

Supplementary Materials

# Genetic Variation among *Aeluropus lagopoides* Populations Growing in Different Saline Regions

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**Figure S1.** Map of different *A. lagopoides* sampled locations of Saudi Arabia: Central region inland sabkha Qareenah and Qaseem, Eastern region of Salwa, Northern region of Jouf, and Southern region of Jizan.

**Table S1.** Pairwise comparison of population based on Geographical Distance and Nei's Genetic Distance.

Genetic Distance (ISSR)					
	Jouf	Jizan	Salwa	Qareenah	Qaseem
Jouf	0	0.351	0.205	0.310	0.375
Jizan	1453	0	0.283	0.347	0.366
Salwa	1204	1250	0	0.245	0.282
Qareenah	808	1023	462	0	0.164
Qaseem	588	975	679	243	0
Geographical Distance(km)					
Genetic Distance (SRAP)					
	Jouf	Jizan	Salwa	Qareenah	Qaseem
Jouf	0	0.339	0.162	0.203	0.264
Jizan	1453	0	0.352	0.369	0.370
Salwa	1204	1250	0	0.166	0.204
Qareenah	808	1023	462	0	0.129
Qaseem	588	975	679	243	0
Geographical Distance(km)					
Genetic Distance (ISSR+SRAP)					
	Jouf	Jizan	Salwa	Qareenah	Qaseem
Jouf	0	0.279	0.112	0.195	0.249
Jizan	1453	0	0.235	0.285	0.286
Salwa	1204	1250	0	0.133	0.161
Qareenah	808	1023	462	0	0.066
Qaseem	588	975	679	243	0
Geographical Distance(km)					

**Table S2.** Sample wise genetic distance of *A. lagopoides* population collected from different regions using ISSR Markers.

	JOUF1	JOUF2	JOUF3	JOUF4	JOUF5	JIZN1	JIZN2	JIZN3	JIZN4	JIZN5	SALWA1	SALWA2	SALWA3	SALWA4	SALWA5	QAR1	QAR2	QAR3	QAR4	QAR5	QAS1	QAS2	QAS3	QAS4	QAS5
JOUF1	0	39	46	46	42	71	73	59	64	70	63	61	60	55	59	71	71	74	71	72	68	73	62	75	70
JOUF2		0	13	23	33	66	62	54	57	59	46	44	45	52	48	54	62	61	62	65	71	76	63	72	69
JOUF3			0	16	32	71	69	65	64	68	55	55	52	57	51	55	59	62	65	66	70	79	64	67	68
JOUF4				0	32	71	71	63	68	70	51	51	50	57	55	53	55	60	63	60	68	79	64	65	66
JOUF5					0	65	71	61	64	70	59	63	58	51	51	59	53	56	67	64	68	69	68	73	70
JIZN1						0	28	38	37	37	66	66	67	64	68	64	66	67	68	71	63	64	75	72	67
JIZN2							0	44	31	31	70	68	71	62	58	68	74	67	64	69	73	70	71	78	71
JIZN3								0	41	43	58	60	57	56	58	52	60	67	58	59	55	56	65	68	55
JIZN4									0	24	59	61	62	65	51	65	69	70	67	68	70	67	74	77	76
JIZN5										0	59	63	64	71	65	67	77	70	73	68	72	73	76	79	70
SALWA1											0	4	13	62	56	54	64	61	56	59	63	60	53	62	67
SALWA2												0	15	64	58	56	66	63	58	61	65	62	53	64	69
SALWA3													0	59	57	59	63	64	59	64	62	59	56	63	68
SALWA4														0	46	68	58	53	60	59	63	68	55	70	69
SALWA5															0	50	64	61	50	57	69	76	63	76	69
QAR1																0	36	39	34	47	59	66	61	62	57
QAR2																	0	29	32	35	49	46	49	42	41
QAR3																		0	37	42	56	53	48	53	50
QAR4																			0	37	49	48	41	46	41
QAR5																				0	52	51	44	43	48
QAS1																					0	41	52	31	42
QAS2																						0	41	44	37
QAS3																							0	41	38
QAS4																								0	39
QAS5																									0

ISSR: Inter-simple sequence repeat, QAR: Qareenah, QAS: Qaseem.

**Table S3.** Sample wise genetic distance of *A. lagopoides* population collected from different regions using SRAP Markers.

	JOUF1	JOUF2	JOUF3	JOUF4	JOUF5	JIZN1	JIZN2	JIZN3	JIZN4	JIZN5	SALWA1	SALWA2	SALWA3	SALWA4	SALWA5	QAR1	QAR2	QAR3	QAR4	QAR5	QAS1	QAS2	QAS3	QAS4	QAS5
JOUF1	0																								
JOUF2	23	0																							
JOUF3	23	22	0																						
JOUF4	21	26	20	0																					
JOUF5	21	18	18	18	0																				
JIZN1	52	43	41	39	39	0																			
JIZN2	53	42	44	44	46	17	0																		
JIZN3	49	40	38	42	40	17	16	0																	
JIZN4	54	49	43	51	45	22	23	21	0																
JIZN5	44	39	31	37	35	24	27	17	22	0															
SALWA1	28	29	25	31	29	46	45	35	44	30	0														
SALWA2	26	33	27	27	29	48	51	41	46	32	10	0													
SALWA3	31	32	28	24	28	47	44	38	47	35	15	11	0												
SALWA4	43	36	32	32	36	49	46	44	49	39	25	29	24	0											
SALWA5	32	41	27	27	35	54	51	43	56	44	26	26	21	27	0										
QAR1	40	35	31	39	37	54	49	41	58	42	32	36	31	37	22	0									
QAR2	38	27	25	35	29	46	47	45	48	38	32	36	33	33	32	24	0								
QAR3	36	35	33	41	35	50	45	41	52	40	28	32	31	33	30	18	22	0							
QAR4	41	32	30	40	32	47	44	36	53	39	29	37	34	36	25	11	19	25	0						
QAR5	36	29	27	33	31	44	47	41	50	34	22	30	31	31	26	24	22	26	23	0					
QAS1	50	45	43	39	45	46	45	41	48	36	32	36	29	35	32	34	34	40	33	32	0				
QAS2	46	33	35	43	35	52	51	47	54	42	34	36	33	37	40	26	26	26	31	26	32	0			
QAS3	46	37	37	43	39	54	53	47	58	42	34	36	33	35	34	24	26	24	29	28	28	14	0		
QAS4	49	44	42	44	38	45	48	44	47	45	49	49	44	44	43	37	31	37	40	41	39	29	35	0	
QAS5	39	40	36	40	36	51	50	48	55	43	33	33	34	40	37	35	27	27	36	31	35	27	25	34	0

SRAP: Sequence-related amplified polymorphism analysis, QAR: Qareenah, QAS: Qaseem