

Northern genetic richness and southern purity, but just one species in the *Chelonoidis chilensis* complex

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Table S1 Samples of the *Chelonoidis chilensis* complex and GenBank accession numbers of their mitochondrial haplotypes. Samples are housed in the tissue collection of the Museum of Zoology, Senckenberg Dresden (MTD T)

MTD T	Species	Locality	Coordinates	Haplotype cluster	Accession number
6081	<i>C. chilensis</i>	Argentina: La Ríoja: Talampaya National Park near km 68	30°03'40"S, 67°46'12"W	B	HE648062
5635	<i>C. chilensis</i>	Argentina: Mendoza: Alücuym	32°48' 48.61"S, 67°51' 51.31"W	C	HE648063
5636	<i>C. chilensis</i>	Argentina: Mendoza: Alücuym	32°48' 48.61"S, 67°51' 51.31"W	C	HE648064
5649	<i>C. chilensis</i>	Argentina: Mendoza: Alücuym	32°48' 48.61"S, 67°51' 51.31"W	B	HE648065
5651	<i>C. chilensis</i>	Argentina: Mendoza: Alücuym	32°48' 48.61"S, 67°51' 51.31"W	C	HE648066
6079	<i>C. chilensis</i>	Argentina: San Luis: Las Quijadas National Park	32°28'13"S, 66°57'53"W	B	HE648067
6082	<i>C. chilensis</i>	Argentina: San Luis: Las Quijadas National Park	32°45'36"S, 67°05'11"W	B	HE648068
6075	<i>C. donosobarrosi</i>	Argentina: Buenos Aires: National Road N°3 between José B. Casás and Stroeder, near km 900	40°26'00.74"S, 62°47'37.35"W	B	HE648069
6076	<i>C. donosobarrosi</i>	Argentina: Buenos Aires: National Road N°3 between José B. Casás and Stroeder, near km 900	40°26'00.74"S, 62°47'37.35"W	B	HE648070
5637	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648071
5638	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648072
5639	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648073
5640	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648074
5641	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648075
5642	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648076
5643	<i>C. donosobarrosi</i>	Argentina: Mendoza: Jacüel Casa de Pedras, north of Río Colorado	37°26' 23.06"S, 68°32' 21.17"W	B	HE648077
5644	<i>C. donosobarrosi</i>	Argentina: Neuquén: Octavio Picos, south of Río Colorado	37°41' 22.55"S, 68°14' 30.46"W	B	HE648078
5645	<i>C. donosobarrosi</i>	Argentina: Neuquén: Octavio Picos, south of Río Colorado	37°41' 22.55"S, 68°14' 30.46"W	B	HE648079
5646	<i>C. donosobarrosi</i>	Argentina: Neuquén: Octavio Picos, south of Río Colorado	37°41' 22.55"S, 68°14' 30.46"W	B	HE648080
5647	<i>C. donosobarrosi</i>	Argentina: Neuquén: Octavio Picos, south of Río Colorado	37°41' 22.55"S, 68°14' 30.46"W	B	HE648081
5648	<i>C. donosobarrosi</i>	Argentina: Neuquén: Octavio Picos, south of Río Colorado	37°41' 22.55"S, 68°14' 30.46"W	B	HE648082
5668	<i>C. donosobarrosi</i>	Argentina: Río Negro: 30 km S Choele Choel	39°30' 37.433"S, 65°32' 0.41"W	B	HE648083

■ Table S1 continued ■

MTD T	Species	Locality	Coordinates	Haplotype cluster	Accession number
5669	<i>C. donosobarrosi</i>	Argentina: Río Negro: 30 km S Choele Choel	39°30' 37.433"S, 65°32' 0.41"W	B	HE648084
5670	<i>C. donosobarrosi</i>	Argentina: Río Negro: 30 km S Choele Choel	39°30' 37.433"S, 65°32' 0.41"W	B	HE648085
5754	<i>C. donosobarrosi</i>	Argentina: Río Negro: along National Road N°3 South at km 1157, between Provincial Road N°23 and San Antonio Oeste	40°47'16"S, 65°18'59"W	B	HE648086
5753	<i>C. donosobarrosi</i>	Argentina: Río Negro: along Provincial Road N°23 at km 8, between National Road N°3 South and Valcheta	40°49'52"S, 65°24'16"W	B	HE648087
5752	<i>C. donosobarrosi</i>	Argentina: Río Negro: along road between San Antonio Oeste and Las Grutas, near "Camping Oasis"	40°46'35"S, 65°03'12"W	B	HE648088
6083	<i>C. donosobarrosi</i>	Argentina: Río Negro: National Road N°3 near km 1238, 25 km N Sierra Grande	41°23'06.1"S, 65°21'48.9"W	B	HE648089
6084	<i>C. donosobarrosi</i>	Argentina: Río Negro: Road N°6 at 50 km from Gral Roca	38°35'43.7"S, 67°35'16.3"W	B	HE648090
6077	<i>C. petersi</i>	Argentina: Santiago del Estero: National Road N°9 in direction to Loreto city, near km 1048	28°36'49"S, 64°01'14"W	A	HE648091
6078	<i>C. petersi</i>	Argentina: Santiago del Estero: National Road N°9 in direction to Loreto city, near km 1048	28°36'49"S, 64°01'14"W	B	HE648092
6080	<i>C. petersi</i>	Argentina: Santiago del Estero: new National Road N°34, near km 740	27°36'46"S, 64°17'05"W	A	HE648093
5652	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648094
5653	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648095
5654	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648096
5656	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648097
5657	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648098
5658	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	B	HE648099
5659	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648100
5660	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648101
5661	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648102
5662	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648103
5663	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648104
5664	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648105
5665	<i>C. petersi</i>	Argentina: Santiago del Estero: Quimil Paso	28°48' 31.28"S, 63°5' 18.44"W	A	HE648106

Samples 5635-5636, 5649 and 5651 are from the vicinity of the restricted type locality of *C. chilensis* (Mendoza, Argentina; Boulenger 1889). Sample 5752 is from the type locality of *C. donosobarrosi*; sample 6080 from a site 6 km away from the type locality of *C. petersi*. Sample 5648 did not work for microsatellites.

Table S2 Cross-amplified microsatellite loci in the *Chelonoidis chilensis* complex

Locus	Dye	T _A [°C]	Forward primer (5'–3')	Reverse primer (5'–3')	No of alleles	Allele size range [bp]
GAL 45	FAM	62	TATCTCCTTCCACACGGAGATGGG	CCCCAAAGTAAAGTTAGCTCTCTCA	8	80-98
GAL 50	HEX	62	TGGGACAGGCAAACCTAACAAAACCTT	TGCAGAAGTTAATCCCTTTCTCCTT	13	79-125
GAL 73	ATTO 565	57	ATTATGTGCTTGTGTCATCTTTTTC	TTGAAGATACTCATCCTCGATACA	16	60-101
GAL 75	FAM	57	GAAGCCATTTACCACAAACTTATT	GTTACCATAGCATTCCTGATTATAG	16	66-108
GAL 94	ATTO 565	54	CTTCTATTTCCCAACCATCT	AACTTTATATTTGTGTGCATATT	1	78
GAL 100	FAM	57	TCTTAATAAATTCCATGAGTTGAGCT	AGGGTGATTTTCATAAACAAACAGAA	3	84-101
GAL 127	HEX	57	TAACATATAAACATCAACTGGCAGAA	GTTTAGTGTCATCTGCATATGC	19	78-155
GAL 136	HEX	54	ATGAGATGTATGTACAGAAAATATA	CTGGAGGGAAGTAAGAATC	11	66-99
GAL 159	ATTO 565	57	AATATTTGAAGATACTCATCCTCGA	TTATGTGCTTGTGTCATCTTTT	15	65-112
GAL 263	HEX	62	GGGAAAGTACTATTTCCAGAGCTGG	GCTGAGGCTAGCTAATTTTTATGT	18	72-121

T_A Annealing temperature

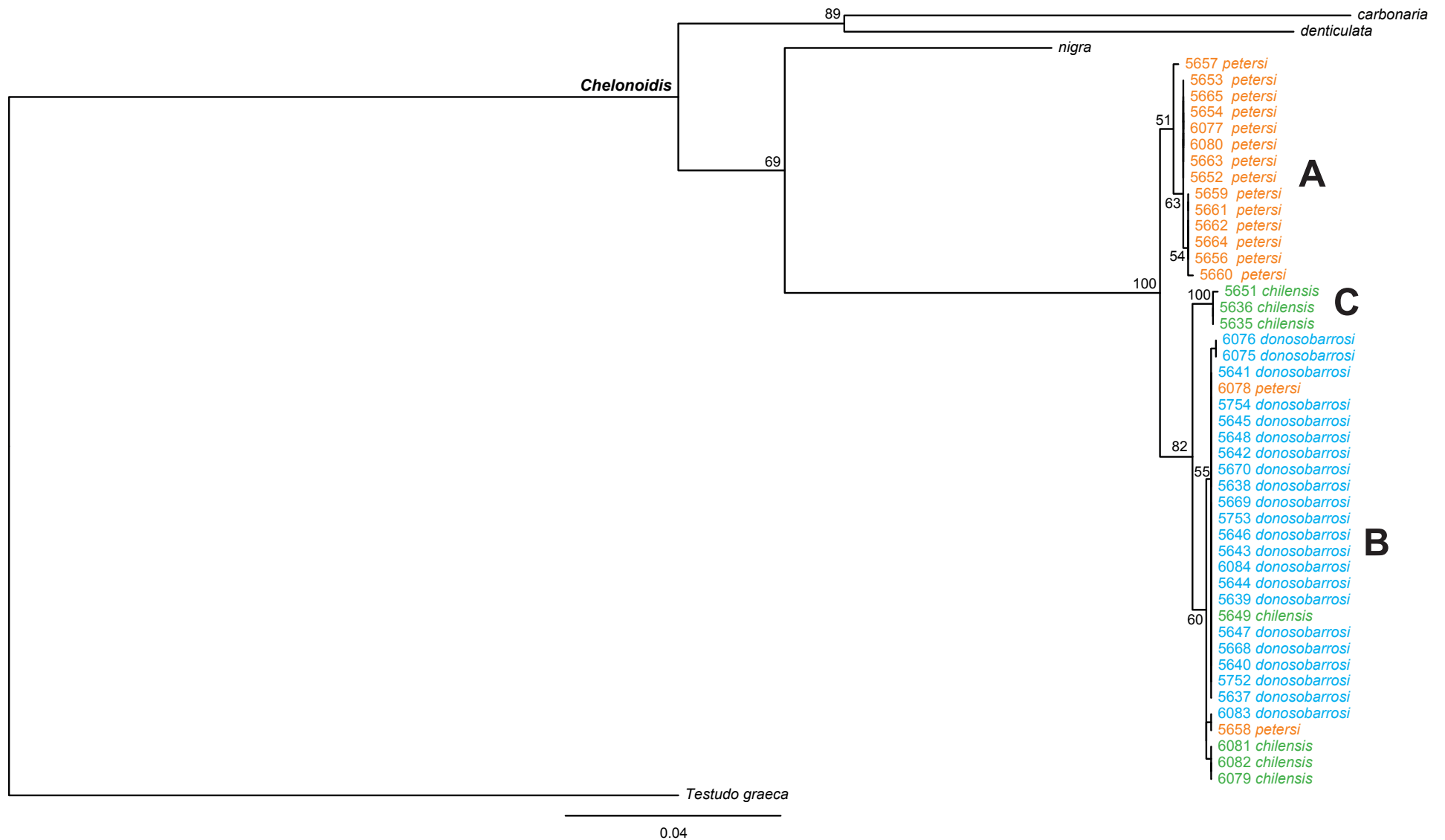


Fig. S1 Maximum Likelihood tree for cyt *b* sequences of the *Chelonoidis chilensis* complex and other *Chelonoidis* species, rooted with *Testudo graeca*. Numbers at nodes are thorough bootstrap values (not shown for some terminal clades with short branches). For the *C. chilensis* complex, voucher codes (Table S1) precede taxon names. Letters on the right correspond to haplotype clusters of Figure 2; colour code within the *C. chilensis* complex, to Figures 1, 2 and 4.

Additional Reference

Boulenger, G.A. (1889). *Catalogue of the Chelonians, Rhynchocephalians, and Crocodiles in the British Museum (Natural History)*. London: British Museum (Natural History), x + 311 pp., 6 pls.