

## A Miscellaneous Measurement of Stick Insects by Gabriel and Gilles Olive

As Shelomi said, there are scarce morphometrical data on stick insects (Shelomi & Zeuss, 2017). It seemed important for us to publish those data of our five species, *Eurycantha calcarata* Lucas 1869, *Haaniella echinata* (Redtenbacher 1906), *Medauroidea extradentata* (Brunner von Wattenwyl 1907), *Peruphasma schultei* Conle & Hennemann 2005, and *Sungaya inexpectata* Zompro 1996, respectively. Table 1 shows the results of all instars for *M. extradentata* females (except the first instar). In addition, eggs weighed 3.8 mg (n = 30) and the specimens at birth 3.0 mg (n = 5). The measurements of the males of the same species give a value for the imago at 6.88 cm with a poor number of specimen (n = 4) as they are occur seldom. Table 2 represents the length of our four other phasmids.

**Table 1** Measurements<sup>a</sup> of all instars for *M. extradentata* female (except the first instar).

	Average (- error) (cm)	Number of specimens	Min. (cm)	Max. (cm)
Birth (instar 1) <sup>b</sup>	1.18 ± 0.01	441	0.75	1.40
Instar 2	1.93	7	1.70	2.12
Instar 3	2.69	5	2.60	2.90
Instar 4	3.58	6	3.40	3.90
Instar 5	4.72	5	4.50	4.90
Instar 6	6.07	6	5.80	6.30
Instar 7	7.64	7	7.10	8.00
Imago (instar 8)	9.32	11	9.10	9.70

<sup>a</sup> specimens were measured from the tip of the abdomen to the base of antennae with a ruler of the Stanley brand ruler.

<sup>b</sup> female and male.

**Table 2** Length<sup>a</sup> of miscellaneous phasmids.

	Average - error (cm)	Number of specimens	Min. (cm)	Max. (cm)
<i>Eurycantha calcarata</i>	2.4 ± 0.1	23	2.0	3.0
<i>Haaniella echinata</i>	3.25 ± 0.09	20	3.0	3.8
<i>Peruphasma schultei</i>	1.30 ± 0.04	8	1.25	1.35
<i>Sungaya inexpectata</i>	1.8 ± 0.2	12	1.6	2.1

<sup>a</sup> specimens were measured from the tip of the abdomen to the base of antennas with the same ruler.

**Extract from:** Shelomi, Matan and Zeuss, Dirk (2017). Bergmann's and Allen's Rules in Native European and Mediterranean Phasmatodea. *Frontiers in Ecology and Evolution*, 5(25), 1-13.

## Wordsearch ANSWERS!

Here are the answers to the Wordsearch on page 13. How did you do? Puzzles seem popular with some members, so please produce your own phasmid-related puzzle (eg wordsearch, crossword, or quiz), and send it to me at [newsletter@phasmid-study-group.org](mailto:newsletter@phasmid-study-group.org).

B	O	R	N	E	O	W	V	G	K	W	M
P	T	G	O	O	X	B	R	U	N	E	I
B	S	J	E	W	M	R	Z	B	V	X	X
G	D	P	Z	T	N	G	Y	R	L	Y	
K	W	J	I	E	Y	R	R	A	D	V	C
P	G	I	L	W	M	C	A	Z	N	P	Q
S	M	L	E	B	L	C	Z	I	U	X	Z
P	C	A	B	U	C	Z	J	L	R	V	V
Q	D	B	A	R	O	L	E	V	U	V	W
F	Q	A	U	B	P	D	W	O	B	L	J
H	S	E	D	A	L	G	N	A	B	N	I
X	M	E	I	O	X	S	D	G	L	B	V