SUPPLEMENTARY MATERIAL

First data on the genetic structure of *Trachemys scripta* populations in Sicily (Testudines: Emydidae)

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Table S1. Studied Sicilian samples of *Trachemys scripta*, with locality, (Sub)Species, sex age and sample ID of all sampled individuals. Sex Ratio of males to females: "Parco d'Orléans", 0.4 : 1 / "Biviere di Gela", 9 : 1. * melanic individual

Country	Province	Locality	Latitude	Longitude	(Sub)Species	Sex	Age	Sample ID
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*Trachemys scripta scripta*	F	OA	23219
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23220
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23221
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	M	OA	23222
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. troostii*	F	OA	23223
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23224
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23225
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. troostii*	F	OA	23226
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. troostii*	F	OA	23227
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	M	OA	23228
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23229
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23230
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23231
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	M	MA	23232
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. troostii*	M	OA	23233
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23234
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	M	MA	23235
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	F	OA	23236
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. scripta*	M	MA	23237
Italy	Palermo	Parco d'Orléans	38.108961	13.353098	*T. s. troostii*	F	OA	23238
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23240
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23241
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23242
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23243

Country	Province	Locality	Latitude	Longitude	(Sub)Species	Sex	Age	Sample ID
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans**	M	MA	23244
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans**	M	MA	23245
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. scripta*	M	MA	23246
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	F	OA	23247
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23248
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23249
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23250
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23251
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23252
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23253
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. scripta*	F	YA	23254
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans**	N.A.	SA	23255
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23256
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23257
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23258
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23259
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23260
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23261
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23262
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23263
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23264
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	MA	23265
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	N.A.	SA	23266
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23267
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. scripta*	M	YA	23268
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. scripta*	M	YA	23269
Italy	Gela	Biviere di Gela	37.01612	14.349536	*T. s. elegans*	M	YA	23270

Explanations: **(Sub)Species** were classified on the basis of postorbital pattern and pattern of carapace and plastron, **F** = female, **M** = male, **SA** = sub adult, **YA** = young adult, **MA** = middle aged, **OA** = old adult, **N.A.** = not available.

Source: own study.

Table S2. ID, multiplex-PCR numbers, annealing temperatures, repeat motifs, fragment sizes of all used microsatellite loci

Locus ID	MP-PCR	T_A (°C)	Repeat motif	Size (bp)	Primers (5'–3')
Tsc108	3	55	TAGA	196–278	F: CGCAGTCAAAACACCTTCAG
					R: TTCACCTCCCCAGATCTCAC
Tsc169	3	55	TAGA	192–272	F: TAAAATGGGCCTCAACAAGG
					R: GGATTGTTTGGTCAAAGAAGTTG
Tsc241	2	55	TATC	191–223	F: GGTTTTTCTCCATCCCGAAT
					R: TTCATTTTGAAAGGTTAGCTCGT
Tsc243	1	55	ATAG	90–166	F: GCAAAACCTGGAGATTTTCAA
					R: TTTCGATGGAAAATGGCTTT
Tsc252	1	55	ATAG	191–243	F: CCATACACCCTCTGACAGCA
					R: TTCCCAAGACAAGAAACACCTT
Tsc260	2	55	ATCT	149–205	F: TGCAAATGGAGTTGCAAGA
					R: TCCATTTGAACCTGGGAGAA
Tsc263	2	55	GATA	116–172	F: GTGCACGGGAGTTGTATG
					R: TTCTATTTGCCAAAAATTGCAT
Tsc288	1	55	TG	145–201	F: ACAAGATTGGCACCCACTTC
					R: AGTATGGGGATGCATGTGTG
Tsc297	1	50	TCTA	207–239	F: GCTGTGTCTGCTGCCAACTA
					R: TCTGGATCTTTTGGGCAGTT
Tsc299	1	55	TATC	235–291	F: CCATGTGCCATCTGTCTACCT
					R: GATCAAGGGATGAGGGTCAA
Tsc302	3	55	TAGA	146–220	F: ACTGGCCAGCAGGAGTAATG
					R: TGGGGCACAAACTACTAGGG
Tsc323	3	55	TATC	196–256	F: GTAAAATTGATTAGGACCTCTCTGA
					R: TGCAATCTATCACATGACTGCAT
Tsc328	2	55	TAGA	184–240	F: TGGATTGCATTATTAGAAATGGT
					R: CCCACCAACCACCATAATTC
Tsc330	2	55	ATCT	216–276	F: TGGCTTATTTTGCAGCCTGA
					R: CCAACTTTCACTCCCATTGC

Explanations: T_A = annealing temperature, **F** = forward primer, **R** = reverse primer, **MP-PCR** = multiplex-PCR.
Source: SIMISON *et al*. [2013].

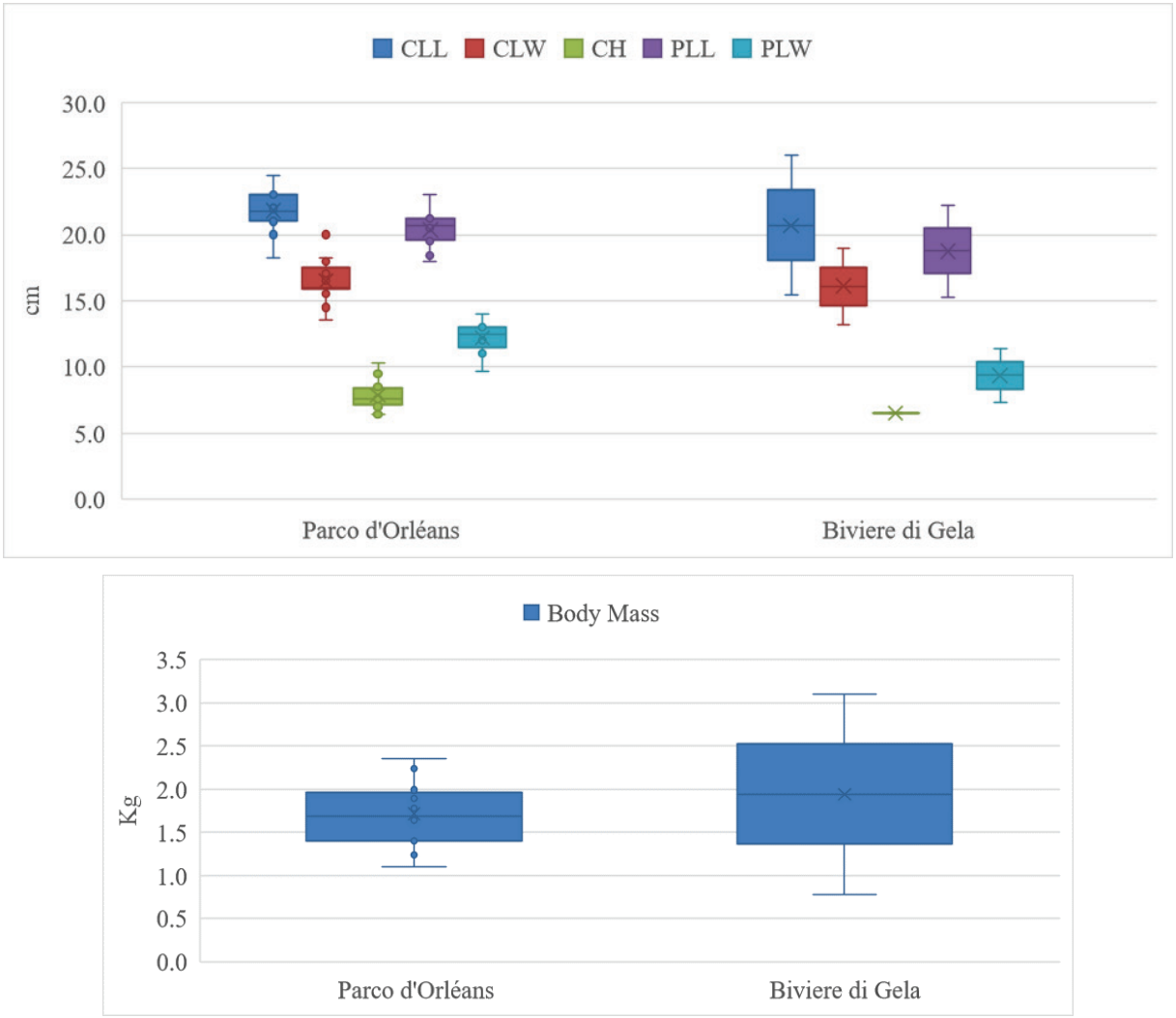

Fig. S1. Box-plots (median, quartile and range) of the carapace linear length (CLL), carapace linear width (CLW), carapace height (CH), plastron linear length (PLL), plastron linear width (PLW) and body mass between females of *Trachemys scripta* form "Parco d'Orléans" and "Biviere di Gela"; source: own study

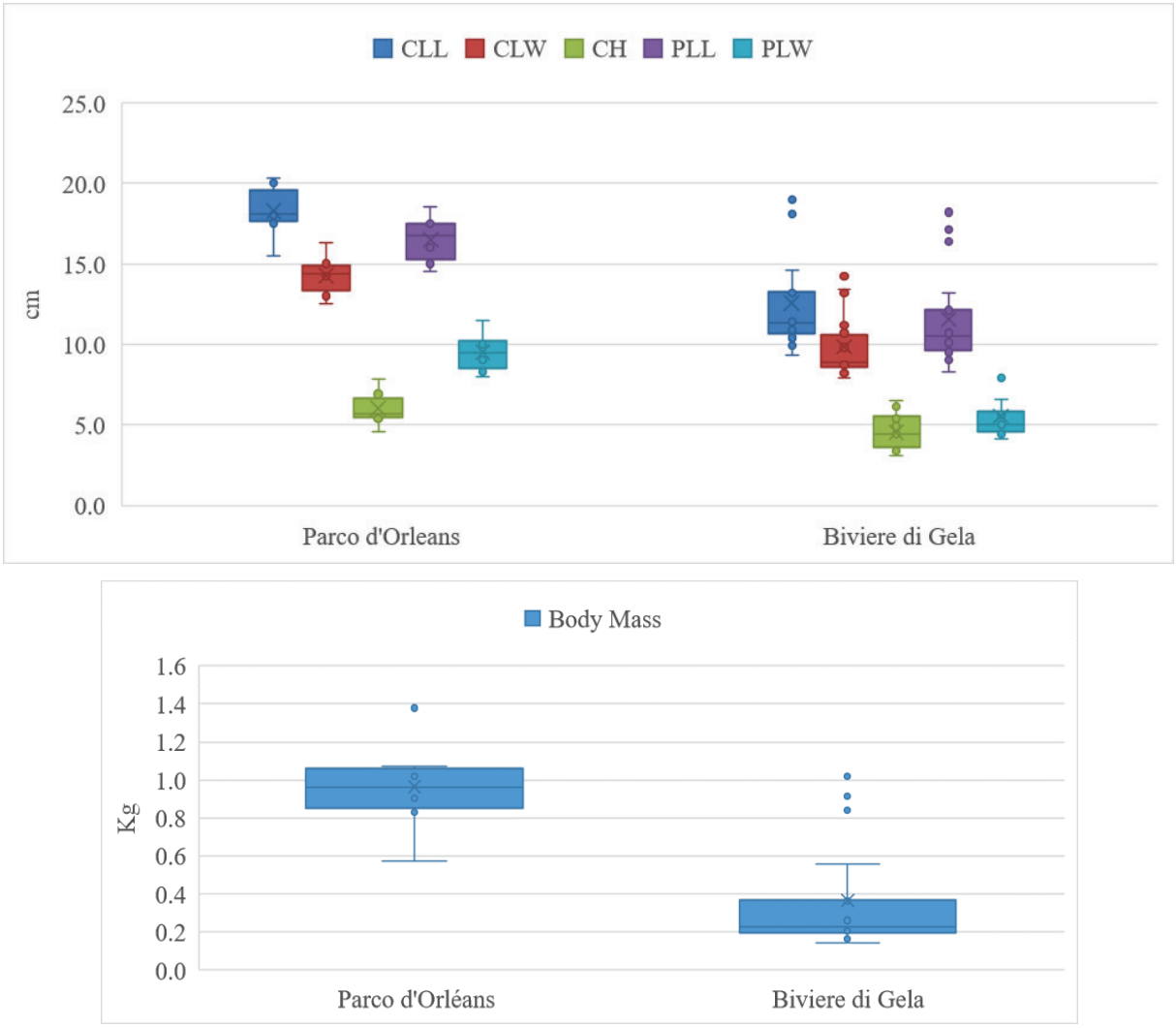

Fig. S2. Box-plots (median, quartile and range) of the carapace linear length, CLL, carapace linear width, CLW, carapace height, CH, plastron linear length, PLL, plastron linear width, PLW and body mass between males of *Trachemys scripta* form "Parco d'Orléans" and "Biviere di Gela"; source: own study

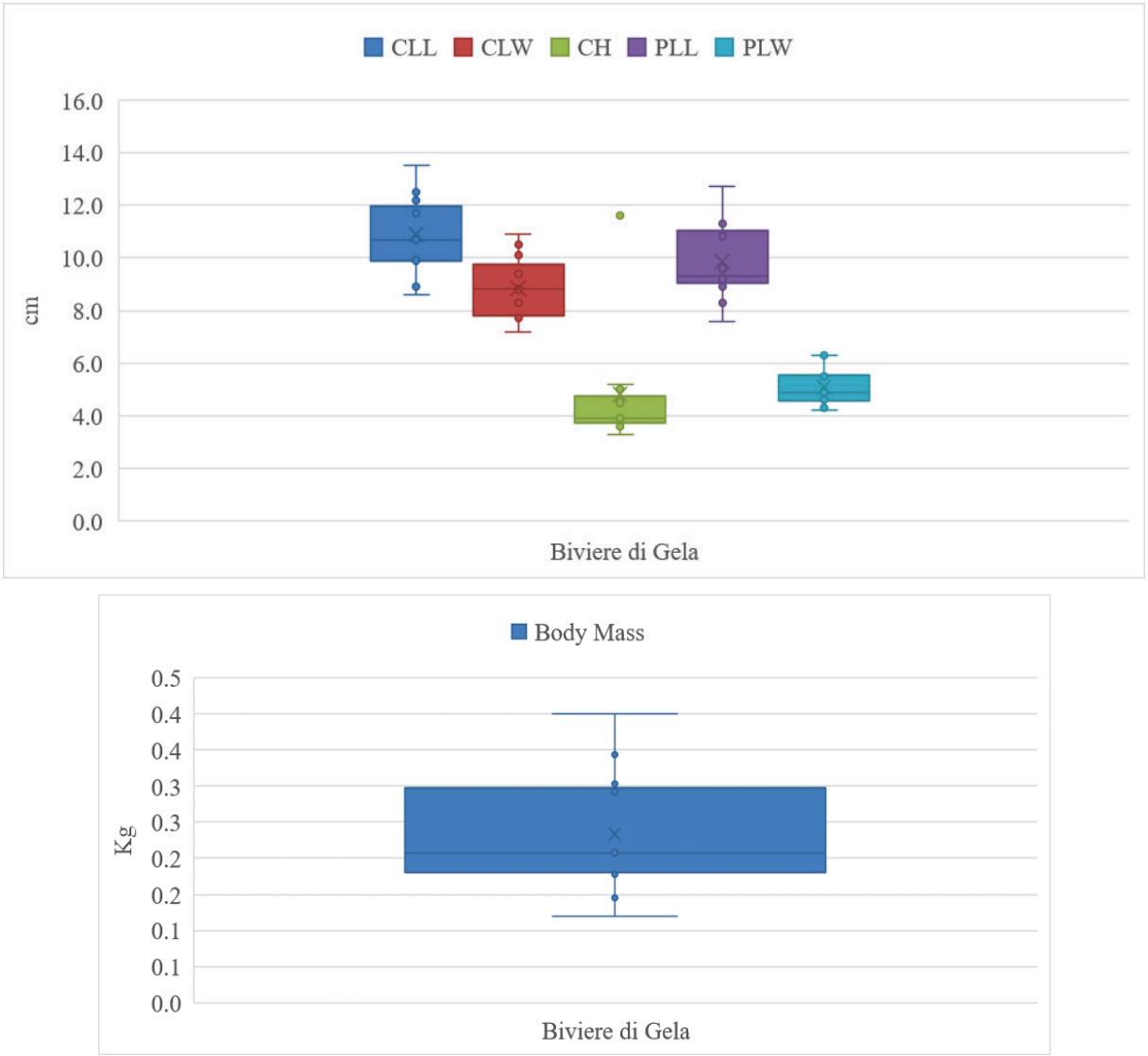

Fig. S3. Box-plots (median, quartile and range) of the carapace linear length (CLL), carapace linear width (CLW), carapace height (CH), plastron linear length (PLL), plastron linear width (PLW) and body mass between subadults of *Trachemys scripta* form "Biviere di Gela"; source: own study

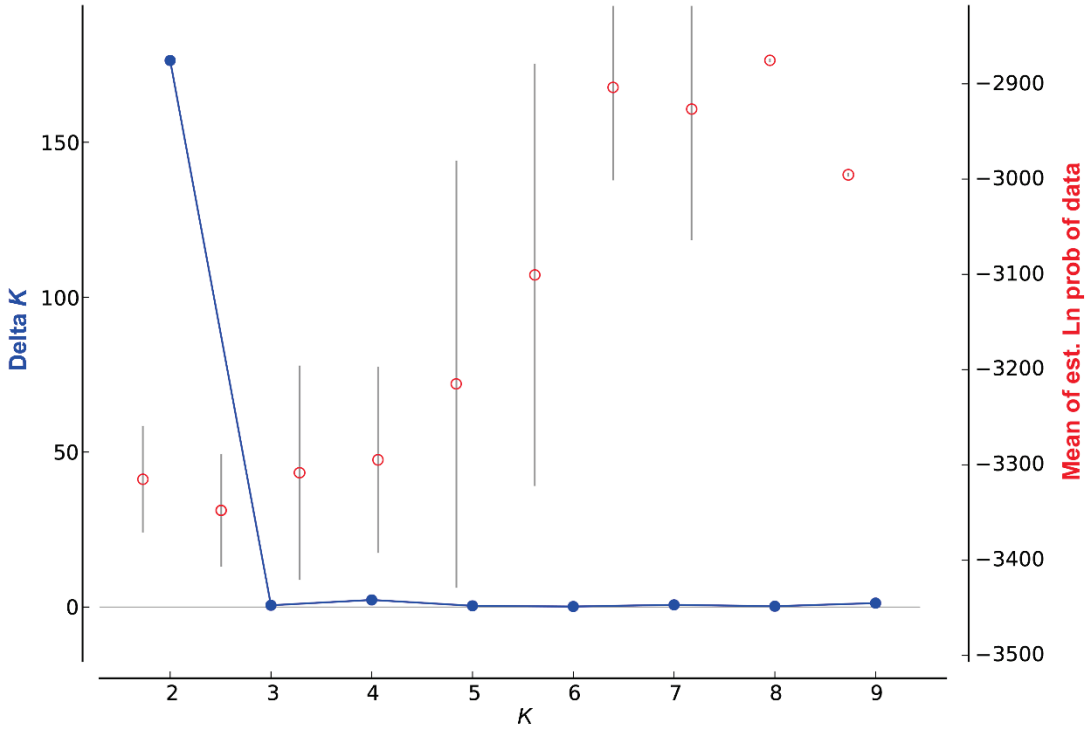

Fig. S4. Estimated log probability of data — Ln P(D), the mean likelihood of *K* (Delta *K*) and the number of simulated clusters for both *Trachemys scripta* populations; *K* = 10 was calculated separately, hence excluded from graph; source: own study

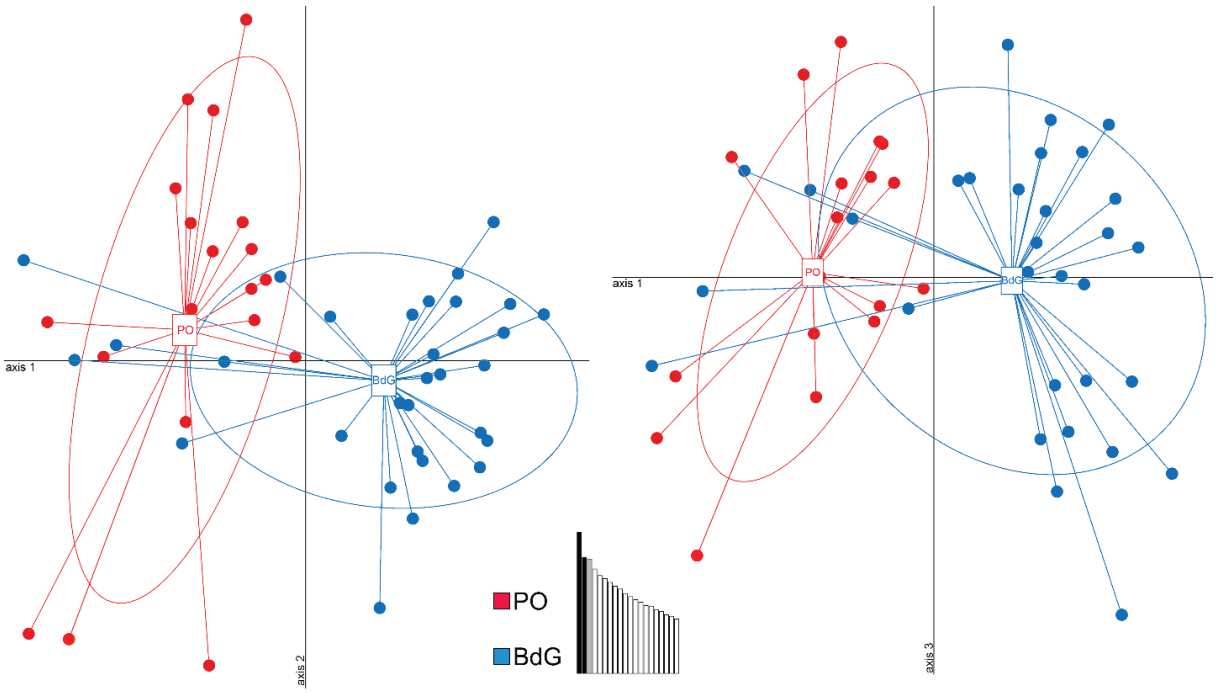

Fig. S5. Principal Components analysis (PCA) for microsatellite data of the two clusters ("Parco d'Orléans", PO, and "Biviere di Gela", BdG) of *Trachemys scripta*. Axis 1 contributes 10.6%; axis 2 – 8.7%; and axis 3 – 8.6% of the variance (eigenvalues: 1-10.600; 2-8.712; 3-8.594; 4-7.840; 5-7.351); the oval outlines correspond to 95% confidence intervals

	23219	23221	23222	23223	23228	23233
23226		FS				
23227				HS		
23228			HS			
23231	HS					
23235					FS	HS
23236	HS					

Fig. S6. Kinship-relationship-matrix of *Trachemys scripta* individuals from "Parco d'Orléans", generated by ML-RELATE; numbers correspond to individual IDs; individuals without kinship relationships were excluded from the figure; in orange FS (full siblings) and in yellow HS (half sibling) relationships; source: own study

	23240	23241	23242	23243	23244	23245	23246	23247	23248	23249	23250	23251	23252	23253	23254	23255	23256	23257	23258	23259	23260	23264
23247		HS			FS																	
23248	HS				HS			HS														
23249			HS																			
23250	FS		HS																			
23252					FS				HS													
23253		HS		HS																		
23254							HS															
23255	HS					HS					HS			FS								
23256	HS										HS	HS										
23257				HS	HS							HS										
23258			HS							HS												
23260	HS			HS										HS						HS		
23261			HS							HS						HS						
23262					HS			HS	HS			HS	HS					HS				
23263										HS	HS										HS	
23264						HS		HS				HS					HS					
23265					HS			HS		HS												
23266						HS																
23267	HS													HS							HS	HS
23269							HS								HS				HS			
23270		HS																		HS		HS

Fig. S7. Kinship-relationship-matrix for *Trachemys scripta* individuals from "Biviere di Gela", generated by ML-RELATE; numbers correspond to individual IDs; individuals without kinship relationships were excluded from the figure; in orange FS (full siblings) and in yellow HS (half sibling) relationships; source: own study