Supplementary Table S2a: Gender of each sample within Jenoubi breed, location of population, date of collection, age and GPS information

No. of sample	Gender	Location of population	Age	GPS
1.	Male	Basra\Abo-Alkasib	1,5 year	N: 30.32550
1.			-,- , - , - , - , - , - , - , - , - , -	E:48.25184
2.	Female	Basra\ Al-Seba	14 months	N: 30.32550
۷.				E:48.25184
2	Female	Basra\ Al-Seba	3 years	N: 30.32550
3.			,	E:48.25184
	Female	Basra\ Al-Seba	4 years	N: 30.32550
4.	Temare	Busin (111 Scon	i y cuis	E:48.25184
_	Female	Basra\ Al-Seba	6 years	N: 30.32550
5.	Temate	Dasia\Ai-Scoa	o years	E:48.25184
	Female	Basra\ Al-Seba	3 years	N: 30.32550
6.	remaie	Dasia\Ai-Seua	3 years	E:48.25184
		D \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		N: 30.32550
7.	Female	Basra\ Al-Seba	5 years	E:48.25184
	Б. 1	Basra\ Al-Seba 4 years		N: 30.32550
8.	Female		4 years	E:48.25184
	г 1	Female Basra\ Al-Seba 3	2	N: 30.32550
9.	Female		3 years	E:48.25184
	Female	Amara\ Al-Musharah	6 years	N: 31,86904
10.	Temate			E: 47,45592
	Female	Amara\ Al-Musharah	5 years	N: 31,86904
11.	Temate	Amara\ An-iviusnaran		E: 47,45592
	Female	Amara\ Al-Musharah	11 years	N: 31,86904
12.				E: 47,45592
	г 1	A \ \ A1.N6 1 1	4 years	N: 31,86904
13.	Female	Amara\ Al-Musharah		E: 47,45592
14.	E1-	A	2 years	N: 31,86904
	Female	Amara\ Al-Musharah		E: 47,45592
	M-1-		1	N: 31,86904
15.	Male	Amara\ Al-Musharah	1 year	E: 47,45592
	Famala	Amoro\ Al Musharah	10 years	N: 31,86904
16.	Female	Amara\ Al-Musharah		E: 47,45592

				N: 31,86904
17.	Female	Amara\ Al-Musharah	1 year	E: 47,45592
	Female		7 1100 20	N: 31,86904
18.	Female	Amara\ Al-Musharah	7 years	E: 47,45592
10	Male	Amara\ Al-Musharah	1 year	N: 31,86904
19.	TVILLE	7 mara (7 masharan	1 your	E: 47,45592
20	Female	Amara\ Al-Musharah	7 years	N: 31,86904
20.	Temate	Timara (Tir Masharan	, years	E: 47,45592
2.1	Female	Amara\ Al-Musharah	2 years	N: 31,86904
21.	Temate	Timara (Tir Masharan	2 years	E: 47,45592
	Male	Amara\ Al-Musharah	1 year	N: 31,86904
22.	iviaic	7 Milara (7 M. Milasharan	1 year	E: 47,45592
	Female	Amara\ Al-Musharah	7 days	N: 31,91181
23.	Temate	7 Milara (7 M. Milasharan	7 days	E: 47,47033
	Female	Amara\ Al-Musharah	15 days	N: 31,91181
24.	Temate	7 Milara (7 M. 1914) Sharan	13 days	E: 47,47033
	Famala	Amous Al Mushoush	15	N: 31,91181
25.	Female	Amara\ Al-Musharah	15 years	E: 47,47033
				N: 31,91181
26.	Female	Amara\ Al-Musharah	5 years	E: 47,47033
				N: 31,91181
27.	Female	Amara\ Al-Musharah	4 years	E: 47,47033
27.				Б. 47,47033
				N: 31,91181
28.	Female	Amara\ Al-Musharah	4 years	E: 47,47033
		emale Amara\ Al-Musharah		N: 31,91181
29.	Female		10 years	E: 47,47033
	Г 1	A	0	N: 31,91181
30.	Female	Amara\ Al-Musharah	8 years	E: 47,47033
	Eams 1 -	Amous\ A13.6. 1 1	1.5	N: 31,91181
31.	Female	Amara\ Al-Musharah	1,5 year	E: 47,47033
	Male	Amara\ Al-Musharah	1,5 year	N: 31,91181
32.	IVIAIC	Amara\Ar-wusharan	1,5 year	E: 47,47033
	Female	Amara\ Al-Musharah	1 voor	N: 31,91181
33.	Temale	Amara\ Ar-iviusiiatan	1 year	E: 47,47033
L	1		1	

	Esmals	Amous\ Al Mushoush		N: 31,91181
34.	Female	Amara\ Al-Musharah	l year	E: 47,47033
	Mala	Amono\ Al Muchando	1.5	N: 31,91181
35.	Male	Amara\ Al-Musharah	1,5 year E: 47,4703:	E: 47,47033

Supplementary Table S2b: Gender of each sample within Rustaqi breed, location of population, date of collection, age and GPS information.

No. of samples	Gender	Location of population	Age	GPS
1.	Female	Baghdad- Al-Taji	6 years	N\33,3718
	Telliale	Dagiluau- Al-1 aji	o years	E\44,19890
	F1-	D1-1-1 A1 T-::	15	N\33,3718
2.	Female	Baghdad- Al-Taji	15 years	E\44,19890
	Female	Baghdad- Al-Taji	5 years	N\33,3718
3.	Temale	Bugildud 111 Tuji	3 years	E\44,19890
	Female	Baghdad- Al-Shuaala	7 years	N\ 33.30718
4.	Temate	Dagiidad- Ai-Siluaala	/ years	E\ 44.19890
	Male	Doghdad Al Chyaala	6 months	N\ 33.30718
5.	Maie	Baghdad- Al-Shuaala	o months	E\ 44.19890
	Female	Baghdad- Abou Graib	Sugars and 6 months	N\33,36481
6.	remate	Bagildad- Abou Graib	5years and 6 months	E\044,24476
	Female	Dooleded Alexy Craile	6 months	N\33,36481
7.	remate	Baghdad- Abou Graib	o months	E\044,24476
	Female	Baghdad- Abou Graib	4 years	N\33,36481
8.	Temate	Bagildad- Abou Graib	+ years	E\044,24476
	Male	Daghdad Abou Craib	dad- Abou Graib 11 months	N\33,36481
9.	Iviaic	Dagildad- Abou Graib		E\044,24476
1.0	Female	Baghdad- Abou Graib	ı Graib 5 years	N\33,36481
10.	Temate	Dagnad 71000 Graio		E\44,24476
	Female	Baghdad -Al-Fudailia	11 months	N\33.33145
11.	Telliale	Dagnuau -Ai-ruuama		E\44.52449
	Female	Baghdad -Al-Fudailia	1 year	N\33.33145
12.	Temate			E\44.52449
	Female	Baghdad -Al-Fudailia	1 year and 6 months	N\33.33145
13.	remaie	Dagnuau -Ai-Fuuaina		E\44.52449
14.	Female	Doghdad Al Endaili-	1 year and 2 months	N\33.33145
	remate	Baghdad -Al-Fudailia	1 year and 2 months	E\44.52449
	Female	Baghdad -Al-Fudailia	2 years	N\33.33145
15.	Tomate	Dagiidad -Ai-Fudaiila	2 years	E\44.52449
•	Female	Baghdad- Al-Maamil	5 vears	N\33.33148
16.	Telliale	Dagildau- Al-Maalilli	3 years	E\44.52449

				N\33.33148
17.	Female	Baghdad- Al-Maamil	4 years	E\44.52449
	Female	D 11 1 A1M '1	2 220000	N\33.33148
18.		Baghdad- Al-Maamil	2 years	E\44.52449
	Female	Baghdad- Al-Maamil	6 years	N\33.33148
19.	Temate	Dagildad 711 Widdilli	o years	E\44.52449
20	Female	Baghdad- Al-Maamil	3 months	N\33.33148
20.	Temare	Bugitadu 111 Madilini		E\44.52449
21	Female	Babylon-Al-Sada-	5 years	N\32.32807
21.	Temare	Alnasria village	o y cuito	E\44.52311
	Female	Babylon-Al-Sada-	6years and 6 months	N\32.32807
22.	remaie	Alnasria village	oyears and o mondis	E\44.52311
••	Male	Babylon-Al-Sada-	9 months	N\32.42303
23.	iviaic	Alnasria village	y months	E\44.18541
2.4	Female	Babylon-Al-Sada-	3 years and 6 months	N\32.42303
24.	Temate	Alnasria village	3 years and 6 months	E\44.18541
25	Female	Babylon-Al-Sada-	2 years and 6 months	N\32.32807
25.	Telliale	Alnasria village	2 years and 6 months	E\44.52311
26	Female	Babylon-Al-Sada-	5 years and 6 months	N\32.42303
26.	Temate	Alnasria village	5 years and 6 months	E\44.18541
	Female	Babylon-Al-Sada-	1 year and 6 months	N\32.32807
27.	1 ciliaic	Alnasria village	Tyear and o months	E\44.52311
• •	Female	Babylon-Nile- Taba	2 years	N\32.32807
28.	1 Ciliaic	village	2 years	E\44.52312
	Female	Babylon-Nile – Taba	1 year	N\32.48276
29.	1 cinaic	village	1 your	E\44.56210
20	Male	Babylon-Nile – Taba village	2 years	N\32.48276
30.				E\44.56210
21	Female	Babylon-Nile – Taba	5 years and 6 months	N\32.48276
31.	Temate	village		E\44.56210
22	Male	Babylon- Nile – Taba	2 years	N\32.48276
32.	1,1410	village		E\44.56210
22	Male	Babylon- Nile – Taba	2 years	N\32.48276
33.		village	J	E\44.56210
2.4	Male	Babylon- Nile – Taba	2 years	N\32.48276
34.	Male	village		E\44.56210
L	1	1		

		D 1 1 377 T 1	T T	N\32.48276
35.	Male	Babylon- Nile – Taba village	2 years and 6 months	E\44.56210
		Babylon- Nile – Taba		N\32.48276
36.	Male	village	2 years	E\44.56210
		Babylon- Nile – Taba		N\32.48276
37.	Male	village	2 years and 6 months	E\44.56210
	Mala	Babylon- Nile – Taba	2 was and 6 months	N\32.48276
38.	Male	village	2 years and 6 months	E\44.56210
	Female	Babylon- Nile – Taba	3 years and 6 months	N\32.48276
39.	remale	village	3 years and 6 months	E\44.56210
	Eamala	Babylon- Al-Hamza-	4 110000	N\32.4370
40.	Female	Al-Basheia village	4 years	E\44.4120
	Female	Babylon- Al-Hamza-	4 years	N\32.4370
41.	remale	Al-Basheia village	4 years	E\44.4120
	Female	Babylon- Al-Hamza-	6 years and 6 months	N\32.4370
42.	remale	Al-Basheia village		E\44.4120
	Female	Babylon- Al-Hamza-	10 years	N\32.4370
43.		Al-Basheia village		E\44.4120
	N. (1	Babylon- Al-Hamza-	2 110000	N\32.4370
44.	Male	Al-Basheia village	2 years	E\44.4120
	Mala	Babylon- Al-Hamza-	10 months	N\32.4370
45.	Male	Al-Basheia village	10 months	E\44.4120
	Б 1	Babylon- Al-Hamza-	10	N\32.4370
46.	Female	Al-Basheia village	10 years	E\44.4120
	F 1	Babylon- Al-Hamza-	5 16 1	N\32.4370
47.	Female	Al-Basheia village	5 years and 6 months	E\44.4120
	Famala	Babylon- Al-Hamza-	5 years	N\32.4370
48.	Female	Al-Basheia village	5 years	E\44.4120
	N # - 1	Babylon- Al-Hamza-	2	N\32.4370
49.	Male	Al-Basheia village	2 years	E\44.4120
	F 1	Babylon-Alqasim-	£	N\32.1252
50.	Female	Alnakabia village	5 years	E\44.3928
	P 1	Babylon-Al-Qasim-	Avoora	N\32.1307
51.	Female	Al-Nakabia village	4 years	E\44.3947
	Eamala	Babylon-Al-Qasim-		N\32.1252
52.	Female	Al-Nakabia village	8 years	E\44.3928
			<u>.</u>	

52	Female	Babylon-Al-Qasim-	5 years and 6 months	N\32.1307
53.	1 chiaic	Al-Nakabia village	5 years and 6 monens	E\44.3947
	Female	Babylon-Al-Qasim-	3 years	N\32.1307
54.	Temate	Al-Nakabia village	3 years	E\44.3947
	Female	Babylon-Al-Qasim-	5 years	N\32.1252
55.	Temale	Al-Nakabia village	3 years	E\44.3928
	Female	Babylon-Al-Qasim-	5 voors	N\32.1252
56.	remate	Al-Nakabia village	5 years	E\44.3928
	Male	Babylon-Al-Qasim-	2 years and 6 months	N\32.1307
57.	iviaic	Al-Nakabia village	2 years and 6 months	E\44.3947
	Male	Babylon-Al-Qasim-	3 years	N\32.1252
58.	Iviaie	Al-Nakabia village	3 years	E\44.3928
	Male	Babylon-Al-Qasim-	2 years and 6 months	N\32.1307
59.	IVIAIC	Al-Nakabia village		E\44.3947
	Male	Babylon-Al-Qasim-	2 voors	N\32.1252
60.	iviaie	Al-Nakabia village	2 years	E\44.3928