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Butterfly Agamas *[Leiolepis spp.]*

Beautiful Butterfly Lizards from Africa

Also known as the butterfly lizards, butterfly runners, or smooth sided agamas, the butterfly agamas are a relatively small to medium sized genus of agamid lizards found in southern to southeastern Asia, including Vietnam, Myanmar, Laos, Thailand, Cambodia, and Indonesia. Butterfly agamid can range in color from reddish, tan, to light brown or grayish brown dorsally with numerous lighter colored tan or cream colored dorsal spots, streaks, dashes, stripes, and/or blotches. During the breeding season, males especially will develop vibrantly colored bluish jaws, throats, and limbs, and vibrant yellow, orange, and black barred laterals and ventral surfaces, giving them their common names. An active, diurnal genus, butterfly agamas are primarily terrestrial, although they will climb and burrow as well when provided the opportunity. Although still seldom bred in captivity, butterfly agamas are popular reptile pet species in the pet trade, with perhaps the most common species appearing in the trade being the Common Butterfly Agama, *L. belliana*. Although many species typically reproduce sexually, some species and subspecies can also be parthenogenic, or reproduce asexually as well.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Iguania

Family: Agamidae

Genus: *Leiolepis*

Species: *Leiolepis spp.**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, butterfly agamas can attain longevity of at least 10 to 15 years or more.

Distribution and Habitat

The butterfly agamas are a genus of relatively small to mid-sized agamid lizards with a broad distribution over much of southern to southeastern Asia, depending on the species. Species in

this genus can occur from Peninsular Malaysia, Thailand, Myanmar, Laos, Cambodia, Indonesia, and Vietnam, to Hainan and some other portions of China. These species have also been introduced in Florida in the United States, and a few other areas elsewhere in the world as well. Within their native range, these species can occur in a variety of sandy, dry soiled habitats including coastal, open dunes and scrubland, to dry, open tropical to sub-tropical forests and woodlands, savannahs, semi-deserts, to residential and agricultural areas and plantations.

Origin/History

Leiolepis spp. Cuvier, 1829. Specific species would have other authors first describing them during other years.

Not much is known about the history of butterfly agamas in the pet trade, although most that are available are of wild-collected origin.

Experience Level Required

Novice/Beginner to Intermediate/Moderate.

Size

Butterfly agamas range from about 3.5 to 5.0 inches as hatchlings or juveniles in total snout-to-tail length, and roughly 7.0 to 15.74 inches as adults, snout-to-tail length. Maximum snout-to-vent length is up to 7.10 inches (SVL) depending on species.

Housing and Enclosure

Enclosure System: Primarily Terrestrial. Housing must be sealed and escape proof. Hatchling and juvenile butterfly dragons can be housed in a 15 gallon terrarium or enclosure. Adult butterfly dragons require a minimum of a 40 gallon long terrarium or enclosure. Hatchling and adult butterfly dragons can be maintained on a substrate of potting soil, play sand mixtures, or ground walnut shell substrates. Avoid using substrates made from reptile bark that result in environments that are too humid. Provide a small dish of clean water, and change and clean it every several days, or sooner if fouled. Soaking them at least once weekly in lukewarm water for 15 to 20 minutes can also help raise their hydration. Provide ample basking and hiding opportunities by providing artificial foliage, driftwood, rocks, or logs.

Temperature, Lighting, and Humidity

For basking, create a thermal gradient (or a warm side) in the cage/enclosure with an appropriate sized under tank heating pad, ceramic, or radiant heat emitter. Thermal gradient temperatures for butterfly agamas can range from 75 to 88 degrees F on the cool side and around 95 to 100 degrees F on the warm, basking side. Basking temperatures of up to 130 degrees F can also be tolerated. Nighttime temperatures can be allowed to drop from 65 to 75 degrees F. Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of butterfly agamas in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Butterfly agamas should ideally be maintained at relatively low humidity levels at, or around 40 to 50%.

Feeding, Diet, and Nutrition

Omnivorous; As with most agamids, butterfly agamids are omnivorous, meaning they will eat

both plant and animal matter. They will eat a variety of insects and other invertebrates, as well as fruit and vegetable matter. In captivity, feed butterfly agamas mostly a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. They can also be given a mixed assortment of chopped up vegetables including carrots, peas, collard, mustard, and dandelion greens, and beans. Several commercially available omnivore mix diets are also available. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Butterfly agamas also require additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Although butterfly agamas are generally not aggressive or defensive towards handling they tend to be a more nervous to skittish genus of agamids in general. When they are handled, it should be done so gently and deliberately, but do not drop or injure the animal. However, with regular handling and interaction, they can become somewhat tame and make for good pets.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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