

Supplementary document S1. Specimens used in the morphologic study of size and shape variation in terrestrial Western Palearctic salamanders.

- Chioglosa lusitanica* (5): MNCNM; 12875, 28429, 28433, 28434, 9698.
- Mertensiella caucasica* (8): MSNP; 1991.501, 1991.503, 1994.5516, 70203, 7204, NHML, 1954.11.9, 1954.11.10, 1954.11.11.
- Lyciasalamandra fazilae* (10): MSNF; 25556, 25557, MHML; 1964.360, 1964.359, 1964.367, 1964.357, 1964.353, 1964.370, 1964.368, 1964.364.
- Lyciasalamandra luschni* (10): MSNF; 25552, 25553, MSNP; 1977-781, 1977-782, 1988-7210, 4639, A110, A171; MNCNM, 1937, 1938.
- Lyciasalamandra atifi* (2): MSNF, 22446, 25547.
- Lyciasalamandra billae* (2): MSNF, 25550, 25551.
- Lyciasalamandra flavimembris* (2): MSNF, 25548, 25549.
- Salamandra atra* (27): MSNF: 1781, MNSNM, 1576-884, 1576-885, MSNP, 1915, 1987-814, 1988-7220, 1988-7221, 4635, 4637, 851, 89740, A305, A670, A671, A672, A673, NHML, BM1970.1819, BM1970.1820, BM1970.1822, BM1970.1823.
- MSNF, 2004 0040, 2004 0041, 2004 0044, 2004 0045, 2004 0046, 2004 0048, 2004 0049
- Salamandra corsica* (18): MSNP: 1095, 1655, 1896-20, 1896-21, 38-182, 554, 555, 556, 557, 559, 560, 562, 563, 565, 566, 567, 9640.
- Salamandra i. infraimmaculata* (8): MSNF: 15231, 25536, 25537, NHML: 19591.1.4, 19591.1.5, 1961.673, 1961.674, 1961.675, MNSNP: 1978-550.
- Salamandra lanzai* (9): MSNF: 1505, 1506, 2875, 2876, 2877, MNSNP: 1938-179, 1986-1929, 1994-5993, NHML: 88.10.24.1.
- Salamandra a. algira* (2): NHML, 89-72, 89-73.
- Salamandra a. splendens* (15): EBD, 2543, 29787, David Donaire personal collection: 29070, 29074, 29129, 29133, 29137, MCNB, 2007-0002, 2010-135, 2010-132, 2010-130, 2010-134, 2010-133, 2010-128, 2010-131, 2010-129.
- Salamandra a. spelaea* (3): EBD, 904, 905, 906.
- Salamandra a. tingitana* (12): NHML, 89-3-12-9-15, 89-3-12-9-16, MHNb, 2007-0002, 2010-141, 2010-139, 2010-137, 2010-146, 2010-145, 2010-136, 2010-140, 2010-144, 2010-143.
- Salamandra a. atra* (27): MSNF, 1781, 2004 0040, 2004 0041, 2004 0044, 2004 0045, 2004 0046, 2004 0048, 2004 0049, MNSNP, 1915, 1987-814, 1988-7220, 1988-7221, 4635, 4637, 851, 89740
- A305, A670, A671, A672, A673, NHML, BM1970.1819, BM1970.1820, BM1970.1822, BM1970.1823.
- Salamandra s. almanzoris* (75): EBD, 10068, 10069, 10070, 10071, 00191, 12148, 13760, 13761, 1953, 29843, 9562, 994, 995.
- Salamandra s. bejarae* (48): EBD, 29221, 29223, 29337, 03476, 03480, 03481, 03483, 03484, 03497, 03498, 03499, 03502, 03503, 03504, 03505, 1170479, 1295283, 2200, 29221, 29226, 29331
- 3418, 3474, 3475, 3481, 3482, 3485, 3500, 3501, 3506, 4102, 4103, 6131, 6132, 6133, 946, 952, 956, 969, 978, 990, 995.
- Salamandra s. bernardezi* (26): EBD, 29287, 29288, 29289, 29290, 29291, 29292, 29294, 29295, 2812, 2870, 2885; MNCNM: 29276, 29278, 29305, 29306, 29308, 29312, 29315, 29316, 29319, 29320, 29324, 29379, 29388, 30870; MNCNP: 861775.
- Salamandra s. crespai* (2): EBD, 10114, 301138.
- Salamandra s. fastuosa* (113): EBD, 2815, 2818, 2826, 2828, 2831, 2832, 2848, 2851, 2878, 2892, 28101, 28101, 28113, 28113, 28116, 28143, 28149, 28777, 28777, 28777, 10479, 10479, 10480, 10480, 10484, 10484, 10485, 10485, 10486, 10486, 10487, 10487, 10494, 10494, 10495, 10495, 10496, 10496, 10504, 10505, 10523, 10524, 10525, 10526, 10527, 10528, 10536, 10537, 10543, 10544, 10545, 10546, 10547, 10548, 10579, 2802, 2805, 2808, 28108, 28116, 2813, 28141, 28146, 28152, 28156, 28163, 28168, 2824, 2825, 2844, 2844, 2857, 2859, 2863, 2865, 2868, 2869, 2874, 2881, 2899, 770618, 77061801, 77061802, 77061804, 77061805, 77061807, 77061814, 77061816, 77061825, 77061826, 77061828, 77061829, 77061833, 7706822.
- Salamandra s. gallaica* (82): EBD, 117841, 11785, 11787, 11788, 11789, 11790, 11792, 11793, 11795, 11797, 11799, 11801, 11803, 11805, 11806, 11807, 11807, 11808, 11809, 11811, 11812, 11813, 11814, 11815, 11816, 11817, 11819, 11820, 11822, 11823, 11824, 11826, 11827, 11829, 11832, 11833, 11835, 11838, 1780, 1780, 1781, 1782, 1784, 1786, 19077, 20311, 2447, 2448, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 29096, 29097, 29099, 29100, 29101, 29103, 29416, 29417, 67092951, 722, 9737; NHML: 1909.5.21.31, 1909.5.21.32, 1909.5.21.33, 1909.5.21.34, 98.3.30.3, MNCNM; 24333, 29345, 29347, 29359, 29360, 29361, 29363, 29364, 29367, 29368, 29369.
- Salamandra s. giglioli* (40): NHML, 1908.4.3.43; MSNF, 11518, 11519, 11520, 11521, 11522, 11523, 11529, 11530, 11533, 11535, 11537, 11538, 11539, 11540, 11541, 11542, 11543, 11544, 11545, 11546, 11547, 11548, 11549, 11550, 11551, 11553, 11554, 11555, 11556, 11557, 11558, 11559, 11560, 11561, 11562, 22361, 22362, 22363, 22364.
- Salamandra s. longirostris* (36): EBD, 11852, 11853, 11854, 11860, 11861, 11862, 00246, 00248, 11851, 11867, 13148, 13149, 16177, 16718, 16719, 16720, 16721, 16722, 16723, 16724, 16725, 16726, 28838, 28840, 28841, 29896, 30698, 4147; MNCNM: 11233, 11857, 11858, 11859, 19316, 19317, 28893, MCNB, 86-1716.
- Salamandra s. morrenica* (52): EBD, 1979, 28930, 00138, 00139, 00174, 00175, 00177, 00178, 00179, 00179, 00180, 00181, 00184, 00185, 00187, 00188, 00189, 00190, 00192, 151279, 1975, 1976, 1977, 1978, 1980, 20700, 21987, 28840, 28846, 28847, 28884, 5163, 5167, 5759, 11332, MNCNM: 28434, 28932, 28933, 28935, 28936, 28937, 28938, 28939, 28940, 28941, 28943, 28944, 28945, 885, 934, 935, 936.
- Salamandra s. salamandra* (9): NHML, 19-10.910.12, 19-10.910.13, 19047.25, 19047.30, 19047.39, 1905.1, 1905.10, 1905.15, 1905.30.
- Salamandra s. terrestris* (125): MCNB, 2004-50, 2004-48, 2011-0323, 83-348, 83-411, 83-417, 83-419, 83-342, 83-343, 83-344, 83-440, 83-345, 83-441, 83-415, 2004-37, 2004-34, 2004-35, 2004-32, 2004-36, 2004-38, 2004-31, 2004-39, 2004-33, 2004-40, 2004-45, 2004-46, 2004-47, 2004-41, 2004-44, 2004-42, 2004-49, 2000-610, 82-5272, 82-8808, 82-8810, 82-8791, 83-406, 83-425, 83-493, 93-355, 99-1112, 82-8826, 82-8827, 82-8829, 82-8832, 82-8831, 88-8825, 82-8834, 82-8837, 82-8822, 82-8835, 82-8836, 82-8828, 82-8830, 2004-30, 83-494, 83-470, 86-1707, 82-8817, 82-8815, 88-8816, 82-8807, 82-8804, EBD, 30138, MSNF, 5170, 5759, 22349, 22350, 22351, 22352, 22353, 22354, 22355, 22356, 22403, 23183, 23184, 23186, 23190, 23192, 23193, NSML, 1911.2.22.45, 1911.2.22.46, 1911.2.22.48, 1911.2.22.50, 1911.2.22.51, 1911.2.22.52, 1911.2.22.54, 1911.2.22.55, 1911.2.22.62, 1911.2.22.63, 1911.2.22.64, 1911.2.22.64D, 1911.2.22.64E, 1911.2.22.64G, 1911.2.22.64K, 1911.1.5.1-20, 1895.9.28.3, 1894.12.31.44, 1919.8.21.1, 1919.8.21.2, 1919.8.21.3, 1919.8.21.4, 1919.8.21.5, 1919.8.21.6, 1919.8.21.7, 1911.2.22.70,

1911.2.22.71, 1911.2.22.72, 1911.2.22.73, 1911.2.22.74,
1911.2.22.75, 1911.2.22.76, 1911.2.22.77, 1911.2.22.78,
1911.2.22.79, 1911.2.22.69, 1911.2.22.21, 1911.2.22.22,
1911.2.22.35, 1911.2.22.36, 1911.2.22.27, 1911.2.22.28,
1911.2.22.38, 1954.1.4.10.

Acronyms:

NHM; Natural History Museum-London, MSNP; Musée Sciences Naturelles-Paris, MNCNM; Museo Nacional de Ciencias Naturales-Madrid; MSNF; Museo di Storia Naturale di Firenze, EBD, Estación Biológica de Doñana, Sevilla, MCNB, Museu Ciències Naturals de Barcelona.

Supplementary document S2. Bibliography used to compile data on species localities.

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Supplementary document S3. Gene bank codes of the 12sRNA and cytochrome b sequences.

Taxa	12sRNA	Cytochrome b	Taxa	12sRNA	Cytochrome b
<i>Chioglossa lusitanica</i>	EU880308	EU880308	<i>Salamandra salamandra bernardezi</i>	DQ092285	DQ092219
<i>Mertensiella caucasica</i>	EU880319	EU880319	<i>Salamandra salamandra crespai</i>	DQ221217	DQ221237
<i>Lyciasalamandra fazilae</i>	KY348391	KF645936	<i>Salamandra salamandra fastuosa</i>	DQ221214	DQ221234
<i>Lyciasalamandra luschani</i>	KF645384	KF645935	<i>Salamandra salamandra gallaica</i>	KX094979	KF645922/ KX094979
<i>Lyciasalamandra atifi</i>	KY348389	AF154053	<i>Salamandra salamandra giglioli</i>	DQ221221	DQ221241
<i>Lyciasalamandra billae</i>	KY348384	AY042786	<i>Salamandra salamandra longirostris</i>	DQ221223	KT995210
<i>Lyciasalamandra flavimembris</i>	KY348393	DQ473605	<i>Salamandra salamandra morrenica</i>	AY222458	AY222502/ KF645925
<i>Salamandra atra atra</i>	KF645351	AY042786	<i>Salamandra salamandra salamandra</i>	DQ221213	AY035819
<i>Salamandra corsica</i>	AY928618	KT995323	<i>Salamandra salamandra terrestris</i>	AY222459	AY035819
<i>Salamandra infrainmaculata</i>	KF645362	KF645919/ MF043389	<i>Chioglossa lusitanica</i>	EU880308	EU880308
<i>Salamandra lanzai</i>	MF043391	AF356699	<i>Mertensiella caucasica</i>	EU880319	EU880319
<i>Salamandra algira algira</i>	DQ221230	HQ190892	<i>Cynops orientalis</i>	KY399474	KY399474
<i>Salamandra algira splendens</i>	KF645376	HQ190896	<i>Triturus marmoratus</i>	HQ697279	HQ697279
<i>Salamandra algira spelaea</i>	DQ221231	DQ221247	<i>Pleurodeles waltl</i>	EU880330	EU880330
<i>Salamandra algira tingitana</i>	DQ221227	KF645933/ HQ190900	<i>Salamandrina terdigitata</i>	EU880332	EU880332
<i>Salamandra salamandra almanzoris</i>	DQ221219	DQ221239	<i>Ambystoma californiense</i>	AY659995	AY659995
<i>Salamandra salamandra bejarae</i>	DQ221216	DQ221236			

Supplementary document 4. Calibration points and bibliographic references used for molecular clock of the phylogenetic tree.

Point of calibration	Lower bound	Upper bound
<i>Cynops orientalis</i> / <i>Taricha granulosa</i>	15.0 Mya	23.0 Mya
<i>Pleurodeles waltl</i> / <i>Triturus marmoratus</i>	44.0 Mya	55.0 Mya
<i>Mertensiella caucasica</i> / <i>Pleurodeles waltl</i>	55.0 Mya	151.0 Mya