47.661389,-15.362778
zuc,-49.154722,-16.536944
zuc,-47.9296989440918,-15.7797002792358
zuc,-46.54164,-20.17249
zuc,-44.4042015075684,-19.2744007110596
zuc,-47.4700012207031,-20.25
zuc,-46.8539009094238,-20.343900680542
zuc,-44.198299407959,-19.9678001403809
zuc,-51.9952777,-18.4394444
zuc,-46.904556,-20.29025

Table SII. Names, category, dependency, biome to which it belongs, and area (km²) of the PAs that fall within the optimal area predicted for the *Lessingianthus* species studied. The map in Figure 4a shows the most important PAs in terms of the area they cover (between 200-8000km²) with their codes.

Protected Areas covering the central area of the Cerrado					
NAME	CODE	CATEGORY	DEPENDENCY	BIOME	AREA KM2
ARIE DA GRANJA DO IPÊ		Relevant Area Ecological Interest	State	Cerrado	11.94
ARIE DO TORTO		Relevant Area Ecological Interest	State	Cerrado	2.18
ÁREA DE PROTEÇÃO AMBIENTAL DA BACIA DO RIO SÃO BARTOLOMEU	EPABRSB	Environmental Protection Area	Federal	Cerrado	864.11
PARQUE DISTRIAL SALTO DO TORORÔ		Park	State	Cerrado	0.64
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL VEREDAS DO PRATUDINHO		Private Reserve of the Natural Patrimony	Federal	Cerrado	23.25
RESERVA BIOLÓGICA DO GUARÁ		Biological Reserve	State	Cerrado	1.52
ÁREA DE PROTEÇÃO AMBIENTAL FAZENDA PRIMAVERA		Environmental Protection Area	Municipal	Cerrado	22.25
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL SANTUÁRIO DAS PEDRAS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.27
ÁREA DE RELEVANTE INTERESSE ECOLÓGICA CAPETINGA/TAQUARA		Relevant Area Ecological Interest	Federal	Cerrado	21.52
PARQUE ESTADUAL ALTAMIRO DE MOURA PACHECO		Park	State	Cerrado	32.93
ESTAÇÃO ECOLÓGICA DE ÁGUAS EMENDADAS		Ecological Station	State	Cerrado	95.85
ÁREA DE PROTEÇÃO AMBIENTAL DOS PIRENEUS	EPAP	Environmental Protection Area	State	Cerrado	200.52
PARQUE ESTADUAL DA SERRA DOURADA	SDSP	Park	State	Cerrado	299.78
ÁREA DE PROTEÇÃO AMBIENTAL DA BACIA DO RIO DESCOBERTO	EPABRD	Environmental Protection Area	Federal	Cerrado	436.52
ÁREA DE PROTECAO AMBIENTAL MUNICIPAL PIRACANJUBINHA		Environmental Protection Area	Municipal	Cerrado	9.70
ARIE PARANOÁ SUL		Relevant Area Ecological Interest	State	Cerrado	0.42
ÁREA DE PROTEÇÃO AMBIENTAL DA SERRA DOURADA		Environmental Protection Area	State	Cerrado	387.60
RESERVA BIOLÓGICA DO RIO DESCOBERTO		Biological Reserve	State	Cerrado	4.54
APA DA BACIA DOS RIBEIRÕES DO GAMA E CABEÇA DE VEADO		Environmental Protection Area	State	Cerrado	248.29

Table SII. Continuation

RPPN FLOR DO CERRADO III		Private Reserve of the Natural Patrimony	Federal	Cerrado	27.22
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL CANTO DA MATA		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.04
RPPN FLOR DO CERRADO I		Private Reserve of the Natural Patrimony	Federal	Cerrado	4.61
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL CATINGUEIRO		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.62
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL CACHOEIRA DAS PEDRAS BONITAS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.97
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL INTEGRA O PARQUE		Private Reserve of the Natural Patrimony	Federal	Cerrado	3.30
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL PAU TERRA		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.07
ÁREA DE RELEVANTE INTERESSE ECOLÓGICO DA CABECEIRA DO CÔRREGO MAHANA		Relevant Area Ecological Interest	Municipal	Cerrado	0.58
REFÚGIO DE VIDA SILVESTRE DA MATA SECA		Wildlife Refuge	State	Cerrado	2.64
RESERVA BIOLÓGICA DO GAMA		Biological Reserve	State	Cerrado	5.62
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL MARIA BATISTA		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.49
FLORESTA NACIONAL DA MATA GRANDE		Floresta	Federal	Cerrado	20.80
ÁREA DE PROTEÇÃO AMBIENTAL DO PLANALTO CENTRAL	EPAPC	Environmental Protection Area	Federal	Cerrado	5258.91
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL VALE DAS COPAIBEIRAS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.04
ÁREA DE PROTEÇÃO AMBIENTAL POUSO ALTO	EPAPA	Environmental Protection Area	State	Cerrado	8701.28
RESERVA BIOLÓGICA DA CONTAGEM		Biological Reserve	Federal	Cerrado	35.63
ARIE PARQUE JK		Relevant Area Ecological Interest	State	Cerrado	31.23
PARQUE NACIONAL DA CHAPADA DOS VEADEIROS	CVNP	Park	Federal	Cerrado	2493.80
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL PARQUE BOTÂNICO DOS KAIAPÓS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.85
ARIE DA VILA ESTRUTURAL		Relevant Area Ecological Interest	State	Cerrado	0.46

Table SII. Continuation

ARIE CRULS		Relevant Area Ecological Interest	State	Cerrado	0.57
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL SÃO BARTOLOMEU		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.74
FLORESTA NACIONAL DE BRASÍLIA		Floresta	Federal	Cerrado	97.54
APA DO LAGO PARANOÁ		Environmental Protection Area	State	Cerrado	167.96
PARQUE NACIONAL DE BRASÍLIA	BNP	Park	Federal	Cerrado	442.37
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL SOLUAR		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.46
PARQUE ESTADUAL DE PARAÚNA		Park	State	Cerrado	35.07
ÁREA DE RELEVANTE INTERESSE ECOLÓGICO ÁGUAS DE SÃO JOÃO		Relevant Area Ecological Interest	State	Cerrado	0.26
ARIE DO CÓRREGO CABECEIRA DO VALO		Relevant Area Ecological Interest	State	Cerrado	0.65
RPPN FLOR DO CERRADO II		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.77
ÁREA DE PROTEÇÃO AMBIENTAL SERRA DA JIBÓIA		Environmental Protection Area	State	Cerrado	180.14
ARIE SANTUÁRIO DE VIDA SILVESTRE DO RIACHO FUNDO		Relevant Area Ecological Interest	State	Cerrado	4.99
APA DE CAFURINGA	EPAAC	Environmental Protection Area	State	Cerrado	485.59
PARQUE ESTADUAL DO DESCOBERTO		Park	State	Cerrado	20.19
RESERVA BIOLÓGICA DO CERRADÃO		Biological Reserve	State	Cerrado	0.56
FLORESTA NACIONAL DE SILVÂNIA		Floresta	Federal	Cerrado	5.11
ARIE DOM BOSCO		Relevant Area Ecological Interest	State	Cerrado	0.76
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA NATURAL DO TOMBADOR		Private Reserve of the Natural Patrimony	Federal	Cerrado	90.25
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL PONTE DE PEDRA		Private Reserve of the Natural Patrimony	Federal	Cerrado	1.11
ÁREA DE PROTEÇÃO AMBIENTAL JOÃO LEITE	EPAJL	Environmental Protection Area	State	Cerrado	747.89
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL NASCENTES DO RIO TOCANTINS		Private Reserve of the Natural Patrimony	Federal	Cerrado	2.80

Table SII. Continuation

PARQUE ESTADUAL DOS PIRINEUS		Park	State	Cerrado	29.66
ESTAÇÃO ECOLÓGICA DO JARDIM BOTÂNICO		Ecological Station	State	Cerrado	47.08
ARIE DO CÓRREGO MATO GRANDE		Relevant Area Ecological Interest	State	Cerrado	1.38
ARIE DO BOSQUE		Relevant Area Ecological Interest	State	Cerrado	0.20
MONUMENTO NATURAL DO CONJUNTO ESPELEOLÓGICO DO MORRO DA PEDREIRA		Natural Monument	State	Cerrado	0.95
Protected Areas covering the southeastern area of the Cerrado					
NAME	CODE	CATEGORY	DEPENDENCY	BIOME	AREA KM2
MONUMENTO NATURAL ESTADUAL VARGEM DA PEDRA		Natural Monument	State	Cerrado	0.108
PARQUE NATURAL MUNICIPAL REGO DOS CARRAPATOS		Park	Municipal	Cerrado	0.148
ESTAÇÃO ECOLÓGICA DO TRIPUÍ		Ecological Station	State	Atlantic Forest	3.976
PARQUE ESTADUAL DO SUMIDOURO		Park	State	Cerrado	21.395
PARQUE ESTADUAL DO LIMOEIRO		Park	State	Cerrado	21.438
PARQUE ESTADUAL SERRA DO SOBRADO		Park	State	Cerrado	4.097
MONUMENTO NATURAL MUNICIPAL SERRA DA FERRUGEM		Natural Monument	Municipal	Atlantic Forest	9.222
REFÚGIO DE VIDA SILVESTRE ESTADUAL SERRA DAS AROEIRAS		Wildlife Refuge	State	Cerrado	11.063
MONUMENTO NATURAL ESTADUAL VÁRZEA DA LAPA		Natural Monument	State	Cerrado	0.251
PARQUE ESTADUAL DA SERRA DOS MONTES ALTOS		Park	State	Cerrado	191.99
PARQUE ESTADUAL SERRA DO INTENDENTE		Park	State	Cerrado	143.701
PARQUE ESTADUAL SERRA VERDE		Park	State	Cerrado	1.518
PARQUE ESTADUAL SERRA DA CANDONGA		Park	State	Atlantic Forest	35.383
ÁREA DE PROTEÇÃO AMBIENTAL FAZENDA CAPITÃO EDUARDO		Environmental Protection Area	State	Cerrado	5.503
MONUMENTO NATURAL ESTADUAL SERRA DO GAMBÁ		Natural Monument	State	Atlantic Forest	4.75
PARQUE ESTADUAL DE BOTUMIRIM		Park	State	Cerrado	371.096

Table SII. Continuation

FLORESTA ESTADUAL SÃO JUDAS TADEU		Floresta	State	Cerrado	1.505
PARQUE NATURAL MUNICIPAL DO RIBEIRÃO SÃO JOSÉ		Park	Municipal	Cerrado	0.814
PARQUE NATURAL MUNICIPAL DO TABULEIRO		Park	Municipal	Cerrado	32.868
PARQUE NATURAL MUNICIPAL DO INTELLECTO		Park	Municipal	Cerrado	0.375
PARQUE ESTADUAL CERCA GRANDE		Park	State	Cerrado	1.432
ÁREA DE PROTEÇÃO AMBIENTAL CACHOEIRA DAS ANDORINHAS		Environmental Protection Area	State	Atlantic Forest	152.926
MONUMENTO NATURAL EXPERIÊNCIA DA JAGUARA		Natural Monument	State	Cerrado	0.411
MONUMENTO NATURAL ESTADUAL VÁRZEA DO LAGEADO E SERRA DO RAI0		Natural Monument	State	Cerrado	23.322
PARQUE ESTADUAL RIO PRETO		Park	State	Cerrado	128.936
MONUMENTO NATURAL MUNICIPAL GRUTA NOSSA SENHORA DA LAPA		Natural Monument	Municipal	Atlantic Forest	0.218
MONUMENTO NATURAL ESTADUAL DE SANTO ANTÔNIO		Natural Monument	State	Cerrado	0.332
PARQUE NATURAL MUNICIPAL SALÃO DE PEDRAS		Park	Municipal	Atlantic Forest	9.122
ESTAÇÃO ECOLÓGICA DO CERCADINHO		Ecological Station	State	Cerrado	2.407
REFUGIO DE VIDA SILVESTRE DA SERRA DOS MONTES ALTOS		Wildlife Refuge	State	Cerrado	285.53
MONUMENTO NATURAL ESTADUAL LAPA VERMELHA		Natural Monument	State	Cerrado	0.356
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL AVES GERAIS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.02
PARQUE ESTADUAL BIRIBIRI	BSP	Park	State	Cerrado	179.885
PARQUE NACIONAL DA SERRA DO GANDARELA		Park	Federal	Atlantic Forest	334.699
ÁREA DE PROTEÇÃO AMBIENTAL ÁGUAS VERTENTES	EPAAV	Environmental Protection Area	State	Cerrado-Atlantic Forest	808.195
PARQUE ESTADUAL DA SERRA DO CABRAL	SCSP	Park	State	Cerrado	237.074
FLORESTA ESTADUAL DO UAIMII		Floresta	State	Cerrado	47.607
PARQUE ESTADUAL SERRA DO OURO BRANCO		Park	State	Cerrado	80.718
PARQUE NATURAL MUNICIPAL FELISBERTO NEVES		Park	Municipal	Atlantic Forest	0.307

Table SII. Continuation

PARQUE NATURAL MUNICIPAL DAS ANDORINHAS		Park	Municipal	Cerrado	5.52
RESERVA BIOLÓGICA MUNICIPAL DA MATA DO BISPO		Biological Reserve	Municipal	Cerrado	7.378
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL INHOTIM		Private Reserve of the Natural Patrimony	Federal	Atlantic Forest	1.557
ÁREA DE PROTEÇÃO AMBIENTAL MORRO DA PEDREIRA	EPAMP	Environmental Protection Area	Federal	Cerrado	1403.919
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL POÇO FUNDO		Private Reserve of the Natural Patrimony	Federal	Atlantic Forest	4.584
PARQUE ESTADUAL SERRA NEGRA		Park	State	Cerrado-Atlantic Forest	138.575
PARQUE ESTADUAL DO ITACOLOMI		Park	State	Atlantic Forest	64.32
ÁREA DE PROTEÇÃO AMBIENTAL CARSTE DA LAGOA SANTA	EPACLS	Environmental Protection Area	Federal	Cerrado	402.512
ÁREA DE PROTEÇÃO AMBIENTAL PIRACÍCABA	EPAP	Environmental Protection Area	Municipal	Atlantic Forest	406.017
ÁREA DE PROTEÇÃO AMBIENTAL DO ITÁCURU	EPAI	Environmental Protection Area	Municipal	Cerrado-Atlantic Forest	249.938
PARQUE NATURAL MUNICIPAL DA CACHOEIRA DE SANTO ANTÔNIO		Park	Municipal	Cerrado-Atlantic Forest	0.849
MONUMENTO NATURAL ESTADUAL DE ITATIAIA		Natural Monument	State	Cerrado	34.512
ÁREA DE PROTEÇÃO AMBIENTAL PARQUE MUNICIPAL DA ESTÂNCIA ECOLÓGICA DO CRUZEIRO		Environmental Protection Area	Municipal	Atlantic Forest	0.296
MONUMENTO NATURAL ESTADUAL SERRA DA MOEDA		Natural Monument	State	Atlantic Forest	25.442
PARQUE ESTADUAL SERRA DO ROLA MOÇA		Park	State	Atlantic Forest	43.891
PARQUE ESTADUAL DE MONTEZUMA		Park	State	Atlantic Forest	18.148
PARQUE NACIONAL DAS SEMPRE VIVAS	SVNP	Park	Federal	Cerrado	1311.153
ÁREA DE PROTEÇÃO AMBIENTAL SANTO ANTÔNIO	EPASA	Environmental Protection Area	Municipal	Cerrado	677.119
AREA DE PROTECAO AMBIENTAL CORREGO DA MATA	EPACM	Environmental Protection Area	Municipal	Atlantic Forest	131.224

Table SII. Continuation

ÁREA DE PROTEÇÃO AMBIENTAL SUL-RMBH	EPAS-R	Environmental Protection Area	State	Atlantic Forest	1760.021
ESTAÇÃO ECOLÓGICA DE ARÊDES		Ecological Station	State	Cerrado	13.777
PARQUE NATURAL MUNICIPAL DE CACHOEIRA DO CAMPO		Park	Municipal	Atlantic Forest	0.039
PARQUE ESTADUAL PICO DO ITAMBÉ		Park	State	Cerrado	69.099
ESTAÇÃO ECOLÓGICA DE FECHOS		Ecological Station	State	Cerrado	6.033
PARQUE NACIONAL DA SERRA DO CIPÓ	SCNP	Park	Federal	Cerrado	337.153
ESTAÇÃO ECOLÓGICA MATA DOS AUSENTES		Ecological Station	State	Cerrado	4.807
PARQUE NATURAL MUNICIPAL DO HORTO DOS CONTOS		Park	Municipal	Atlantic Forest	0.06
ÁREA DE PROTEÇÃO AMBIENTAL VARGEM DAS FLORES		Environmental Protection Area	State	Cerrado-Atlantic Forest	131.243
PARQUE NATURAL MUNICIPAL DO ALTO RIO DO TANQUE		Park	Municipal	Cerrado	2.637
REFÚGIO DE VIDA SILVESTRE ESTADUAL MACAÚBAS		Wildlife Refuge	State	Cerrado	24.376
PARQUE NATURAL MUNICIPAL ARQUEOLÓGICO DO MORRO DA QUEIMADA		Park	Municipal	Atlantic Forest	0.714
Protected Areas covering the southern area of the Cerrado					
NAME	CODE	CATEGORY	DEPENDENCY	BIOME	AREA KM2
PARQUE NACIONAL DA SERRA DA CANASTRA	SCNP	Park	Federal	Cerrado	2122.07
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA HR - DOURADINHO		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.24
PARQUE ESTADUAL PAU FURADO		Park	State	Cerrado-Atlantic Forest	23.21
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA VII		Private Reserve of the Natural Patrimony	Federal	Cerrado	1.44
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA II		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.07
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA SÃO MIGUEL II		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.06

Table SII. Continuation

RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA IV		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.48
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA RECANTO DAS ÁGUAS CLARAS		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.12
PARQUE ESTADUAL CAMPOS ALTOS		Park	State	Cerrado	8.36
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA III		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.06
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL JOAQUIM THEODORO DE MORAES		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.60
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL ECOCERRADO BRASIL		Private Reserve of the Natural Patrimony	State	Cerrado	0.42
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL FAZENDA SÃO MIGUEL		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.36
PARQUE ESTADUAL DAS FURNAS DO BOM JESUS		Park	State	Cerrado	22.10
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA VI		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.08
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA SÃO BERNARDO II		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.45
RESERVA PARTICULAR DO PATRIMÔNIO NATURAL RESERVA FAZENDA BONITO DE CIMA I		Private Reserve of the Natural Patrimony	Federal	Cerrado	0.31

Table III. Percent contribution and permutation importance of the six selected bioclimatic variables in MaxEnt current models for *Lessingianthus* species. % C: Percent contribution; PI: permutation importance.

Species	Variable	%C	PI
<i>L. arachniolepis</i>	bio14	62.5	19.5
	bio1	33.4	78
	bio3	1.5	0.7
	bio16	1.3	1.2
	bio5	1.3	0.5
	bio2	0	0
<i>L. adenophyllus</i>	bio1	38.4	11.3
	bio14	25.2	74.4
	bio16	16	1.8
	bio2	10.4	3
	bio3	5.8	9.6
	bio5	4.2	0
<i>L. asteriflorus</i>	bio14	59.3	0
	bio1	35.6	99.5
	bio5	2	0
	bio16	1.8	0
	bio3	1.1	0.3
	bio2	0.2	0.2
<i>L. exiguus</i>	bio14	41	16.7
	bio5	31.1	83.3
	bio1	27.9	0
	bio3	0	0
	bio2	0	0
	bio16	0	0
<i>L. pumillus</i>	bio5	49.6	64.2
	bio1	34.6	16.2
	bio14	15.2	18.9
	bio3	0.5	0.2
	bio2	0.1	0.5
	bio16	0	0
<i>L. stoechas</i>	bio5	49.7	13.3
	bio16	25.4	26.6
	bio14	16.8	31.5
	bio2	4.9	1.3
	bio1	2.9	27.1
	bio3	0.2	0.2

Table SIII. Continuation

<i>L. zuccarinianus</i>	bio5	61.3	60.5
	bio16	16.3	11.2
	bio14	15.8	20.8
	bio2	6.2	7.1
	bio3	0.2	0.4
	bio1	0.2	0
<i>L. eitenii</i>	bio5	65.3	68.7
	bio14	19.7	28
	bio3	6	2.3
	bio16	5.5	0.9
	bio2	3.2	0
	bio1	0.2	0.1
<i>L. irwinii</i>	bio5	68.3	89.3
	bio14	23	8.3
	bio16	5.1	1.9
	bio2	3.3	0.5
	bio3	0.2	0
	bio1	0.1	0
<i>L. venosissimus</i>	bio5	55.4	27.1
	bio14	19.2	44.5
	bio16	11	7
	bio3	6.9	5.7
	bio2	5.4	6.1
	bio1	2.1	9.6

Appendix S1

Figure S1. Results of the Multivariate Environmental Similarity Surfaces (MESS) analysis for all species of *Lessingianthus*, a -Rcp4.5 2050, b -Rcp4.5 2070, c - Rcp8.5 2050, d -Rcp8.5 2070. The MESS map provides a visualization of where model predictions are extrapolating beyond the environmental conditions used to train the model (specifically for each point, the extent to which the most dissimilar variable is outside the training range), and thus denotes locations where model predictions are less certain because of novel conditions. Negative MESS values (red gradient) indicates the degree of dissimilarity in the projection range with the climate of the training datasets, while positive MESS values (green gradient) indicate greater similarity to the training data points.

