In the Yemen chameleons, the sexes differ in many features from each other. They show the s.c. Primary sexual dimorphism, which is expressed through the presence of sexual glands (testes with ductus deferens in males and ovaries with oviducts in females) and copulatory organs (hemipenes in males, hemiclitoris in females).

The problem for sexing animals is, that some of these organs (first group) are situated in the body cavity and some (the second group) in special pockets at the base if the tail, none of them are invisible from outside. There is a technique how to evert the hemipenis, but in young animals and in animals which are dehydrated, old or out of breeding season, it does not work reliably, plus, it might be painful for the animal and is definitely rather stressful, especially if done by an inexperienced owner, therefore not recommended.

Fortunately, there are several Secondary sexual characteristics, which allow us to define the sex rather reliably, especially in adult animals:

SIZE

The males are much bigger than the females, they can reach up to 30in / 19in resp., usually stay much smaller

BODY PROPORTIONS

The females are built more slender with smaller heads

TAIL BASE

Due to the presence of male copulatory organs, hemipenes, the tail base

behind cloacal is thicker/swollen in males

TARSAL SPUR

Males have a prominent knob-like protuberance on the heels, while female lack them. This characteristic is is well visible from hatchlings already. Through inbreeding and improper incubation temperatures and regime, however, we can see more and more females with differently developed spurs as well as males with small or lacking spurs.

CASQUE

The casque in males is much higher than in females. Through mistakes in incubation and after sterilization, some females can grow very high casques and resemble a fully developed casque of males.

DORSAL CREST

The conical scales on the dorsal crest are relatively much bigger in males

GULAR CREST

The conical scales on the gular crest are relatively much bigger in males, plus they are usually orange in males and white in females

COLORATION

The general pattern is in both sexes same, however due the ability to change the color, some skin areas melt in color with each other. The diagnostic features are: orange spots on the flanks possess only females while bright yellow transversal bands on the flanks are confined to males only.

For reliable sex determination, all aspects need to be taken in consideration. In doubt, ask experienced colleagues in for assistance.

Other species of chameleons possess same primary but partly or fully different secondary sexual characteristics...

TABLES

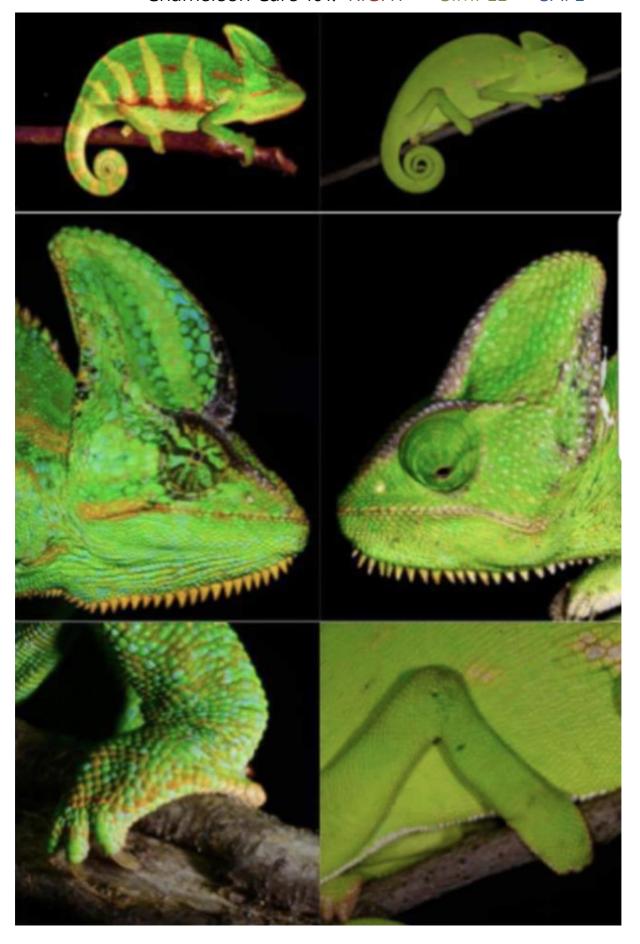
The left column relates always to male, the right to females They show the differences (top down) in:

Table 1: General habitus Head form Casques relative size Tarsal spurs

Table 2: Gular crest Tail base Dorsal crest



Chameleon Care 101: RIGHT - SIMPLE - SAFE



Chameleon Care 101: RIGHT - SIMPLE - SAFE

