Table 1. Selected measurements, proportions and scale characters of male and female *Anolis cristatellus*. Range is followed by mean value and one standard deviation in parentheses.

Character	males	females	p-value
max. SVL [mm]	69	58	–
tail length / SVL	1.288–1.891 (1.683 ± 0.158)	1.466–1.773 (1.560 ± 0.120)	0.0926 (ns)
tail diameter vertical / horizontal	1.095–2.286 (1.589 ± 0.247)	1.0–2.091 (1.409 ± 0.247)	0.0052 (**)
HL/HW	1.417–1.627 (1.511 ± 0.044)	1.09–1.775 (1.576 ± 0.100)	<0.0001 (***)
HL/SVL	0.175–0.224 (0.192 ± 0.001)	0.165–0.214 (0.183 ± 0.011)	<0.0001 (***)
axilla–groin distance / SVL	0.331–0.484 (0.402 ± 0.032)	0.363–0.531 (0.421 ± 0.035)	0.0064 (**)
snout length / SVL	0.116–0.165 (0.134 ± 0.009)	0.115–0.158 (0.134 ± 0.009)	0.9427 (ns)
snout length / HL	0.425–0.506 (0.462 ± 0.019)	0.397–0.711 (0.468 ± 0.042)	0.4145 (ns)
shank length / SVL	0.248–0.313 (0.276 ± 0.014)	0.222–0.319 (0.260 ± 0.016)	<0.0001 (***)
shank length / HL	0.878–1.045 (0.952 ± 0.039)	0.808–1.303 (0.907 ± 0.072)	0.0002 (***)
subdigital lamellae of 4th toe	29–39 (32.560 ± 2.140)	27–36 (29.956 ± 2.088)	<0.0001 (***)
number of scales between IP and SS	1–4 (2.180 ± 0.691)	1–4 (2.511 ± 0.804)	0.0320 (*)
number of SPL to level below centre of eye	5–8 (6.640 ± 0.749)	5–8 (6.756 ± 0.609)	0.4148 (ns)
number of SBL to level below centre of eye	5–8 (6.460 ± 0.646)	6–8 (6.511 ± 0.589)	0.6888 (ns)
total number of loreals	21–51 (34.040 ± 7.714)	18–57 (30.844 ± 6.755)	0.0352 (*)
number of horizontal loreal scale rows	5–8 (5.980 ± 0.820)	4–7 (5.556 ± 0.693)	0.0080 (**)
number of postrostrals	2–5 (3.511 ± 0.748)	2–5 (3.349 ± 0.686)	0.2893 (ns)
number of postmentals	6–10 (7.060 ± 0.978)	4–9 (6.682 ± 0.959)	0.0621 (ns)
number of scales between nasals	3–6 (4.367 ± 0.636)	4–6 (4.605 ± 0.791)	0.1144 (ns)
number of scales between 2nd canthals	4–8 (5.480 ± 0.863)	3–8 (5.409 ± 0.897)	0.6973 (ns)
number of scales between posterior canthals	5–11 (7.840 ± 1.131)	6–12 (7.682 ± 1.052)	0.4863 (ns)
number of medial dorsal scales in one head length	42–72 (58.120 ± 7.233)	42–84 (63.957 ± 8.094)	0.0003 (***)
number of medial ventral scales in one head length	32–60 (46.820 ± 6.336)	30–54 (39.277 ± 4.871)	<0.0001 (***)
number of medial dorsal scales between levels of axilla and groin	64–119 (87.633 ± 13.435)	67–120 (90.711 ± 12.650)	0.2568 (ns)
number of medial ventral scales between levels of axilla and groin	40–76 (57.02 ± 7.23)	40–60 (50.96 ± 4.50)	<0.0001 (***)

trals at midbody larger and smooth; 30–60 ventral scales in one head length; 27–39 lamellae under phalanges ii–iv of 4th toe.

We found highly significant morphological differences between males and females in relative head width, relative trunk length, and in the relative size of ventral scales. Males have relatively broader heads than females as indicated by ratios of head length to head width as well as head width to SVL (Tab. 1). Males have a relatively shorter axilla–groin distance, and in consequence a relatively larger head than females, but more ventral scales between levels of axilla and groin (Tab. 1). Also the average adult size of males is greater than in females. The largest male specimen measured 69 mm in SVL, whereas the largest female reached a SVL of 58 mm. Counting dorsal scales turned out to be another distinctive means for separating males from females, since female specimens had a significantly higher number of medial dorsal scales in one head length than males (Tab. 1).

Counting the 4th toe lamellae on a hind limb showed another highly significant difference between the genders (Tab. 1). The number of lamellae is higher in males, with a maximum of 39 lamellae, than in females, with a maximum of 36 lamellae.

The shank length, both in relation to SVL and HL is shown to be significantly larger in male specimens (Tab. 1).

A little less significant, with a p-value of 0.0052 (**), is the ratio of vertical to horizontal tail diameter (Tab. 1), which indicates that males have slightly more laterally compressed tails than females.

We noticed ontogenetic and sexual variation in tail morphology. While in juveniles the tails are only slightly compressed laterally (Fig. 1a) and not very different from one another, that changes with age. With maturity comes a stronger lateral compression. Adult males develop a more or less distinct dorsal crest on their tails which range from hardly noticeable (Fig. 1b) to about twice the diameter of the measured tail (Fig. 1c). In females no tail crest was ever apparent (Fig. 1d). Due to the irregular occurrence of tail crests, we did not include them in the measurements.

The present data lead to the conclusion that differences between sexes become evident when comparing HW, HL, SVL, shank length, axilla–groin distance, and 4th toe lamellae count.

Similar results were obtained by Butler et al. (2007). By using analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA), they found that sexual dimorphism was significant regarding SVL, mass, hind and fore limb in some, and 4th toe lamellae count in almost all ecomorph (habitat specialist) classes.

In a slightly different context, Knox et al. (2001) found that among other measurements, SVL, hind and fore limb length, and 4th toe lamellae count were highly significant in establishing which kind of ecomorph class an anole belongs to.

In addition, the somewhat paradox observation that males have smaller relative body sizes than females was also made by Butler et al. (2007) and Butler (2007).

The results we obtained largely support the data published by Schwartz & Henderson (1991). Their largest male had a SVL of 75 mm, the largest female one of 73 mm

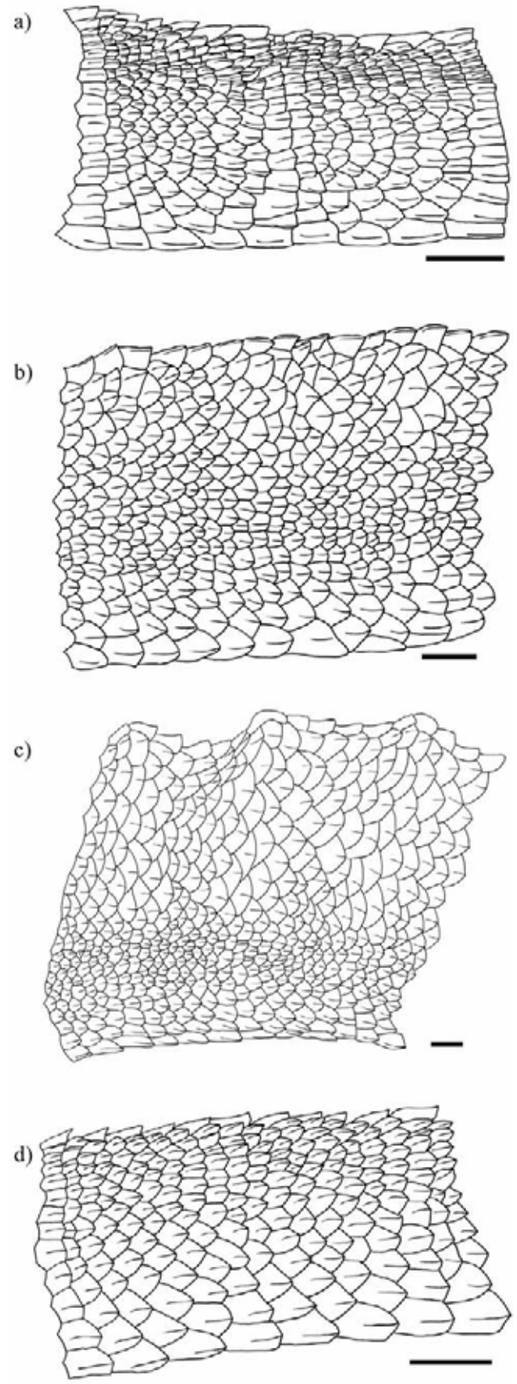

Figure 1. Lateral view of tail in *Anolis cristatellus* (at the point reached by the heel of the extended hind leg) in a) juvenile (SMF 10750); b) adult male (SMF 10609); c) adult male (SMF 10720); d) adult female (SMF 10521). Scale bars equal 1.0 mm