Supplementary Material to:

**Seasonal changes in the testicular activity of the Iranian Mountain
Viper, *Montivipera albicornuta* (Nilson & Andrén, 1985)**

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Table 1. Morphometric parameters of *Montivipera albicornuta* from Bostanabad and Tarom in different months (Mean±SD).

	Bostanabad			Tarom		
	Body Weight (g)	Body Length (cm)		Body Weight (g)	Body Length (cm)	
		SVL	TL		SVL	TL
April	225±42.43 (n=2)	73.25±6.71 (n=2)	5.75 ± 0.3 (n=2)	156.67±22.55 (n=3)	66.50 ± 5.22 (n=3)	5.5±0.44 (n=3)
May	220 (n=1)	72.5 (n=1)	6 (n=1)	172.50 ± 43.49 (n=5)	66.40±6.07 (n=5)	5.90±0.54 (n=5)
June	132.50 ± 25.63 (n=8)	65.87 ± 2.11 (n=8)	6.06± 0.49 (n=8)	187.50±60.10 (n=2)	69.50±2.12 (n=2)	6 (n=2)
July	162.50±32.16 (n=8)	71.75±5.01 (n=8)	5.93±0.62 (n=8)	100±14.14 (n=2)	66±3.53 (n=2)	6.25±0.35 (n=2)
August	175 (n=1)	73.5 (n=1)	6 (n=1)	140 (n=1)	62.5 (n=1)	5 (n=1)
September	210 (n=1)	70.5 (n=1)	5.5 (n=1)	160 (n=1)	65 (n=1)	5 (n=1)
October	260±36.06 (n=3)	77.16±5.10 (n=3)	5.83 ±0.28 (n=3)	165 (n=1)	71.5 (n=1)	6 (n=1)
November	230.63±52.54 (n=8)	74.75 ± 4.95 (n=8)	6 ± 0.53 (n=8)	180 (n=1)	75.5 (n=1)	5 (n=1)
December	210 ±45.83 (n=3)	74.66±3.32 (n=3)	6.16 ± 0.28 (n=3)	195.83±65.76 (n=6)	69.58± 7.43 (n=6)	6± 0.44 (n=6)
January	190 (n=1)	73.5 (n=1)	6 (n=1)	181.25 ± 54.37 (n=4)	68.75± 6.95 (n=4)	5.37±0.94 (n=4)
February	248.33 ± 32.81 (n=6)	76.41 ± 4.12 (n=6)	4.66± 1.08 (n=6)	195 (n=1)	70.5 (n=1)	6 (n=1)
March	220 ± 27.08 (n=4)	75.62 ± 6.90 (n=4)	5.75± 0.28 (n=4)	180 (n=1)	69.5 (n=1)	5 (n=1)

Table 2. Germ cells numbers of *Montivipera albicornuta* (Mean $\pm$ SD), N=Number of tubules that cells were counted.

Months	Germ cells numbers		
	Spermatogonia	Spermatocytes	Spermatids
Mid-April	92 $\pm$ 30.44 (n=5)	44 $\pm$ 12.59 (n=5)	149 $\pm$ 39.82 (n=5)
Late April	89 (n=1)	104 (n=1)	244 (n=1)
Mid-May	179 $\pm$ 70.57 (n=3)	31 $\pm$ 10.09 (n=3)	72 $\pm$ 18.05(n=3)
Late May	44 $\pm$ 9.37 (n=4)	188 $\pm$ 40.85 (n=4)	142 $\pm$ 26.38 (n=4)
Mid-June	52 $\pm$ 8.19 (n=3)	32 $\pm$ 8.09 (n=3)	259 $\pm$ 70.81 (n=3)
Late June	17 $\pm$ 3.84 (n=7)	35 $\pm$ 6.95 (n=7)	60 $\pm$ 9.98 (n=7)
Mid-July	27 $\pm$ 15.17 (n=3)	36 $\pm$ 20.24 (n=3)	86 $\pm$ 41.60 (n=3)
Late July	56 (n=1)	64 (n=1)	92 (n=1)
Mid-August	65 (N=1)	74 (n=1)	104 (n=1)
Late August	79 (n=1)	101 (n=1)	134 (n=1)
Mid-September	63 (n=1)	70 (n=1)	102 (n=1)
Late September	88 (n=1)	100 (n=1)	132 (n=1)
Mid-October	89 (n=1)	104 (n=1)	244 (n=1)
Late October	65 $\pm$ 10.12 (n=3)	186 $\pm$ 39.84 (n=3)	79 $\pm$ 10.93 (n=3)
Mid-November	158 $\pm$ 17.01 (n=3)	110 $\pm$ 8.88 (n=3)	101 $\pm$ 24.13 (n=3)
Late November	136 $\pm$ 50.88 (n=4)	164 $\pm$ 25.83 (n=4)	121 $\pm$ 27.24 (n=4)
Mid-December	165 $\pm$ 40.59 (n=4)	120 $\pm$ 34.93 (n=4)	277 $\pm$ 48.05 (n=4)
Late December	146 (n=1)	86 (n=1)	587 (n=1)
Mid-January	121 $\pm$ 37.37 (n=2)	254 $\pm$ 73.53 (n=2)	349 $\pm$ 72.83 (n=2)
Late January	85 $\pm$ 20.77 (n=3)	117 $\pm$ 66.06 (n=3)	179 $\pm$ 26.51 (n=3)
Mid-February	47 (n=1)	69 (n=1)	124 (n=1)
Late February	35 (n=1)	58 (n=1)	117 (n=1)
Mid-March	26 $\pm$ 3.53 (n=2)	62 $\pm$ 14.09 (n=2)	60 $\pm$ 19.19 (n=2)
Late March	78 $\pm$ 19.71 (n=3)	169 $\pm$ 28.51 (n=3)	119 $\pm$ 79.96 (n=3)
			0 (n=3)

Table 3. Microscopic testicular characters of *Montivipera albicornuta* (Mean $\pm$ SD). N=Number of tubules that cells were measured. Measurements in μ .

	Seminiferous tubule diameter	Tunica thickness
Mid-April	324 $\pm$ 25.10 (n=5)	10 $\pm$ 7.07 (n=2)
Late April	306 $\pm$ 33.93 (n=5)	5 (n=2)
Mid-May	226 $\pm$ 24.08 (n=5)	5 (n=2)
Late May	270 $\pm$ 30 (n=5)	10 (n=2)
Mid-June	213.33 $\pm$ 32.66 (n=6)	5 (n=2)
Late June	182 $\pm$ 28.64 (n=5)	6.25 $\pm$ 1.76 (n=2)
Mid-July	170 $\pm$ 20 (n=5)	10 (n=5)
Late July	165 $\pm$ 14 (n=5)	10 (n=5)
Mid-August	177 $\pm$ 20 (n=5)	8 (n=5)
Late August	180 $\pm$ 17 (n=5)	10 (n=5)
Mid-September	225 $\pm$ 32 (n=5)	9 (n=2)
Late September	256 $\pm$ 22 (n=5)	10 (n=2)
Late October	320 $\pm$ 21.21 (n=5)	6.25 $\pm$ 1.76 (n=2)
Mid- November	276 $\pm$ 19.49 (n=5)	18.7 $\pm$ 5.30 (n=2)
Late November	300 $\pm$ 46.37 (n=5)	3.75 $\pm$ 1.76 (n=2)
Mid- December	265 $\pm$ 57.27 (n=5)	8.75 $\pm$ 1.76 (n=3)
Late December	32.86 $\pm$ 305 (n=5)	4.33 $\pm$ 7.50 (n=3)
Mid- January	394 $\pm$ 25.10 (n=5)	10 (n=2)
Late January	399 $\pm$ 39.62 (n=5)	11.25 $\pm$ 1.76 (n=2)
Mid- February	398 $\pm$ 31 (n=5)	10 (n=5)
Late February	386 $\pm$ 20 (n=5)	10 (n=5)
Mid- March	390 $\pm$ 34.21 (n=5)	10 (n=2)
Late March	404 $\pm$ 54.13 (n=5)	3.75 $\pm$ 1.76 (n=2)

Table 4. Hemipenis length of *Montivipera albicornuta* in Bostanabad and Tarom (Mean $\pm$ SD, all in cm).

Locality	Bostanabad		Tarom	
Months	Right Hemipenis	Left Hemipenis	Right Hemipenis	Left Hemipenis
April	3 $\pm$ 0.70 (n=2)	2.75 $\pm$ 0.35 (n=8)	2.83 $\pm$ 0.28 (n=3)	2.83 $\pm$ 0.57 (n=3)
May	2.95 (n=1)	2.70 (n=1)	2.90 $\pm$ 0.22 (n=5)	2.70 $\pm$ 0.27 (n=5)
June	2.26 $\pm$ 0.35 (n=8)	2.50 $\pm$ 0.46 (n=8)	3 $\pm$ 0.02 (n=2)	3.25 $\pm$ 0.35 (n=2)
July	2.12 $\pm$ 0.58 (n=8)	2.31 $\pm$ 0.25 (n=8)	2.5 $\pm$ 0.05 (n=2)	2.5 $\pm$ 0.03 (n=2)
August	2.30 (n=1)	2.42 (n=1)	2.81 (n=1)	2.80 (n=1)
September	2.46 (n=1)	2.57 (n=1)	2.76 (n=1)	2.60 (n=1)
October	2.10 $\pm$ 0.23 (n=3)	2.50 $\pm$ 0.17 (n=3)	2.87 (n=1)	2.86 (n=1)
November	2.50 $\pm$ 0.46 (n=8)	2.31 $\pm$ 0.37 (n=8)	2.71 (n=1)	2.78 (n=1)
December	2.5 $\pm$ 0.12 (n=3)	2.33 $\pm$ 0.28 (n=3)	3 $\pm$ 1.30 (n=6)	2.25 $\pm$ 0.41 (n=6)
January	2.05 (n=1)	2 (n=1)	2.25 $\pm$ 0.28 (n=4)	2.12 $\pm$ 0.25 (n=4)
February	2.75 $\pm$ 0.52 (n=6)	2.75 $\pm$ 0.41 (n=6)	2.43 (n=1)	2.21 (n=1)
March	2.75 $\pm$ 0.28 (n=4)	2.62 $\pm$ 0.25 (n=4)	2.42 (n=1)	2.31 (n=1)