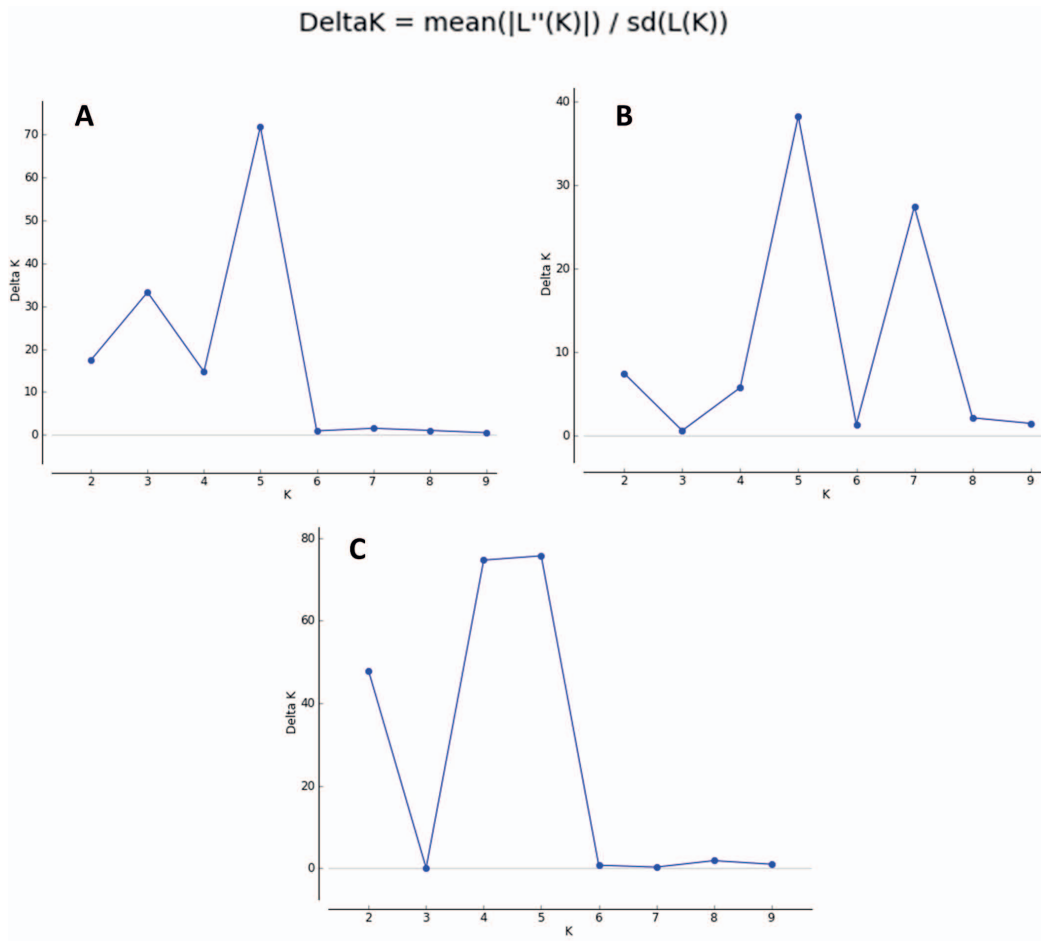
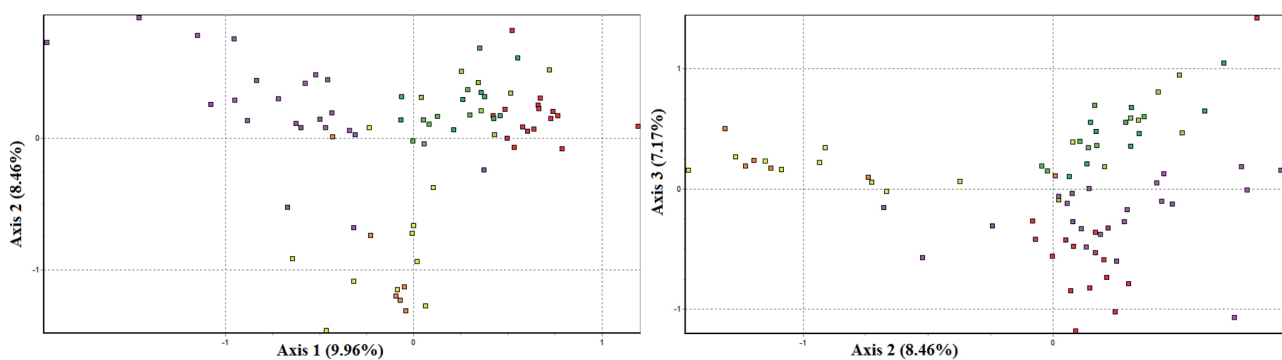




**Supplementary Figure S1.** STRUCTURE exploratory analysis using different combinations of ancestry and allele frequency models (5 simulations, 100000 iterations, 25000 burn-in): A – admixture and independent; B – no admixture and correlated; C – no admixture and independent; x – axis:  $K$  number (2–9), y – axis – Delta  $K$ . All exploratory analysis suggested five clusters as it did the final analysis (see text for details).



**Supplementary Figure S2.** Factorial Correspondence Analysis (FCA) ordination along the first three axes of 67 individuals of *Salamandra atra* from the Dinarides based on six microsatellite loci. Each label corresponds to a sampling site (from north to south): Gorski Kotar (yellow – Vihoraški put, orange – Samarske stijene), Prenj (light green – Zakantar, dark green – Podotiš, green – Kopilice), Prokletije (pink – Bogičevica, violet – Gozdarevac), Čvrtnica – red. No clear clustering of sampling sites within the same sampling area is inferred. The individuals from Čvrtnica are included for a proper partitioning of variation among the Dinaric population. Axis 2 separates well Gorski Kotar (Northern Dinarides) from the other sampling areas (Central and Southern Dinarides).

**Supplementary Table S1.** Accession numbers (Acc. No) of the sequences (*cob* and *D-loop*) from public repositories (GenBank) used in this study (courtesy of Crestanello). Hap – Inferred haplotypes (as in Fig. 2 and Table 1). Codes of sampling locations are as in Fig. 1 and Table 1. Collapsed haplotypes from BONATO et al. (2018) are in bold. In the last column, if different, the reference for *cob* is separated from the reference of *D-loop* by a comma:  $\alpha$  – BONATO et al. (2018),  $\beta$  – VENCES et al. (2014),  $\gamma$  – STEINFARTZ et al. (2000),  $\delta$  – this study.

| Hap        | Code       | Acc. No: <i>cob</i> | Acc. No: <i>D-loop</i> | Reference        | Hap        | Code           | Acc. No: <i>cob</i> | Acc. No: <i>D-loop</i> | Reference        |
|------------|------------|---------------------|------------------------|------------------|------------|----------------|---------------------|------------------------|------------------|
| H1         | 18         | MN255339            | MN255326               | $\delta$         | H16        | 16             | MN255349            | MN255336               | $\delta$         |
| H2         | 18         | MN255340            | MN255327               | $\delta$         | H17        | 16             | MN255350            | MN255337               | $\delta$         |
| H3         | 18         | MN255341            | MN255328               | $\delta$         | H18        | 1              | MG968419            | MG968401               | $\alpha$         |
| H4         | 19         | MN255342            | MN255329               | $\delta$         | H19        | 1, 2           | MG968411            | MG968401               | $\alpha$         |
| H5         | 19         | MN255343            | MN255330               | $\delta$         | <b>H20</b> | 1, 2           | MG968418            | MG968401               | $\alpha$         |
| H6         | 23         | MN255345            | MN255332               | $\delta$         | H20        | 1              | MG968411            | MG968390               | $\alpha$         |
| H7         | 26, 27     | MN255351            | MN255338               | $\delta$         | H21        | 10, 11, 12, 13 | MG968410            | AY628440.1             | $\alpha, \gamma$ |
| H8         | 20         | MN255344            | MN255331               | $\delta$         | H22        | 12             | MG968410            | MG968399               | $\alpha$         |
| H9         | 22         | MG968412            | MG968391               | $\alpha$         | H23        | 10             | KF645910            | KT335870               | $\beta, \gamma$  |
| H10        | 22         | MG968413            | MG968391               | $\alpha$         | H24        | 14, 15         | MG968403            | KF645583.1             | $\alpha, \beta$  |
| H11        | 24         | MN255346            | MN255333               | $\delta$         | H25        | 3              | MG968402            | MG968400               | $\alpha$         |
| <b>H11</b> | 21, 25     | MG968412            | MG968392               | $\alpha$         | H26        | 8              | MG968405            | MG968397               | $\alpha$         |
| H12        | 20, 23, 22 | MN255347            | MN255334               | $\delta$         | H27        | 8, 7, 6        | MG968406            | MG968397               | $\alpha$         |
| <b>H12</b> | 21, 25     | MG968415            | MG968392               | $\alpha$         | H28        | 6              | MG968404            | MG968397               | $\alpha$         |
| <b>H12</b> | 17         | MG968415            | MG968393               | $\alpha$         | H29        | 4              | MG968409            | MG968396               | $\alpha$         |
| H13        | 24, 22     | MN255348            | MN255335               | $\delta$         | H30        | 5              | MG968408            | MG968395               | $\alpha$         |
| H13        | 21, 22, 25 | MG968414            | MG968394               | $\alpha$         | H31        | 5              | MG968407            | MG968397               | $\alpha$         |
| H14        | 9          | MG968416            | AY628442.1             | $\alpha, \gamma$ | H32        | 6              | MG968407            | MG968398               | $\alpha$         |
| H15        | 9          | MG968417            | AY628442.1             | $\alpha, \gamma$ |            |                |                     |                        |                  |

**Supplementary Table S2.** PCR conditions and characteristics of the microsatellite loci.

| Locus/Forward primer label | PCR option | Allelic range | Number of alleles | Primer conc. ( $\mu$ M) | PCR thermal profile                                                                   |
|----------------------------|------------|---------------|-------------------|-------------------------|---------------------------------------------------------------------------------------|
| SalE6/HEX                  | MIX1       | 252–300       | 9                 | 0.20                    | 94°C (120 s)                                                                          |
| SalE8/HEX                  |            | 135–157       | 7                 | 0.10                    | [94°C (40 s) – 60 °C (30 s) – 65°C (40 s) $\times$ 35]                                |
| SalE12/TAMRA               |            | 160–194       | 12                | 0.10                    | 65°C (300 s)                                                                          |
| SalE7/HEX                  |            | 188–220       | 10                | 0.08                    | 94°C (120 s)                                                                          |
| SalE23/HEX                 | MIX2       | 257–323       | 7                 | 0.20                    | [94°C (40 s) – 56°C (30 s) – 65°C (40 s) $\times$ 35]<br>65°C (300 s)                 |
| SalE14/TAMRA               | Single     | 219–265       | 7                 | 0.08                    | 94°C (120 s)<br>[94°C (40 s) – 64°C (30 s) – 65°C (40 s) $\times$ 35]<br>65°C (300 s) |