Morphometry of *Teira dugesii* (Milne-Edwards, 1829) across the Madeira Archipelago and Selvagens Islands

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Morphometry of *Teira dugesii* (Milne-Edwards, 1829) across the Madeira Archipelago and Selvagens Islands

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GENERAL INFORMATION

Species name: *Teira dugesii* (Milne-Edwards, 1829).

Subspecies name: *Teira dugesii dugesii* (Madeira Island), *Teira dugesii selvagensis* (Selvagens Islands), *Teira dugesii mauli* (Desertas Islands), *Teira dugesii jogeri* (Porto Santo Island).

Geographic area: Madeira Archipelago (Madeira Island, Porto Santo Island, Chão Island, Deserta Grande Island, Bugio Island) and Selvagens Islands (Selvagem Grande Island, and Selvagem Pequena Island), Portugal.

Period: 1995-1998.

Type of data: Morphometric

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. This dataset comprises morphometric measurements of 375 adult individuals of *Teira dugesii*, representing the four currently recognized subspecies sampled across nine localities in the Madeira and Selvagens Islands. Data was collected during the summers of 1995–1998 using a consistent, non-invasive capture-and-release protocol. For each individual, nine linear head measurements and one body measurement (Snout–Vent Length) were recorded. Sampling covered multiple islands, including Madeira, Porto Santo, the Desertas Islands, and the Selvagens Islands, providing broad geographic and taxonomic representation across the species' distribution. The dataset offers a robust baseline for investigating insular morphological variation, sexual dimorphism, and population differentiation in an oceanic island reptile. In addition, it

may support comparative, evolutionary, and conservation-oriented studies, as well as future temporal analyses assessing morphological change over time.

METHODOLOGY

All captures were conducted in the morning during the summers of 1995–1998, and individuals were held for no longer than approximately one hour. At the time of sampling (1995–1998), no specific permits were required for non-invasive capture and release of reptiles in Madeira. A non-invasive pitfall trap ("Lagartixeiro") was used, consisting of a plastic bucket positioned against a tree or wall in shaded conditions, with bait suspended from a wire across the top (Câmara and Jesus, 2025). Rotating tubes on the wire cause lizards attempting to access the bait to fall into the bucket (Câmara and Jesus, 2025). Black plastic buckets were used to reduce stress and minimize overheating, and all traps were placed in shaded areas (Crawford and Kurta, 2000; Câmara and Jesus, 2025). Morphometric measurements were conducted in the field, after which all individuals were released at the site of capture. Linear measurements were taken using a caliper with a precision of 0.05 mm. All measurements were performed twice by the same observer to ensure consistency and minimize observer bias. Sex determination was based on the presence and development of femoral pores, hemipenes, and overall body proportions. The dataset includes 375 individuals from nine localities, representing all recognized subspecies of *Teira dugesii*, consisting of 136 females and 239 males. A total of ten linear morphometric traits are provided for each individual.

DATASET DESCRIPTION

The dataset consists of 17 columns (Table 3), representing the following variables: population code (Code), species name (Species), subspecies name (Subspecies), island

where the individual was sampled (Group of Islands; see Figure 2 for a map of islands and sampling sites), sex (Sex), population (Pop), and individual ID (Indiv). For both *Pop* and *Indiv*, the second letter indicates sex (M = male; F = female). The morphological traits recorded include Snout–Vent Length (SVL), Head Length (HL), Head Width (HW), Head Height (HH), Interparietal Width (IW), Mouth Length (ML), Distance between point Y and the posterior margin of the posterior infralabial or posterior margin of the mouth (CBSO), distance between the rostral scale and the point of maximum interparietal width (RPA), Interorbital Width (IOW), and Distance between point Y and the anterior margin of the rostral scale (ORO) (Figure 1, Table 1). These morphometric traits were measured to quantify variation in body size and head morphology, which are relevant for comparing phenotypic differentiation within this subspecies group.

SUMMARY OF DATA

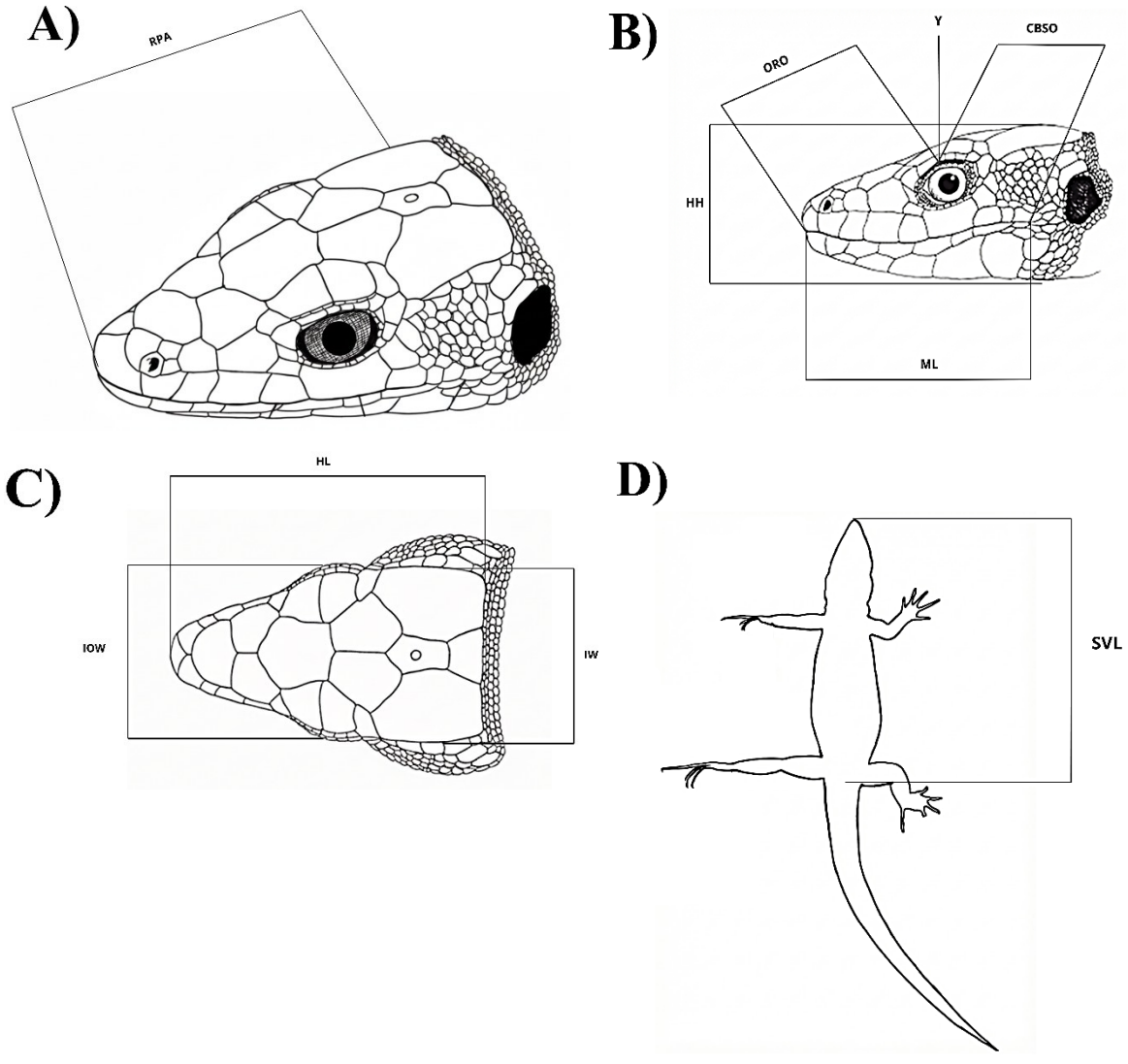

Figure 1. Schematic illustrations of *Teira dugesii* showing the locations of head and body linear morphometric measurements: A) Dorsal surface of head; B) Lateral profile of head, indicating Point Y; C) Dorsal view of head showing height and length measurements; D) Ventral view indicating Snout-Vent Length (SVL). Abbreviations are explained in Table 1.

Table 1. Mensural characters of head morphology used in the Dataset. Point Y refers to the reference landmark defined in Fig. 1 B).

SVL	Snout–Vent Length
HH	Head height.
HL	Head length.
HW	Head width.
ML	Mouth length.
IOW	Interorbital width.
IW	Interparietal width.
ORO	Distance between the point Y and the anterior margin of the rostral scale.
CBSO	Distance between point Y and the posterior margin of the posterior infralabial or posterior margin of the mouth.
RPA	Distance between the rostral scale and the point of maximum interparietal width.

123 **Table 2.** Sample details. Sample size, sampling localities, group of island and subspecies.

Code	Males/Females	Name of site/island	Group of Island	Subspecies
MA2	28/21	Paul da Serra/Madeira	Madeira	*Teira dugesii dugesii*
MA3	33/12	Ponta de São Lourenço/Madeira	Madeira	*Teira dugesii dugesii*
MA1	32/17	Curral das Freiras/Madeira	Madeira	*Teira dugesii dugesii*
DE3	24/19	Ilhéu Chão/Ilhéu Chão	Desertas	*Teira dugesii mauli*
DE1	19/17	Deserta Grande/Deserta Grande	Desertas	*Teira dugesii mauli*
DE2	10/9	Bugio/Bugio	Desertas	*Teira dugesii mauli*
PS	59/18	Porto Santo/Porto Santo	Porto Santo	*Teira dugesii jogeri*
SE1	27/16	Selvagem Grande/Selvagem Grande	Selvagens	*Teira dugesii selvagensis*
SE2	7/7	Selvagem Pequena/Selvagem Pequena	Selvagens	*Teira dugesii selvagensis*

124

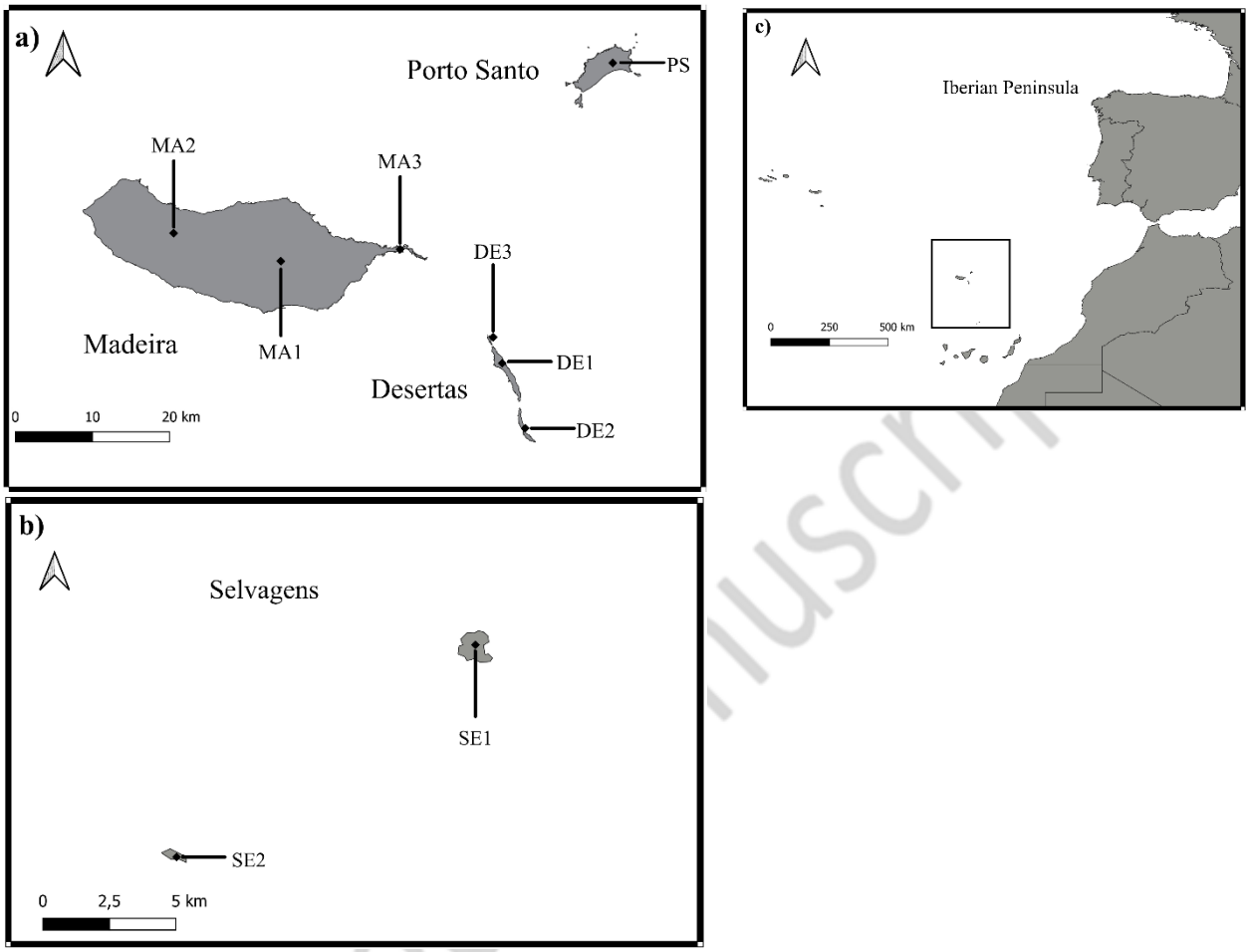

Figure 2. Geographic location of the study area and sampling sites in the Madeira Archipelago. a) Madeira Island, Porto Santo, and the Desertas Islands with sampling localities indicated; b) Sampling localities in the Selvagens Islands; c) Location of the Madeira Archipelago relative to the Iberian Peninsula. Sampling sites are labeled as follows: Madeira group (MA1 – Curral das Freiras, MA2 – Paúl da Serra, MA3 – Ponta de São Lourenço), Desertas group (DE1 – Deserta Grande, DE2 – Bugio, DE3 – Ilhéu Chão), Selvagens group (SE1 – Selvagem Grande, SE2 – Selvagem Pequena), and Porto Santo Island (PS).

Table 3. Mensural variation of individuals of *Teira dugesii* across all sampling sites (see Table 1 and 2). For each cell: upper values are from males, while lower values are from females.

	SVL			HL			HH			HW		
Populations	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min
Paul da Serra (MA2)	76,0 ± 4,07	76,0	86,0 / 70,0	17,47 ± 0,90	17,25	19,4 / 16,0	7,13 ± 0,57	7,18	8,05 / 6,18	12,58 ± 0,87	12,45	14,65/ 11,20
	69,62 ± 5,08	69,5	82,0 / 57,0	14,42 ± 1,15	14,35	18,7 / 12,5	5,84 ± 0,52	5,75	7,20 / 5,05	9,91 ± 0,98	9,80	13,50 / 8,60
P. S. Lourenço (MA3)	65,23 ± 2,83	65,0	72,0 / 59,0	14,94 ± 0,55	14,95	16,25 / 13,90	5,78 ± 0,23	5,80	6,50 / 5,40	10,75 ± 0,51	10,70	12,20 / 9,75
	59,58 ± 3,37	59,0	66,0 / 55,0	12,25 ± 0,37	12,18	12,95 / 11,75	4,68 ± 0,26	4,63	5,35 / 4,35	8,50 ± 0,39	8,40	9,30 / 8,00
C. das Freiras (MA1)	68,73 ± 3,67	68,75	76,5 / 60,0	15,68 ± 0,78	15,58	17,45 / 14,05	6,25 ± 0,42	6,18	6,95 / 5,40	11,20 ± 0,71	11,05	12,50 / 9,75
	59,59 ± 2,21	59,0	64,0 / 57,0	12,62 ± 0,66	12,40	14,40 / 11,80	4,85 ± 0,35	4,85	5,90 / 4,30	8,61 ± 0,53	8,55	9,75 / 7,60
Ilhéu Chão (DE3)	66,38 ± 5,06	65,0	75,0 / 60,0	15,34 ± 1,31	15,33	17,35 / 12,8	6,24 ± 0,56	6,23	7,15 / 5,15	10,47 ± 1,01	10,40	12,35 / 8,65
	59,79 ± 5,52	59,0	70,0 / 50,0	12,82 ± 0,99	12,85	15,60 / 11,1	5,11 ± 0,47	5,15	6,50 / 4,35	8,66 ± 0,76	8,60	10,90 / 7,70
D. Grande	68,47 ±	69,0	75,0 /	16,14 ±	16,55	17,65 /	6,34 ±	6,55	7,40 /	11,30 ±	11,60	13,40 /

(DE1)	3,81 58,41 ± 3,32	58,0	60,0 65,0 / 51,0	1,05 12,92 ± 0,85	13,0	13,4 14,65 / 11,9	0,58 4,87 ± 0,31	4,85	4,95 5,45 / 4,40	0,94 8,55 ± 0,64	8,50	9,05 9,85 / 7,40
Bugio (DE2)	68,1 ± 2,88 58,06 ± 2,88	68,75 58,5	72,0 / 62,0 63,0 / 54,0	16,23 ± 0,82 12,67 ± 0,47	16,40 12,55	17,25 / 14,45 13,8 /12,25	6,54 ± 0,25 4,97 ± 0,28	6,53 4,90	6,85 / 6,20 5,45 / 4,60	11,15 ± 0,58 8,24 ± 0,29	11,10 8,15	11,80 / 9,85 8,80 / 7,95
Porto Santo (PS)	64,02 ± 3,32 59,61 ± 2,70	64,0 59,59	71,0 / 56,0 65,0 / 55,0	14,86 ± 0,71 12,76 ± 0,48	14,80 12,63	16,25 / 13,20 13,55 / 12,05	5,91 ± 0,50 4,86 ± 0,17	5,85 4,88	7,05 / 4,90 5,20 / 4,60	10,54 ± 0,74 8,69 ± 0,40	10,60 8,75	11,95 / 9,00 9,40 / 7,75
Selv. Grande (SE1)	66,19 ± 3,50 58,75 ± 3,75	67,0 59,5	71,0 / 60,0 64,0 / 52,0	15,17 ± 0,87 12,21 ± 0,56	15,40 12,28	16,50 / 13,50 12,90 / 11,10	6,06 ± 0,38 4,77 ± 0,24	6,05 4,85	6,70 / 5,35 5,10 / 4,40	10,70 ± 0,81 8,18 ± 0,39	10,85 8,25	11,90 / 8,95 8,80 / 7,55
Selv. Pequena (SE2)	63,57 ± 1,90 57,00 ± 3,42	63,0 57,0	67,0 /62,0 62,0 / 52,0	14,64 ± 0,59 11,93 ± 0,90	14,85 11,55	15,30 / 14,00 13,80 / 11,00	6,11 ±0,46 4,70 ± 0,41	6,15 4,60	6,75 / 5,45 5,45 / 4,25	10,02 ± 0,49 8,06 ± 0,67	10,15 8,00	10,70 / 9,35 9,35 / 7,30

138

	IW			ML			IOW			ORO		
Populations	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min
Paul da	8,14 ±	8,15	9,10 /	13,94 ±	13,95	15,85 /	6,42 ±	6,38	6,95 /	9,46 ±	9,35	10,40 /

Serra (MA2)	0,54 7,00 ± 0,58	6,95	7,25 8,8 / 6,05	0,79 11,55 ± 1,03	11,55	12,30 15,20 / 10,15	0,31 5,75 ± 0,40	5,65	5,90 7,10 / 5,25	0,44 8,04 ± 0,61	8,03	8,85 10,15 / 7,10
P. S. Lourenço (MA3)	7,05 ± 0,27 6,03 ± 0,19	6,95 5,98	7,75 / 6,60 6,30 / 5,80	12,13 ± 0,49 9,86 ± 0,47	12,10 9,73	13,15 / 11,35 10,95 / 9,20	5,62 ± 0,19 4,84 ± 0,22	5,65 4,85	6,05 / 5,25 5,25 / 4,45	8,23 ± 0,31 6,93 ± 0,29	8,20 6,95	8,90 / 7,50 7,50 / 6,60
C. das Freiras (MA1)	7,36 ± 0,44 6,09 ± 0,26	7,30 6,05	8,30 / 6,60 6,85 / 5,80	12,57 ± 0,71 10,16 ± 0,54	12,43 10,05	14,20 / 11,20 11,80 / 9,55	5,83 ± 0,33 4,99 ± 0,24	5,80 5,00	6,70 / 5,15 5,55 / 4,45	8,53 ± 0,49 7,04 ± 0,33	8,45 7,00	9,40 / 7,45 7,95 / 6,60
Ilhéu Chão (DE3)	7,43 ± 0,61 6,38 ± 0,51	7,35 6,45	8,55 / 6,60 7,75 / 5,55	12,11 ± 0,97 10,16 ± 0,75	12,05 10,10	13,65 / 10,10 12,30 / 8,90	5,90 ± 0,47 5,08 ± 0,40	5,90 5,15	6,95 / 5,15 6,20 / 4,45	8,34 ± 0,67 7,07 ± 0,56	8,33 7,05	9,40 / 7,10 8,50 / 6,00
D. Grande (DE1)	7,59 ± 0,51 6,08 ± 0,39	7,75 6,05	8,40 / 6,45 6,85 / 5,40	12,83 ± 0,83 10,22 ± 0,70	13,00 10,05	14,10 / 10,50 11,65 / 9,20	5,72 ± 0,38 4,71 ± 0,31	5,80 4,75	6,30 / 5,00 5,15 / 4,20	8,61 ± 0,48 7,03 ± 0,42	8,70 7,00	9,40 / 7,40 7,90 / 6,50
Bugio	7,56 ±	7,70	8,15 /	12,87 ±	13,00	13,95 /	5,72 ±	5,73	6,20 /	8,87 ±	8,95	9,40 /

(DE2)	0,47 6,27 ± 0,16	6,30	6,85 6,60 / 6,05	0,78 10,13 ± 0,58	10,10	11,40 11,35 / 9,40	0,33 4,89 ± 0,23	5,00	5,15 5,15 / 4,45	0,45 7,04 ± 0,21	7,00	7,90 7,50 / 6,75
Porto Santo (PS)	7,09 ± 0,46 6,19 ± 0,34	6,95 6,20	8,30 / 6,05 6,95 /5,65	11,79 ± 0,67 10,07 ± 0,42	11,75 9,95	13,15/ 10,35 10,95 / 9,40	5,35 ± 0,28 4,78 ± 0,24	5,25 4,75	6,05 / 4,75 5,15 / 4,35	8,10 ± 0,42 7,06 ± 0,26	8,10 7,05	8,95 / 7,20 7,55 / 6,65
Selv. Grande (SE1)	7,15 ± 0,43 6,03 ± 0,30	7,25 5,98	7,90 / 6,30 6,45 / 5,65	12,14 ± 0,71 9,82 ± 0,43	12,35 9,75	13,05 / 10,70 10,50 / 9,10	5,56 ±0,27 4,77 ± 0,25	5,55 4,80	6,20 / 5,15 5,15 / 4,20	8,26 ± 0,43 6,76 ± 0,25	8,35 6,68	8,95 / 7,50 7,10 / 6,35
Selv. Pequena (SE2)	6,95 ± 0,25 6,04 ± 0,44	6,95 5,90	7,25 / 6,60 6,70 / 5,55	11,79 ± 0,48 9,57 ± 0,61	11,70 9,45	12,55 / 11,00 10,80 / 8,95	5,55 ± 0,23 4,91 ± 0,28	5,55 4,75	5,90 / 5,15 5,40 / 4,60	8,03 ± 0,34 6,69 ± 0,47	8,20 6,70	8,35 / 7,50 7,60 / 6,10

139
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	CBSO			RPA		
Populations	Mean±SD	Median	Max/Min	Mean±SD	Median	Max/Min
Paul da Serra	6,89 ±	6,90	8,05 /	12,88 ±	12,63	15,35 / 11,45

(MA2)	0,48 5,70 ± 0,60	5,60	5,90 7,90 / 4,85	0,88 11,21 ± 0,88	11,08	14,10 / 9,95
P. S. Lourenço (MA3)	6,05 ± 0,39 4,88 ± 0,29	6,05 4,85	6,95 / 5,40 5,55 / 4,45	11,42 ± 0,74 9,72 ± 0,65	11,33 9,78	12,70 / 10,20 11,00 / 8,60
C. das Freiras (MA1)	6,30 ± 0,49 4,88 ± 0,37	6,30 4,75	7,35 / 5,25 5,80 / 4,35	11,76 ± 0,78 9,60 ± 0,69	11,65 9,50	13,20 / 10,20 11,05 / 8,60
Ilhéu Chão (DE3)	5,98 ± 0,62 4,88 ± 0,47	5,98 5,00	7,35 / 5,00 6,05 / 3,95	12,12 ± 1,08 10,31 ± 0,95	12,05 10,10	14,15 / 9,80 12,85 / 8,90
D. Grande (DE1)	6,00 ± 0,44 4,57 ± 0,30	6,05 4,45	6,85 / 5,00 5,15 / 4,20	12,38 ± 0,91 9,93 ± 0,84	12,50 9,95	14,15 / 10,80 12,00 / 8,90
Bugio	6,10 ±	6,05	6,60 /	12,28 ±	12,08	13,80 /

(DE2)	0,41 4,67 ± 0,18	4,75	5,55 4,85 / 4,35	1,03 10,26 ± 0,45	10,45	10,75 10,70 / 9,45
Porto Santo (PS)	5,36 ± 0,43 4,51 ± 0,23	5,40 4,45	6,30 / 4,60 5,00 / 4,10	11,45 ± 0,84 9,84 ± 0,54	11,50 9,88	13,10 / 9,50 11,00 / 8,70
Selv. Grande (SE1)	5,70 ± 0,38 4,68 ± 0,26	5,65 4,60	6,45 / 5,15 5,15 / 4,20	11,70 ± 0,93 9,36 ± 0,69	11,60 9,35	13,65 / 9,80 10,65 / 8,30
Selv. Pequena (SE2)	5,68 ± 0,54 4,89 ± 0,14	5,55 4,85	6,30 / 5,00 5,15 / 4,75	11,39 ± 0,57 9,46 ± 0,46	11,25 9,35	12,60 / 10,85 10,20 / 8,95

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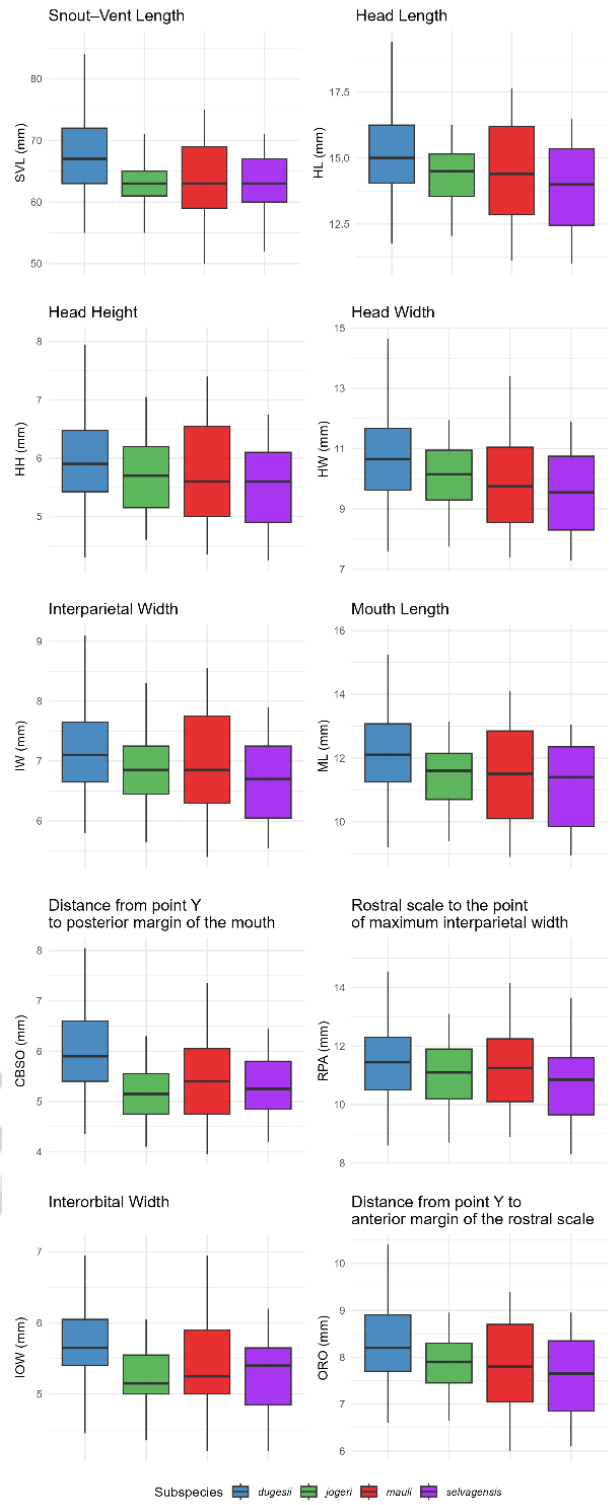

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144 **Figure 3.** Boxplots for all morphological traits measured of *Teira dugesii*.

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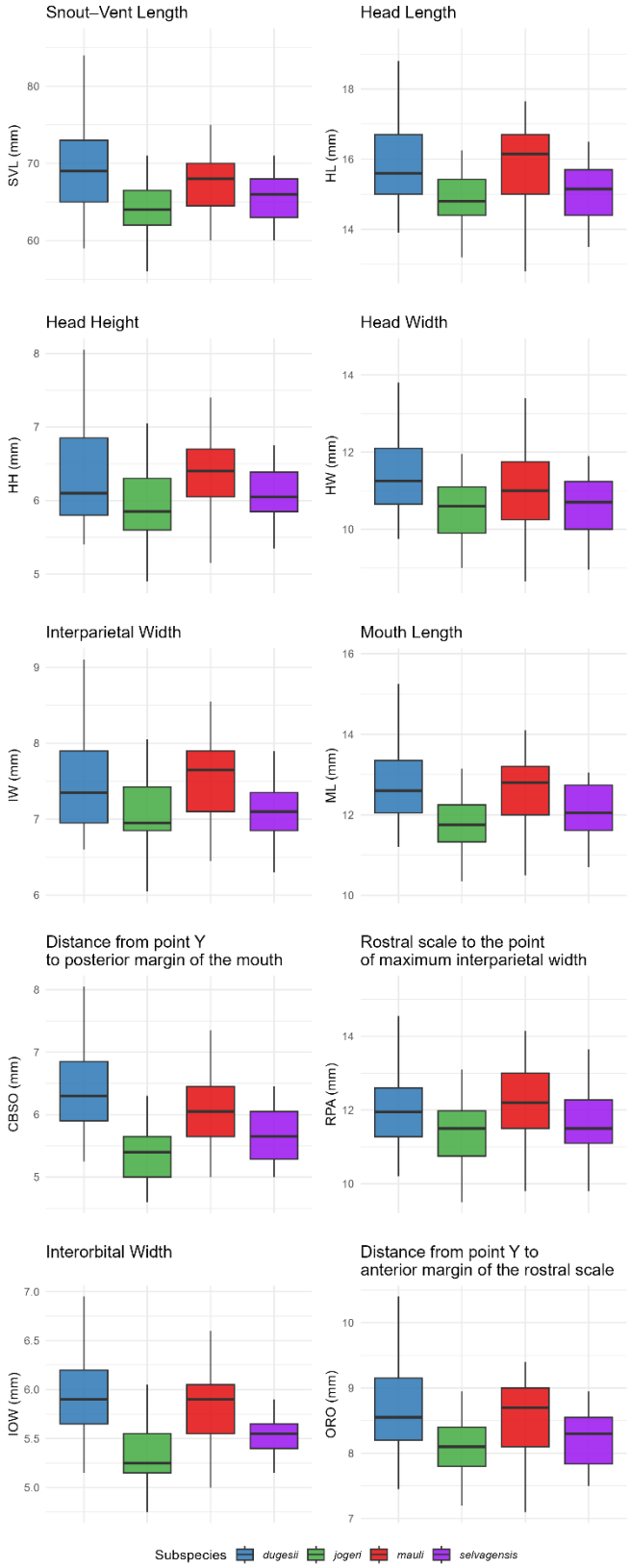

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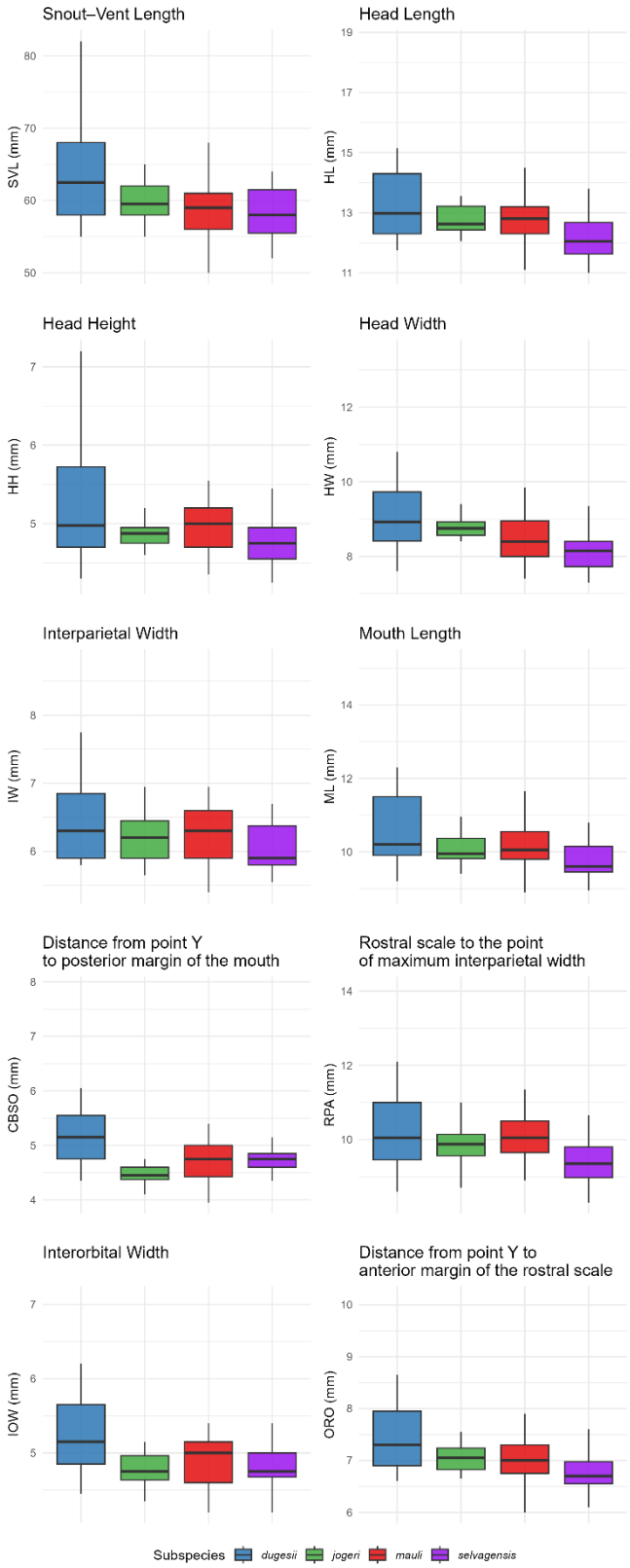
148 **Figure 4.** Boxplots for all morphological traits measured of *Teira dugesii* male

149 individuals.



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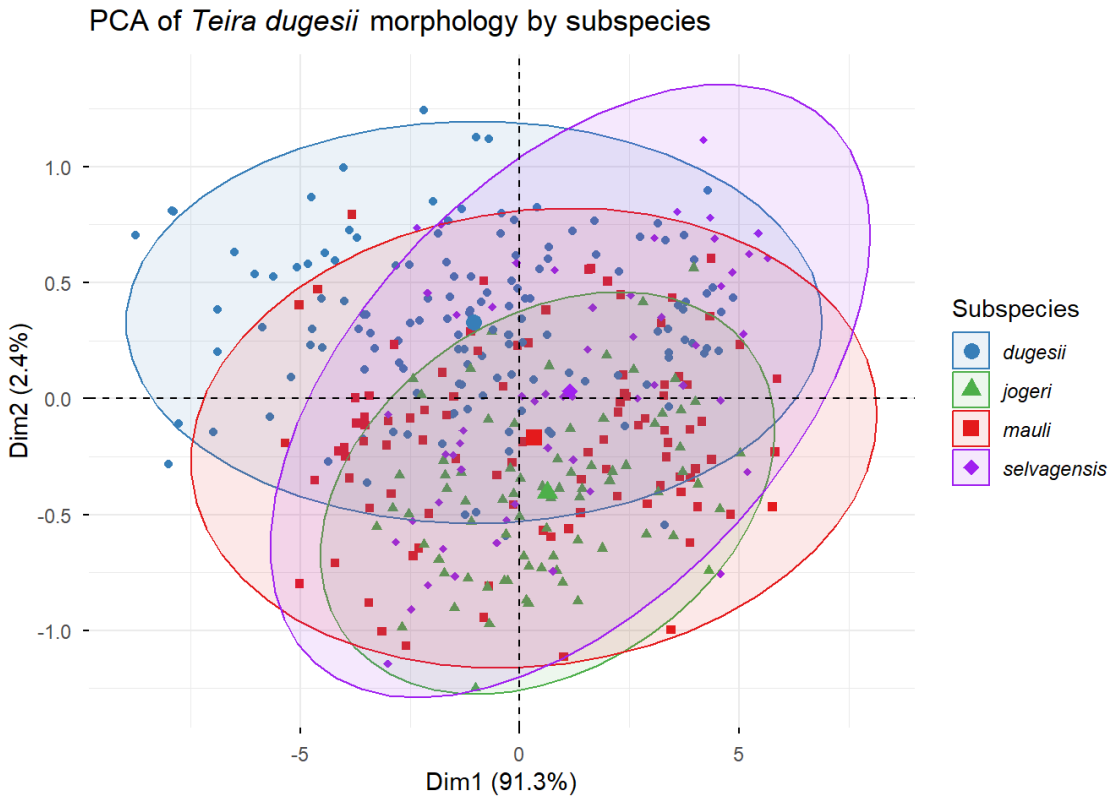
151 **Figure 5.** Boxplots for all morphological traits measured of *Teira dugesii* female

152 individuals.



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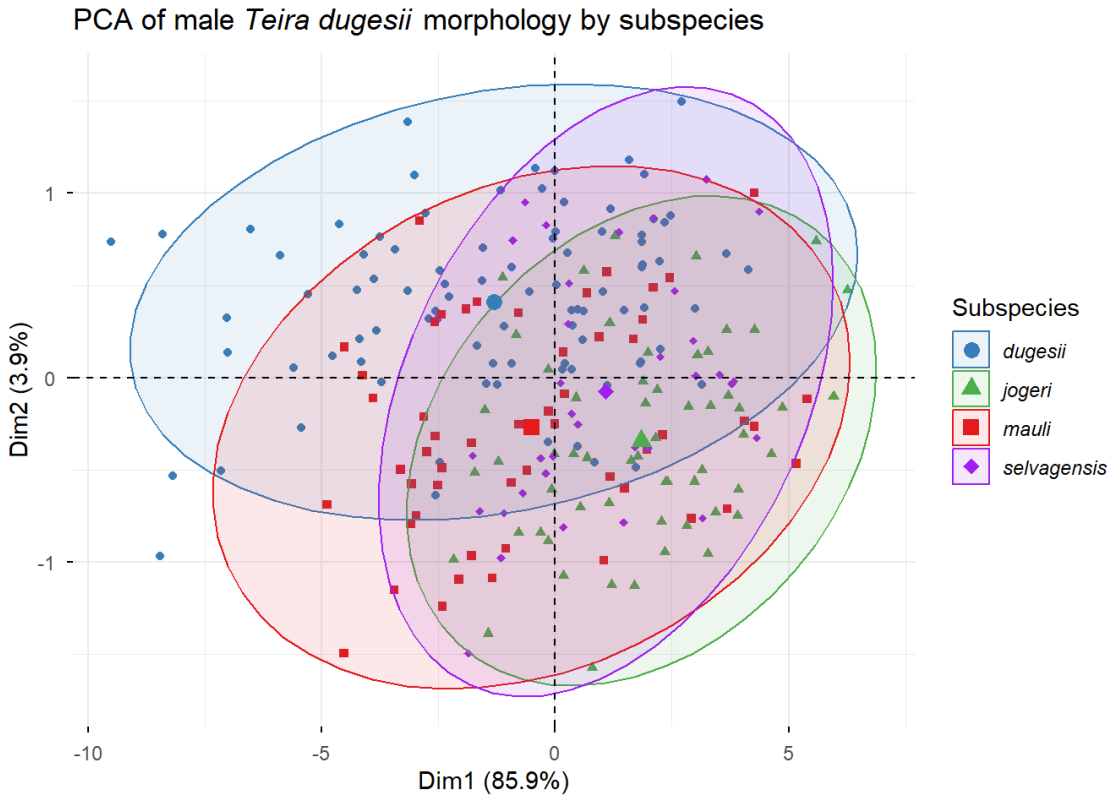
155 **Figure 6.** Principal Component Analysis (PCA) of all morphometric traits measured.



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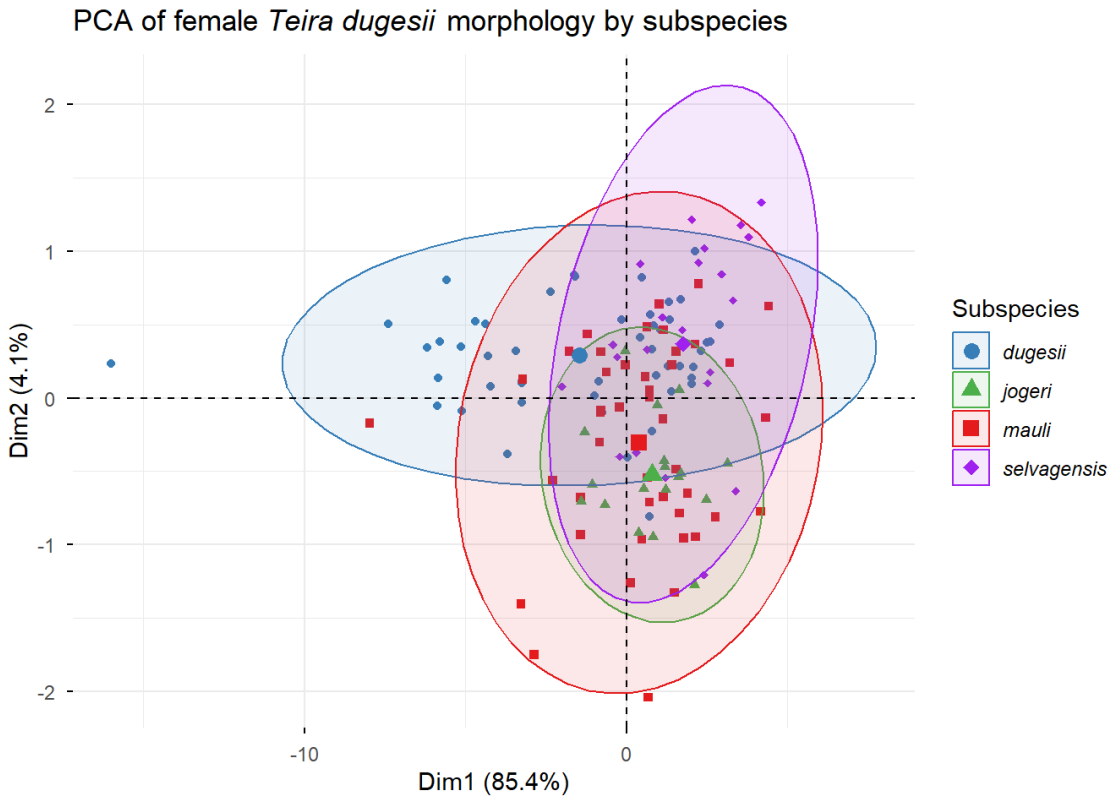
157 **Figure 7.** Principal Component Analysis (PCA) of male traits measured.



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160 **Figure 8.** Principal Component Analysis (PCA) of female traits measured.

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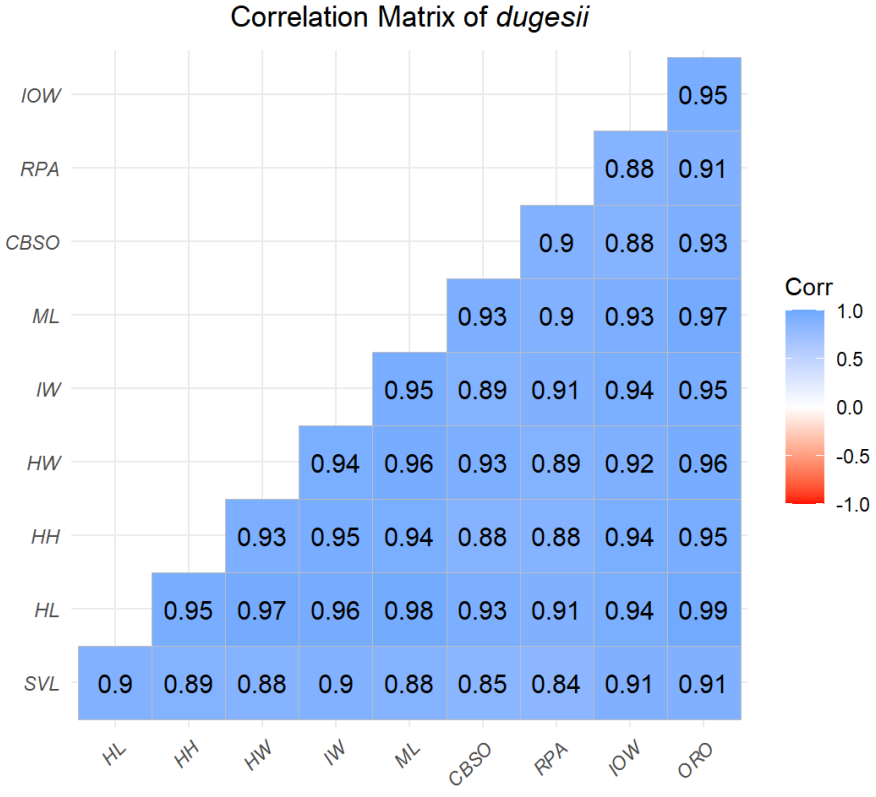

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Figure 9. Correlation Matrix of morphological traits in subspecies *Teira dugesii dugesii*.

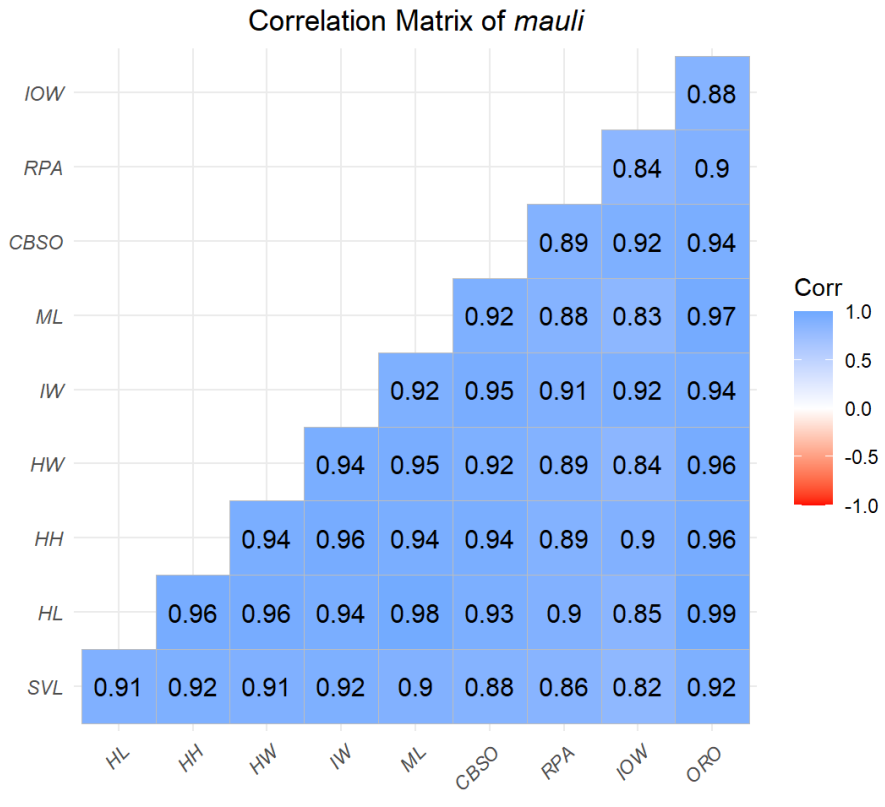

Figure 10. Correlation Matrix of morphological traits in subspecies *Teira dugesii mauli*.

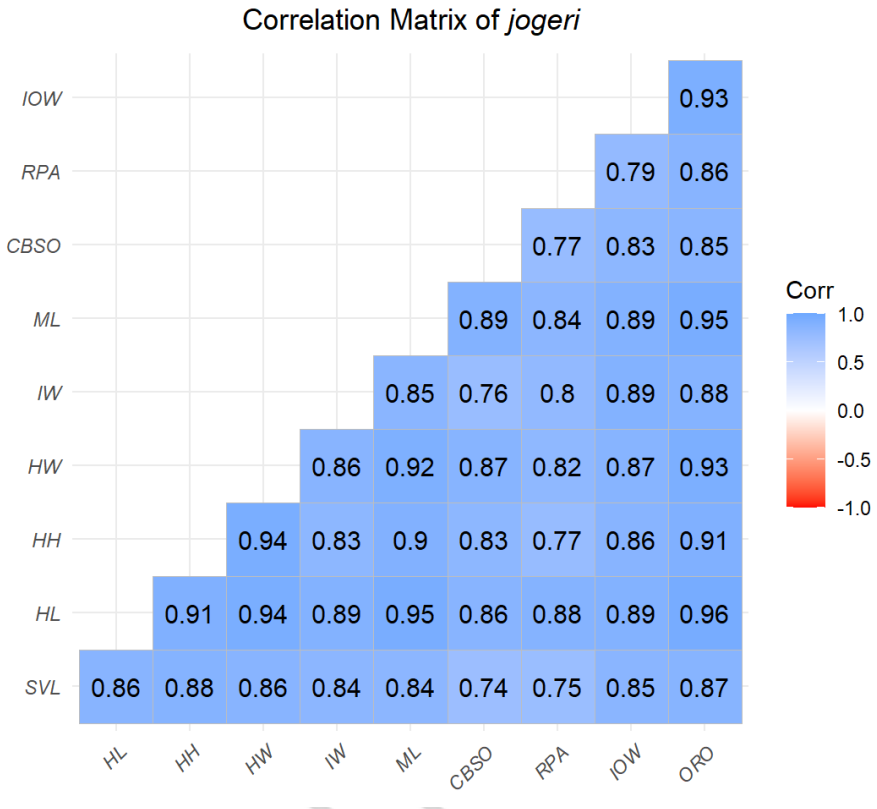

Figure 11. Correlation Matrix of morphological traits in subspecies *Teira dugesii jogeri*.

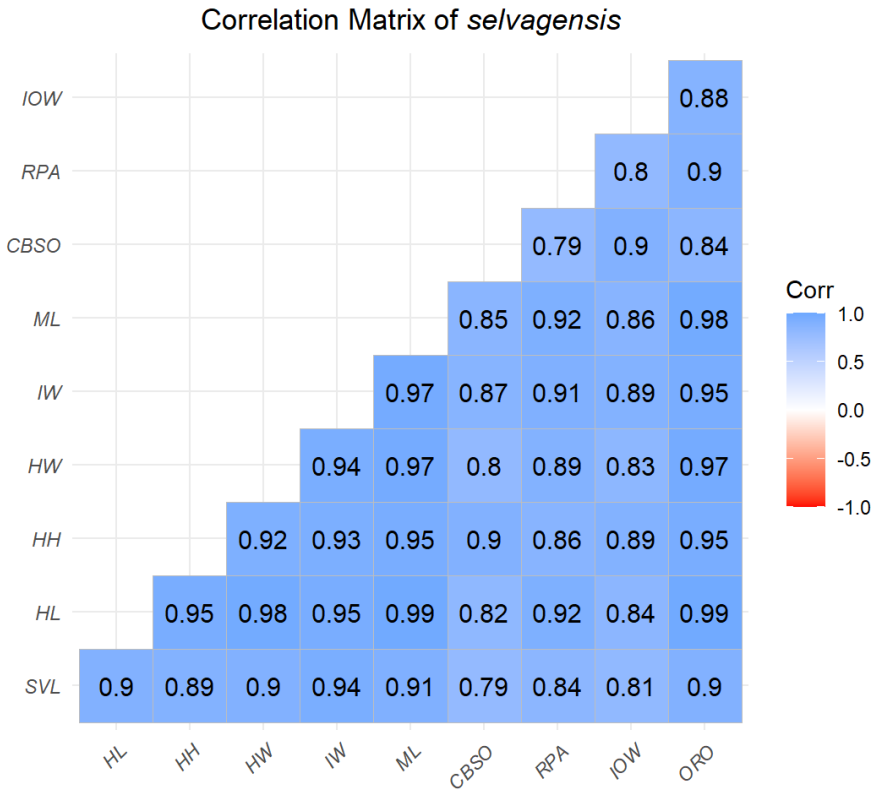

Figure 12. Correlation Matrix of morphological traits in subspecies *Teira dugesii selvagensis*.

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