# Sudan Plated Lizard (Broadleysaurus major)

**Difficulty: Intermediate** 

Sudan plated lizards are 11-24" long lizards with stout bodies, short legs, and thick, matte, keeled scales which traverse the body in rows. Color varies by locality, but the Sudan plated lizard is typically dark brown with a creamy belly and pale yellow stripes that run the lizard's length. The Sudan plated lizard is also known as Broadley's Rough-Scaled Plated Lizard.

These lizards are native to eastern and central Africa. They prefer rocky, semi-open areas within coastal woodland, thicket, moist savannah, and dry savannah habitats, and are most frequently found in and around hills and termite mounds, seeming to have a particular liking for rock piles and crevices.

Sudan plated lizards are known to live up to 23 years in captivity with good care, although they can live longer.

These lizards are generally skittish and require significant effort to tame, so although they are not particularly difficult to care for, they are not a good fit for someone looking for a lizard that tolerates frequent human interaction.

# **Shopping List**

- 48"x24"x24" reptile enclosure (preferably front-opening with a mesh top)
- Dual dome heat lamp with ceramic sockets
- 100w PAR38 halogen flood bulb, x2
- Large piece of flagstone or slate tile, for basking
- Plug-in lamp dimmer, x2
- Digital thermometer/hygrometer device with probes
- Infrared thermometer ("temperature gun")
- 22" T5 HO desert UVB bulb (Arcadia or Zoo Med brand)
- 24" T5 HO light fixture with reflector
- 24" 6500K LED or fluorescent plant light
- Surge protector with digital timer
- 4-6" of naturalistic substrate
- Large reptile hideout/cave
- Environmental enrichment items (ledges, logs, branches, plants, rocks, etc.)
- Food and water dishes
- Calcium powder supplement (low or no D3)
- Multivitamin powder supplement
- Soft-tipped feeding tweezers

### Housing

Sudan plated lizards like to climb, dig, and run around, so it's best to house them in no smaller than a 120 gallon (48"L x 24"W x 24"H) enclosure, or larger if possible. The enclosure should be front-opening for easy access, and should have excellent ventilation (such as a mesh top).

### Can multiple plated lizards be housed together?

Sudan plated lizards are fairly solitary animals, and keeping multiple of them in the same enclosure — especially without using an extra large enclosure — can lead to fighting and injuries. So it's best to keep only one plated lizard per enclosure.

### **Lighting & UVB**

Plated lizards are *diurnal*, which means that they are more active during the day. This also means that they are stimulated by the presence of bright white light in their environment, and they require high-quality UVB lighting for survival. All lamps should be kept on for 12 hours/day.

### **UVB Lighting**

UVB lighting can be tricky, because in order to get the right strength of UVB (UV Index, or UVI), distance and potential mesh obstruction must be considered. To provide appropriate UVB in a single 48" x 24" x 24" enclosure, you will need a 22" T5 HO Zoo Med Reptisun 10.0 or Arcadia D3+ Desert 12% bulb, placed on the warm side of the enclosure.

The basking area should be placed as follows:

- UVB mounted over mesh: basking area 7-11" below UVB lamp
- UVB mounted under mesh: basking area 12-18" below UVB lamp

(These recommendations are approximations based on available data. For best results, use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 4.0-6.0 in the basking area.)

#### **Full-Spectrum Lighting**

Bright light with a color temperature of around 6500K is suggested by experts to be important to diurnal reptiles' mental health. Sudan plated lizards with additional "daylight" lighting in their enclosure seem to be more alert and active than those without, as well as demonstrating better appetite and more natural behaviors.

Full-spectrum lighting is not the same as reptile UVB lighting, so you will need two separate lamps. The 22" Arcadia Jungle Dawn LED Bar and Bio Dude Glow & Grow are both excellent lamps for this purpose.

### Heating

Humans are *warm-blooded*, which means that our body temperature is automatically regulated. Plated lizards, however, are *cold-blooded*, which means that they have to move between areas of different temperatures in order to regulate their body temperature. Plated lizards warm up by basking under the sun in the wild. In captivity, they do best with a halogen heat lamp as a heat source.

• Basking surface temperature: 105-115°F (40-46°C)

Cool zone temperature: 75-80°F (23-26°C)
Nighttime temperature: 60-72°F (15-22°C)

Generally speaking, <u>100w PAR38 halogen flood bulbs</u> should be plenty to achieve those basking temperatures in a 24" tall enclosure. However, if you notice that they're getting too hot, dial it down with a plug-in lamp dimmer. If your basking area is too cool, you need higher wattage bulbs.

To measure the basking surface temperature, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The <u>Etekcity 774</u> is a good infrared thermometer, and most reptile-brand <u>digital probe thermometers</u> function well.

# Humidity

Plated lizards need a range of 20-80% humidity in their enclosure. This means providing both dry areas of 20-40% humidity and moist areas of 50-80% humidity. The enclosure will naturally dry out during the day and especially in the basking area. To create higher humidity areas, it is helpful to spray down the enclosure with water in the evening once a week, and especially to provide a cool, humid hiding place where the substrate is kept damp.

Make sure your lizard has access to places with higher humidity by monitoring them with a <u>digital probe</u> <u>hygrometer</u>.

#### **Substrate**

Plated lizards are healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat. In eastern and central Africa, that habitat includes very sandy soil. So the substrate in your plated lizard's enclosure should be fine sand or sandy soil, packed at least 4" deep — preferably deeper, if possible. Plated lizards LOVE to dig!

<u>Jurassic Natural Australian Desert Dragon Habitat</u>, <u>Jurassic Reptile Substrate</u>, <u>Zoo Med ReptiSand</u>, and <u>The Bio Dude Terra Sahara</u> are all suitable plated lizard substrate options. You can also make your own DIY desert mix of <u>50% play sand</u>, <u>30% organic topsoil</u>, and <u>20% Zoo Med Excavator Clay</u> (this mix is not suitable for bioactive).

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 3-4 months to maintain hygiene.

#### Décor

Decorations play an important role in your plated lizard's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nice! Here are some ideas:

- Cork logs
- Cork flats
- Sturdy branches

- Live or artificial plants
- Ledges
- 3D backgrounds

#### Food

Plated lizards are *omnivores*, which means that they need both animal- and plant-based foods to get the nutrition that their bodies need. How often and how much they need to eat depends on age:

- Hatchlings (<6" long) Insects daily, plants daily
- Juveniles (6-12" long) Insects 5 days/week, plants daily
- Young adults (12-18" long) Insects 3 days/week, plants 4 days/week
- Adults (>18" long)— Insects 2 days/week, plants 4 days/week, no food 1 day/week

It is perfectly fine to occasionally skip a feeding, and helps keep your lizard at a healthy weight.

The key to providing a healthy, balanced diet for your plated lizard is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet with better appetite.

<u>Feeder insects:</u> crickets, dubia roaches, red runner roaches, black soldier fly larvae, mealworms, darkling beetles, hornworms, silkworms, snails, grasshoppers

<u>Safe vegetables:</u> collard greens, cactus pads, spring mix, arugula, kale, pea shoots, alfalfa, bok choy, carrot greens, spinach, dandelion greens/flowers, hibiscus leaves/flowers

<u>Fruit</u> is high in sugar and should only be offered as an occasional treat. Options include berries, figs, apples, prickly pear, papaya, and mango.

### **Supplements**

To ensure that your plated lizard is getting all of the vitamins and minerals that they need, you will need a calcium powder and a multivitamin powder — or a good all-in-one.

There are many options, but you can't go wrong with <u>Arcadia Earthpro A</u> or <u>Repashy Calcium Plus LoD</u>, which are both solid all-in-one reptile supplements. For best results, use as directed by the label.

### Water

All living things on this planet need water, including the ones that live in the desert. Plated lizards are no exception, and should have free access to a shallow bowl of fresh, clean water daily.

Bathing or soaking your plated lizard is an unnecessary practice, and is not beneficial to the animal's health.