

Supplementary information.

Table S2. Number for accessions in different clusters according to their country of origin.

Origin	Cluster							Total	
	I	II	III	IV	V	VI	VII		
ATG		1						1	
BWA	10	1	6		1	1		19	
COD					1	1	1	3	
DJI		1						1	
ETH		3	7			14		24	
GHA				1				1	
IND		1		1	2	1	1	6	
KEN		10	1	2	5	3		21	
MRT		2						2	
NAM	5	2	1		1	3	3	15	
NER		2						2	
OMN		2						2	
SDN		1						1	
SOM	1	5				1		7	
TZA	2	15	2	2	20	1	2	10	
UGA			1	1	1			3	
Unknown	1	5						6	
YEM		1						1	
ZAF	7		9	4	1	9		30	
ZWE			1	3	1	1		6	
Total	26	52	28	14	33	35	6	11	205

ATG: Antigua and Barbuda, BWA: Botswana, COD: Democratic Republic of the Congo, DJI: Djibouti, ETH: Ethiopia, GHA: Ghana, IND: India, KEN: Kenya, MRT: Mauritania, NAM: Namibia, NER: Niger, OMN: Oman, SDN: Sudan, SOM: Somalia, TZA: Tanzania, UGA: Uganda, YEM: Yemen, ZAF: Republic of South Africa, ZWE: Zimbabwe.

Table S3. Buffelgrass collections and number of accessions held by centres across the world.

Provenance of material	Number of accessions held by institute						
	APG	AGG	ILRI	CIAT	EMBRAPA SA	EMBRAPA RGB	Total
Argentina						9	9
Brazil						6	6
Australia	26	1					27
Tanzania	150		57				207
Republic of South Africa	81		32				113
Ethiopia			24				24
India	19		6				25
Zimbabwe	16		8				24
Kenya	13		21	6			39
Botswana	11		19				30
Namibia			15				15
Somalia	12		7				19
Democratic Republic of the Congo			3				3

Oman	8	2				8
Uganda	6	3				6
Antigua and Barbuda		1				
Djibouti		1				
Ghana		1				
Mauritania		2				
Niger		2				
Sudan		1				
Yemen		1				
Not specified	34	1	8	10	103	11
Total	376	2	214	16	103	737

APG: Australian Pastures Genebank, Australia; AGG: Australian Grains Genebank, Australia; ILRI: International Livestock Research Institute (ILRI), Ethiopia; CIAT: Centro Internacional de Agricultura Tropical (CIAT), Colombia; EMBRAPA SA: Embrapa Semi-Árido, Brazil; EMBRAPA RGB: Embrapa Recursos Genéticos e Biotecnologia, Brazil. Source: <https://www.genesys-pgr.org/a/v2DZWkwR4j5>.

Figure S1. Mantel correlation of genetic and geographical distances

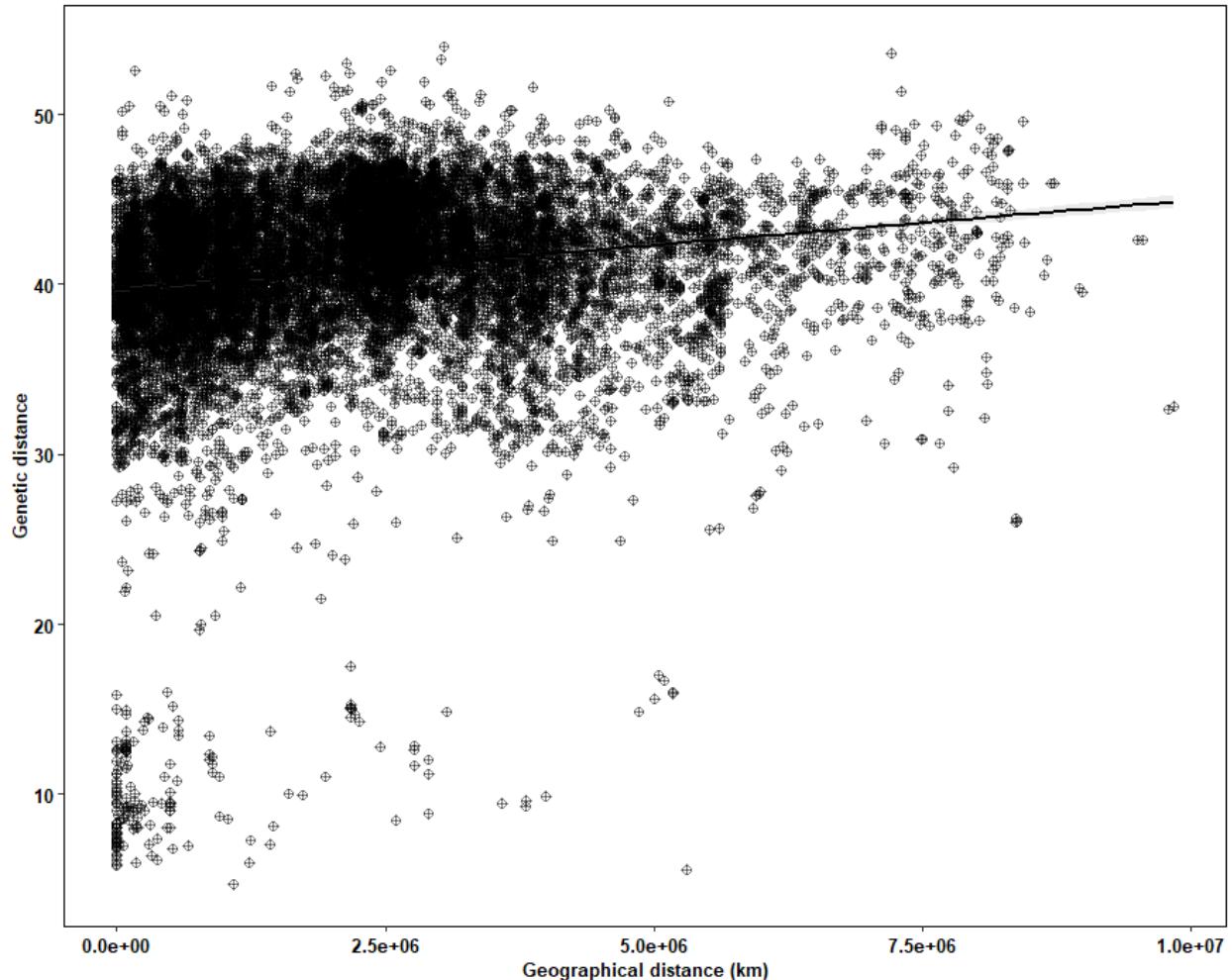


Figure S1. Scatterplot showing the relationship between genetic and geographical distances ($r=0.206$, $p\text{-value}=0.0001$) among 205 accessions of buffelgrass. Mantel correlation analysis was done using the R package vegan[1] to assess the relationship between genetic distance and the geographical distance. The genetic distance was calculated using the vegdist() function of R package vegan[1] while the geographical distance based on longitude and latitude of the collection sites was calculated using distm() function of the R package geosphere[2].

References

1. Oksanen, J.; Blanchet, F.G.; Kindt, R.; Legendre, P.; O'hara, R.; Simpson, G.L.; Solymos, P.; Stevens, M.H.H.; Wagner, H. Vegan: community ecology package. R package version 1.17-4. URL <http://CRAN.R-project.org/package=vegan> 2010.
2. Hijmans , R.J. Geosphere: Spherical Trigonometry. R package version 1.5-10. <https://CRAN.R-project.org/package=geosphere> 2019.