

Linear morphological traits of 7 Italian and 2 Corsican populations of the Italian wall lizard, *Podarcis siculus campestris*

Vasco Avramo, Gabriele Senczuk, Claudia Corti, Andrea Scaramuzzi, Paolo Colangelo

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record.

Please cite this article as:

Avramo, V., Senczuk, G., Corti, C., Scaramuzzi, A., Colangelo P. (2025): Linear morphological traits of 7 Italian and 2 Corsican populations of the Italian Wall Lizard, *Podarcis siculus campestris*. Acta Herpetol. **21**. DOI: 10.36253/a_h-18357

Linear morphological traits of 7 Italian and 2 Corsican populations of the Italian wall lizard, *Podarcis siculus campestris*

Vasco Avramo^{1,*}, Gabriele Senczuk², Claudia Corti³, Andrea Scaramuzzi⁴, Paolo Colangelo⁵

¹Department of Bioscience and Territory, University of Molise, 86090 Pesche, Italy

²Department of Agricultural, Environmental and Food Sciences, University of Molise, 86100 Campobasso, Italy

³Museum of Natural History 'La Specola', Via Romana 17, 50125 Florence, Italy

⁴Department of Biology and Biotechnologies, University of Rome "La Sapienza," Viale dell'Università 32, 00185 Roma, Italy.

⁵National Research Council, Research Institute on Terrestrial Ecosystems, Via Salaria km 29.300, 00010, Montelibretti (Rome), Italy

**Corresponding author. E-mail: vasco.avramo@gmail.com*

Submitted on: 2025, 1st August; revised on: 2025, 21st August; accepted on: 2025, 6th October

Editor: David Beamer

GENERAL INFORMATION

Species name: *Podarcis siculus campestris*

Geographic area: Italy (mainland) and Corsican eastern coastline

Period: April 2019 - September 2019

Type of data: Occurrences and linear morphological measurements

Reference to the dataset: Use your preferred repository (e.g., figshare, dryad) and add the full citation including DOI. Please note that Reviewers must have access to the dataset.

ABSTRACT

Data Descriptor.

The dataset comprises geographical coordinates and linear morphological traits of seven Italian and two Corsican populations of *Podarcis siculus campestris*. Monitoring activities were conducted throughout the warm season of 2019, from April to September. Individuals were captured using the looping technique, and morphological measurements were taken in situ with an electronic caliper. All animals were released unharmed after handling. Each population includes a minimum of five individuals per sex to account for sexual dimorphism, and no population is sexually unbalanced. Morphological traits were recorded on the head (5 measurements), body (2 measurements), and both fore and hind limbs (4 measurements). Italian populations were sampled along a latitudinal gradient on the Adriatic coast, ranging from the southernmost population in Salve (LE) to the northernmost known non-introduced population in Malpensa (MI). The two Corsican populations were sampled along the eastern coastline. Except for Malpensa (shrubs and mixed forest), all populations were sampled in dune habitats.

METHODOLOGY

The monitoring protocol followed standardized, non-invasive capture methods commonly used for lacertid lizards. Each individual was captured by noose, measured in situ, and immediately released. Each morphological trait was measured three times using an electronic caliper, and the mean value was recorded. All measurements were taken by a single operator to minimize inter-observer variability. Although most individuals were adults, a small number of subadults and juveniles (8 individuals in total) were also captured and measured. Subadults and juveniles were classified as fj (females) and mj (males) in the dataset and not considered in the subsequent analysis. Adults were identified by the presence of a fully developed dorsal pattern, and sex was determined by examining head and body size and, femoral size and shape. The dataset includes 9 localities (7 Italian, 2 Corsican), 162 individuals, and 11 linear morphological traits.

DATASET DESCRIPTION

The dataset consists of 18 columns representing the following variables: individual ID (ID), sex (sex), species ID (species), location (loc), geographical coordinates (latitude and longitude), habitat type (habitat), and a classifier (IC) distinguishing Italian (I) and Corsican (C) populations. Linear morphological traits include: Snout–Vent Length (SVL), Trunk Length (TL), Head Length (HL), Snout Length (SL), Inter Orbital Distance (IOD), Head Height (HH), Snouth-Tympanum Length (STL), Forearm Length (FAL), Forelimb Length (FLL), Tibia Length (TLL), and Hindlimb Length (HLL).

SUMMARY OF DATA

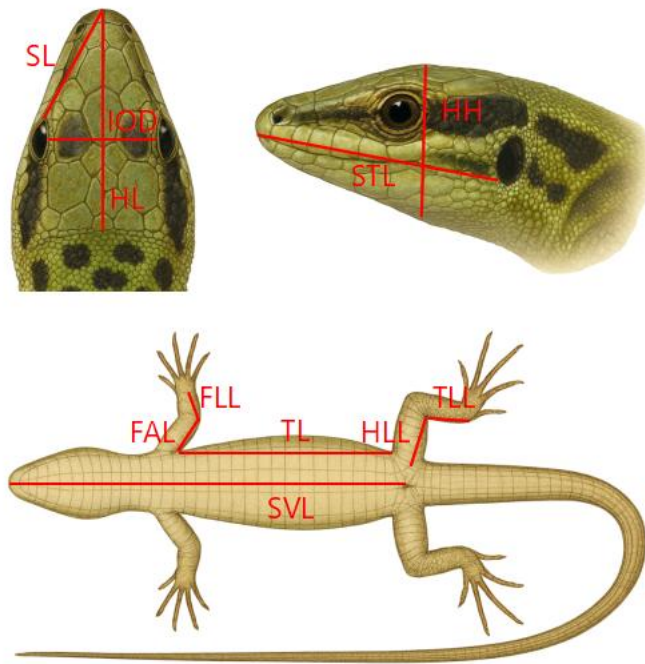


Figure 1: Linear measurements on AI-generated images.

Table1: linear measurements acronym definitions

SVL	Distance from the cloaca to the tip of the snout.
TL	Distance from the armpit to groin.
HL	Distance from the midpoint of the occipital head scales to the tip of the snout.
SL	Distance from the anterior edge of the eye to the tip of the snout.
IOD	Distance between the eyes taken dorsally.
HH	Distance between the highest point of the head to the lowest.
STL	Distance from the base of the tympanic opening to the tip of the snout.
FAL	Distance from the armpit to the elbow.
FLL	Distance from the elbow to the base of the hand.
TLL	Distance from the knee to the base of the feet.
HLL	Distance from the first femoral pore to the knee.

Table2: Descriptive statistics of the morphological traits in mm (females)

Trait	Mean	Median	Variance	SD	Max	Min
SVL	63,6	65	26,9	5,2	73	49,5
Trunk Length	34	34,2	14	3,7	43	24
Head Length	13,1	13,2	1	1	18	10,5
Snout Length	5,8	6	0,2	0,5	7	4,7
Inter Orbital Dist	6	6	0,2	0,4	7,5	5
Head Height	5,7	5,8	0,2	0,5	7,5	4,7
Snouth-Tympanum Length	9,2	9,2	0,9	1	13	7
Forearm Length	7,4	7,4	1,4	1,2	12,8	5
Forelimb Length	6,7	6,8	0,5	0,7	9	4,5
Tibia Length	9,8	9,9	0,8	0,9	12	7,5
Hindlimb Length	11,1	11,4	1,2	1,1	14	8,5

Table3: Descriptive statistics of the morphological traits in mm (males)

Trait	Mean	Median	Variance	SD	Max	Min
SVL	70,4	72	31,2	5,6	77,5	53
Trunk Length	33,4	33,5	11,3	3,4	41	25
Head Length	16,3	17	3,3	1,8	18,9	11
Snout Length	7,2	7,2	0,5	0,7	8,2	5,5
Inter Orbital Dist	7,1	7,1	0,4	0,6	9,8	6
Head Height	7,3	7,5	0,6	0,8	10,9	5,5
Snouth-Tympanum Length	11,5	11,5	1,1	1	13,4	8,6
Forearm Length	8,6	9	2,3	1,5	13,1	1,3
Forelimb Length	8,1	8	0,8	0,9	9,9	5

Tibia Length	11,9	12	1,8	1,4	14	7,5
Hindlimb Length	13,5	13,9	2,4	1,6	15,8	8,8

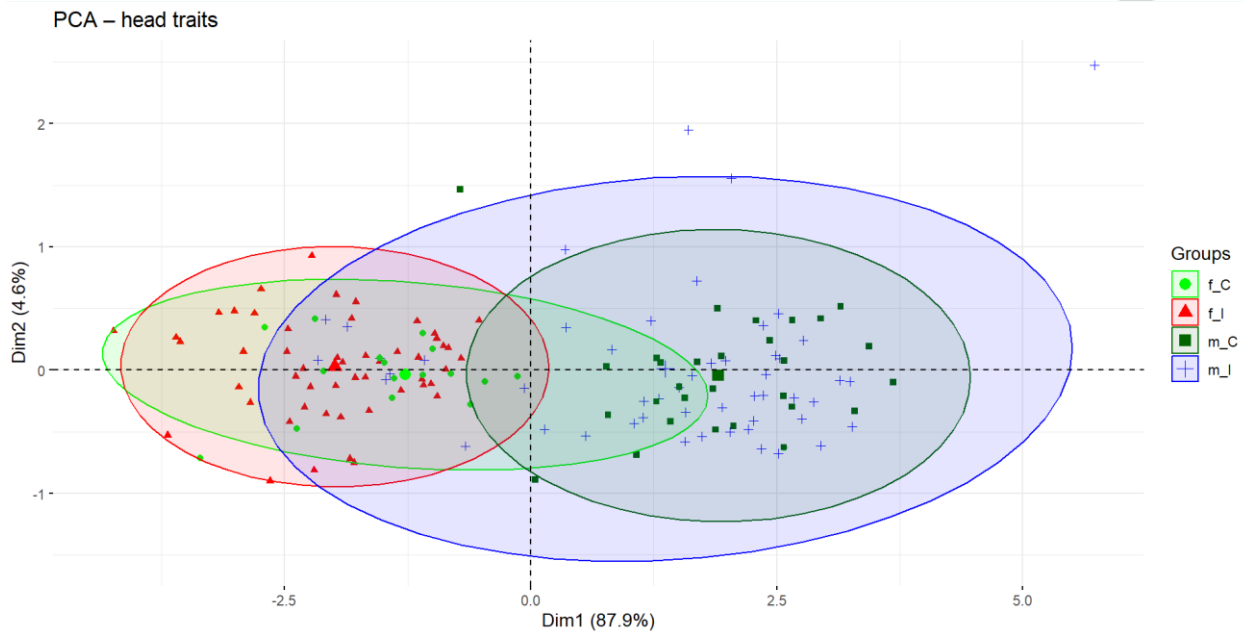


Figure2: PCA of the head traits (Head Length, Snout Length, Inter Orbital Dist, Head Height, Snouth-Tympanum Length). f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.

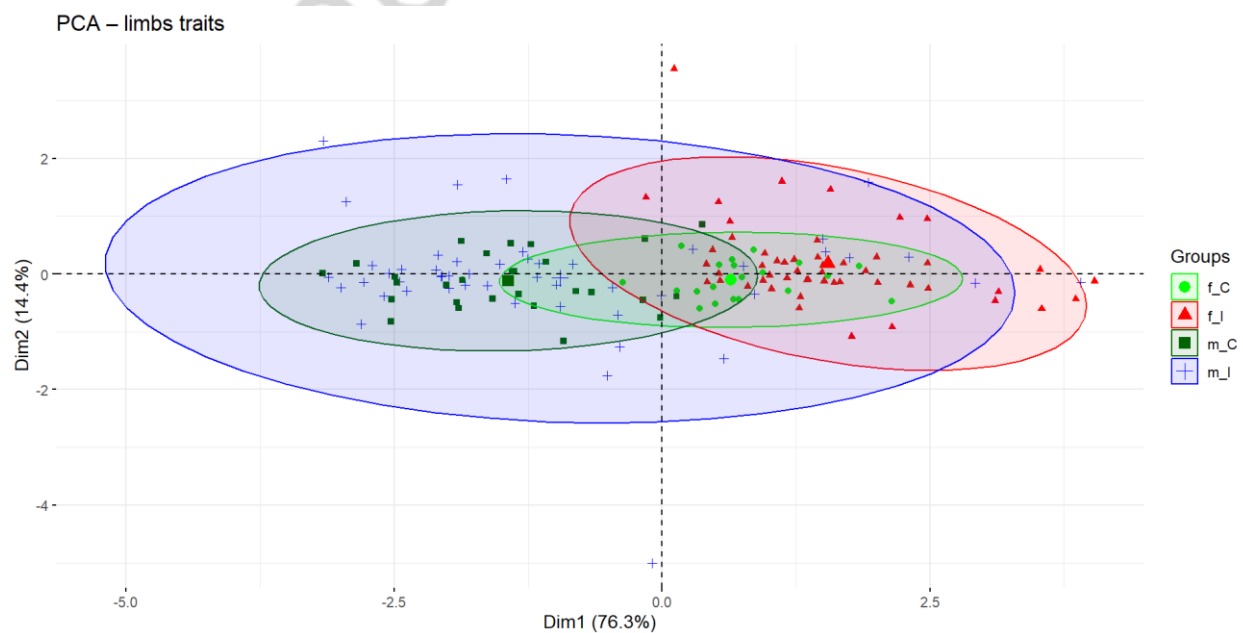


Figure3: PCA of the fore and hind limbs (Forelimb Length, Forearm Length, Tibia Length, Hindlimb Length). f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.

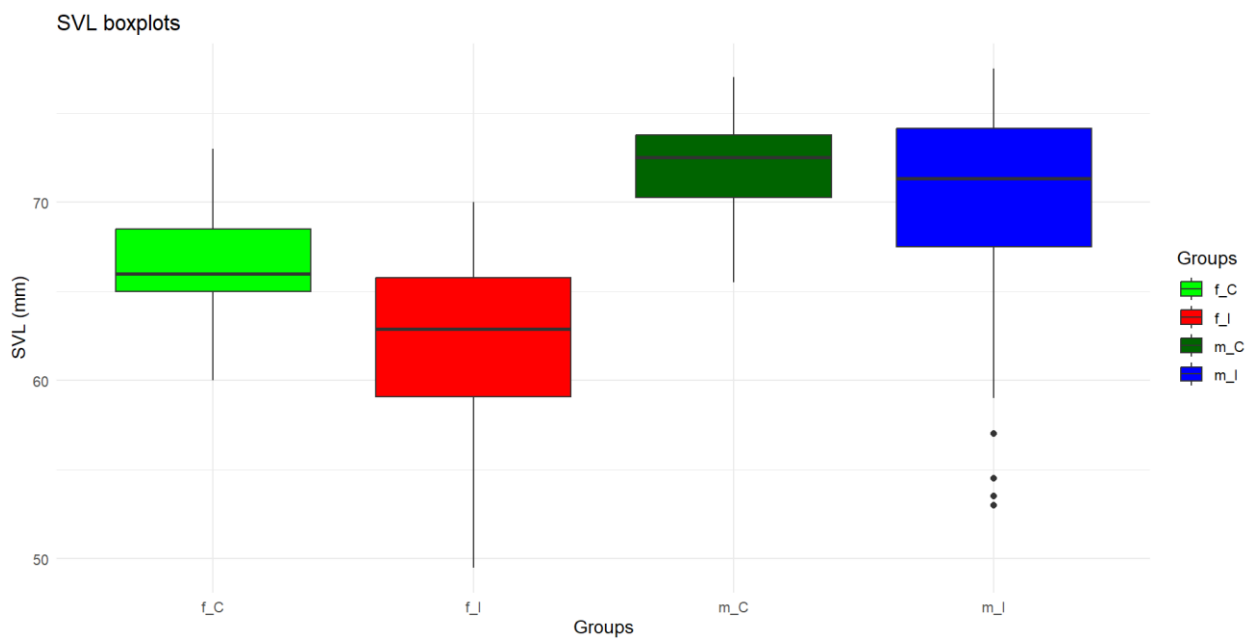


Figure4: SVL Boxplots. f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.

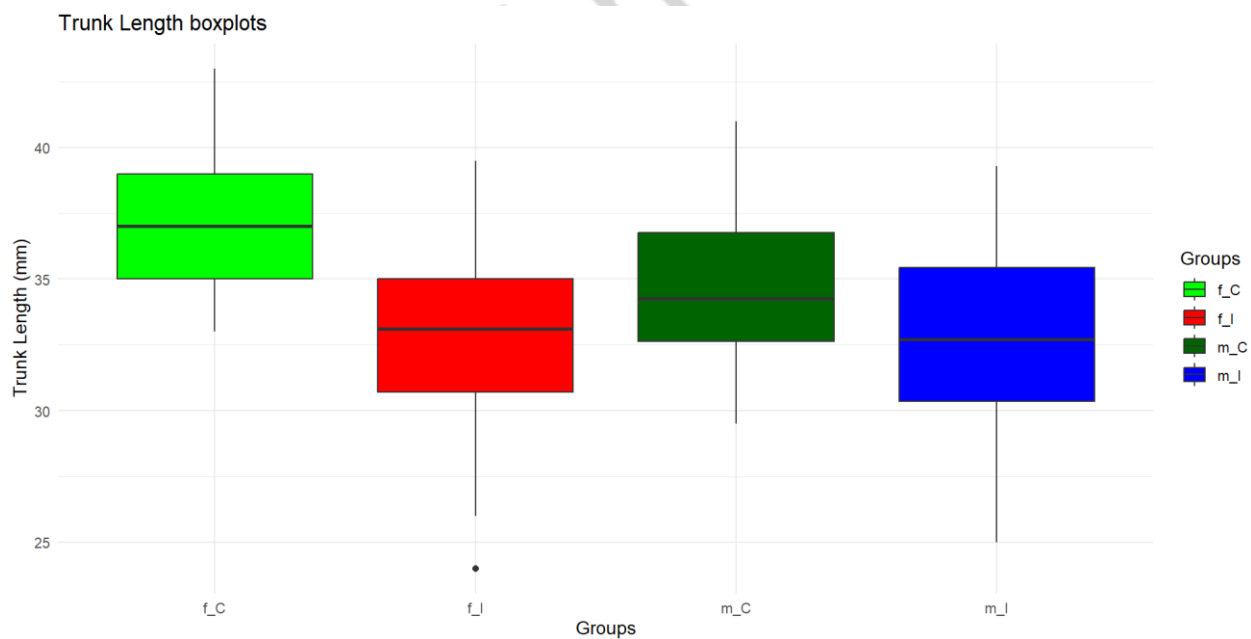


Figure5: Trunk Length Boxplots. f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.

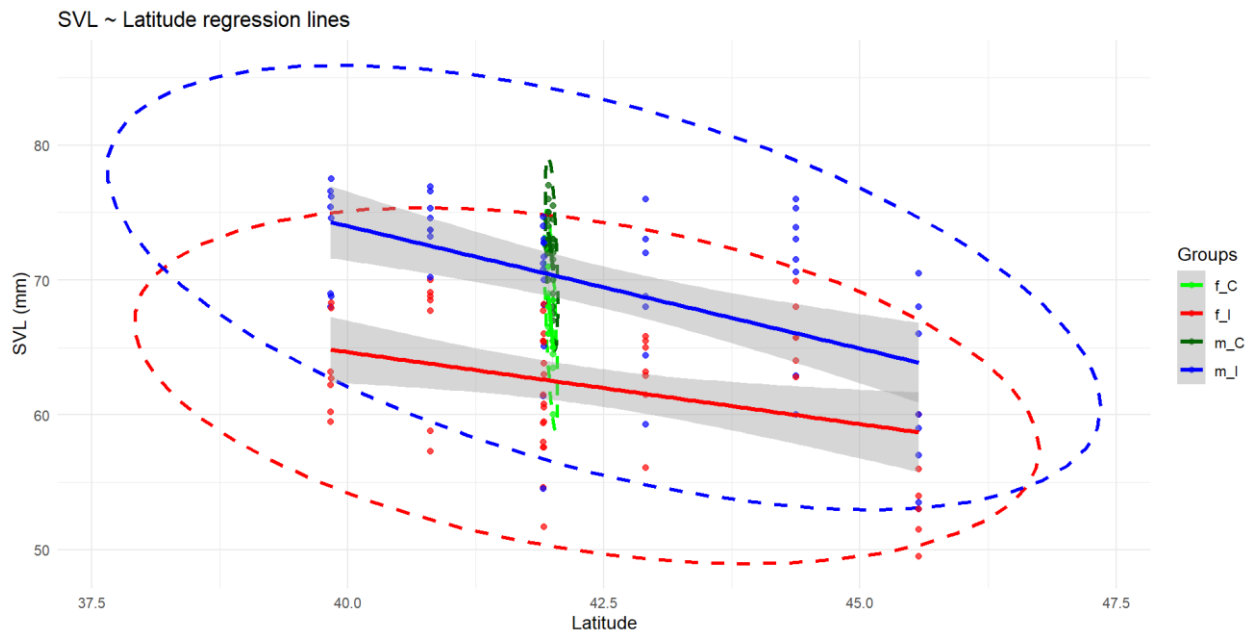


Figure6: Regression SVL - Latitude. f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.

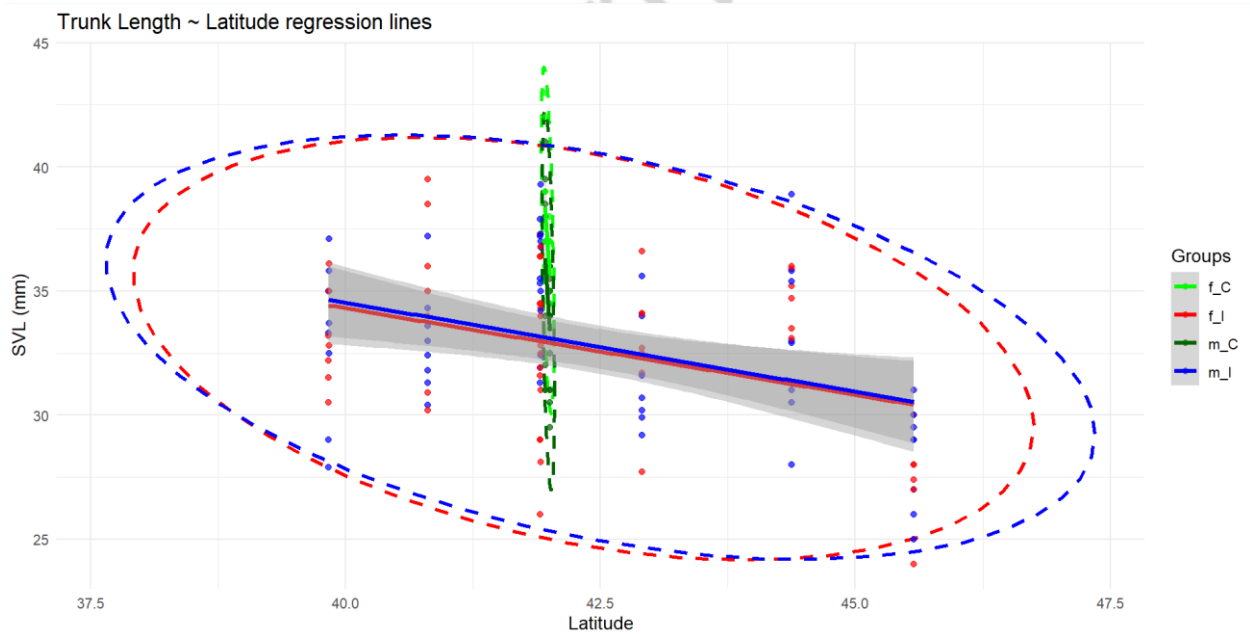


Figure7: Regression Trunk Length - Latitude. f_C = Corsican females, f_I = Italian females, m_C = Corsican males, m_I = Italian_males.