



## **CHAMELEONS**

### **Diet and Care Recommendations**

#### **GENERAL INFORMATION**

There are 3 chameleon species commonly used in the pet trade. Chameleons are arboreal, meaning they spend almost all of their time in trees. Their enclosures should be well-ventilated and large enough to allow enough space to climb, move around, and hide.

**Veiled Chameleon** (*Chamaeleo calyptratus*): Found in the mountainous regions of Yemen and Saudi Arabia. This species is distinguishable by the high casque on its head. The skin is usually green to brown. Adult males tend to grow larger at about 20 inches, while females remain about 12 inches long.

**Temperature Range: 68°- 87°F**

**Humidity: 85-100%**



**Panther Chameleon** (*Furcifer pardalis*): Found in the tropical forests of Madagascar. The skin is vibrant blue to red, depending on subspecies. Adult males can reach 20 inches in length and females remain smaller at approximately 10 inches.

**Temperature Range: 70°- 90°F**

**Humidity: 50-75%**

**Jackson's Chameleon** (*Chamaeleo jacksonii*): Found at high altitude in Kenya, Uganda, and Northern Tanzania. Males have three horns. The skin color ranges from brown to green to blush to yellow depending on the subspecies. Both male and female Jackson's chameleons reach about 12 inches in length.

**Temperature Range: 60°- 80°F**

**Humidity: 50-75%**

**Diet:** Chameleons are insectivores and should eat a wide variety of appropriate prey items: Gut-loaded crickets\*, dubia roaches, silkworms, black soldier fly larvae ("Phoenix worms"), and hornworms. NEVER offer mealworms, waxworms, butterworms, or superworms\*\*.

\* Crickets should be gut-loaded (fed) with T-Rex Calcium+ or ILF formula. This is the only gut-loading formula that has been proven in studies to supply adequate calcium to reptiles. Never use calcium dust; this cannot be effectively broken down and absorbed by the body. It can also cause bladder stones in some reptiles.

\*\* Mealworms, waxworms, butterworms, and superworms do not provide the nutrition that reptiles need. They are reptile "junk food". They are very high in fat and their calcium/phosphorus ratio is steeply inverted. This causes calcium deficiency, as phosphorus inactivates calcium. High phosphorus levels can also cause kidney damage.

**High-quality feeder insects can be ordered online and shipped directly to your home. We recommend:**

[OregonSilkworms.com](http://OregonSilkworms.com)

[JoshSfrogs.com](http://JoshSfrogs.com)

[RainbowMealworms.net](http://RainbowMealworms.net)

[Amazon.com](http://Amazon.com)

## ENVIRONMENT

Chameleons are very sensitive to air quality and will suffer in an environment that is not well-ventilated. It is recommended to keep chameleons in screened enclosures to provide adequate air flow. Their habitat should include natural branches of varying thickness and fake or live “safe” plants.

**UVB Lighting:** Chameleons require a specific wavelength of light called UVB, which simulates natural sunlight in captivity. We recommend using a full-spectrum bulb, the **Reptisun 5.0 or 10.0 manufactured by ZooMed**. Leave UVB bulbs on for 12-14 hours a day and make sure the bulb is not filtered through glass or plastic. Ensure the lamp is placed in an area that is secure and will not cause burns. These bulbs must be replaced every 6 months because the UVB emission weakens over time.

**PLEASE NOTE: Chameleons are unable to properly absorb calcium without UVB. A lack of UVB lighting will cause severe health problems.**

**Heat:** Use ceramic heat emitter bulbs (they emit heat but no light) and keep on 24/7 to provide adequate temperatures in the enclosure. The temperature gradient varies according to species, but all should have a hot and cool end in their enclosure. Keep a thermometer where your chameleon basks in the hot end of the enclosure and another on the cool end.

**Substrate:** Use paper-based bedding, such as Carefresh or Yesterday's News. Coconut fiber and old newspaper are also acceptable. Avoid all types of sand, including Calci Sand. Sand can be ingested, causing blockage in the intestines.

**Moisture:** Chameleons live in humid environments, and the level of humidity varies depending on species. Misting is required frequently. A drip system can also be used. Keep a hygrometer or humidistat in the enclosure to measure humidity.

## MEDICAL CARE

Bring your chameleon to a veterinarian once a year for an annual health check. Every chameleon should have a fecal test to check for internal parasites, which are very common.

### Common Illnesses:

- a) **Parasitic Infections:** Symptoms include: loss of appetite, inability to gain weight, and slow growth. Diagnosis is by performing a fecal test to check for parasites. Treatment includes administering an oral anti-parasitic medication and repeating fecal tests.
- b) **Bacterial Infection:** Chameleons are prone to bacterial infections. Symptoms include: anorexia, lethargy, swellings around the mouth or jaw, or a weakened grip.
- c) **Nutritional Secondary Hyperparathyroidism (Metabolic Bone Disease):** This condition is caused by lack of UVB lighting and improper nutrition. Symptoms include: limb and jaw deformities, muscle twitching, lethargy, lack of appetite, and difficulty eating. Chameleons exhibiting these symptoms should be seen by a veterinarian as soon as possible.

**Bring your chameleon to a veterinarian right away if it is showing any of the following symptoms:**

**Diarrhea or inability to pass stool**

**Loss of appetite**

**Difficulty breathing**

**Inability to grip perches**

**Extreme lethargy**