

Gekkota Lizards: A General Introduction

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There are two common names for certain reptilian fauna under the Order Squamata: snakes and lizards. People can easily distinguish between a snake and a lizard because of their physical structure but sometimes, in certain cases, the observer may confuse one for the other. An example is the burrowing lizard with degenerate limbs, which may be regarded as a snake (Alcala, 1976). Lizards constitute the largest living group of reptiles, with more than 4,300 species in a wide variety of shapes and sizes (Encarta Encyclopedia, 2000). Lizards can be interesting in many different ways. However, the group of lizards called geckos maybe the most amazing of all. Hence, discussions in this paper will deal only with species of lizards

under the Family Gekkonidae, (geckoes) Suborder Gekkota, Order Squamata in the Class Reptilia. The gekkonids form a large, cosmopolitan family of about 75 genera and hundreds of species.

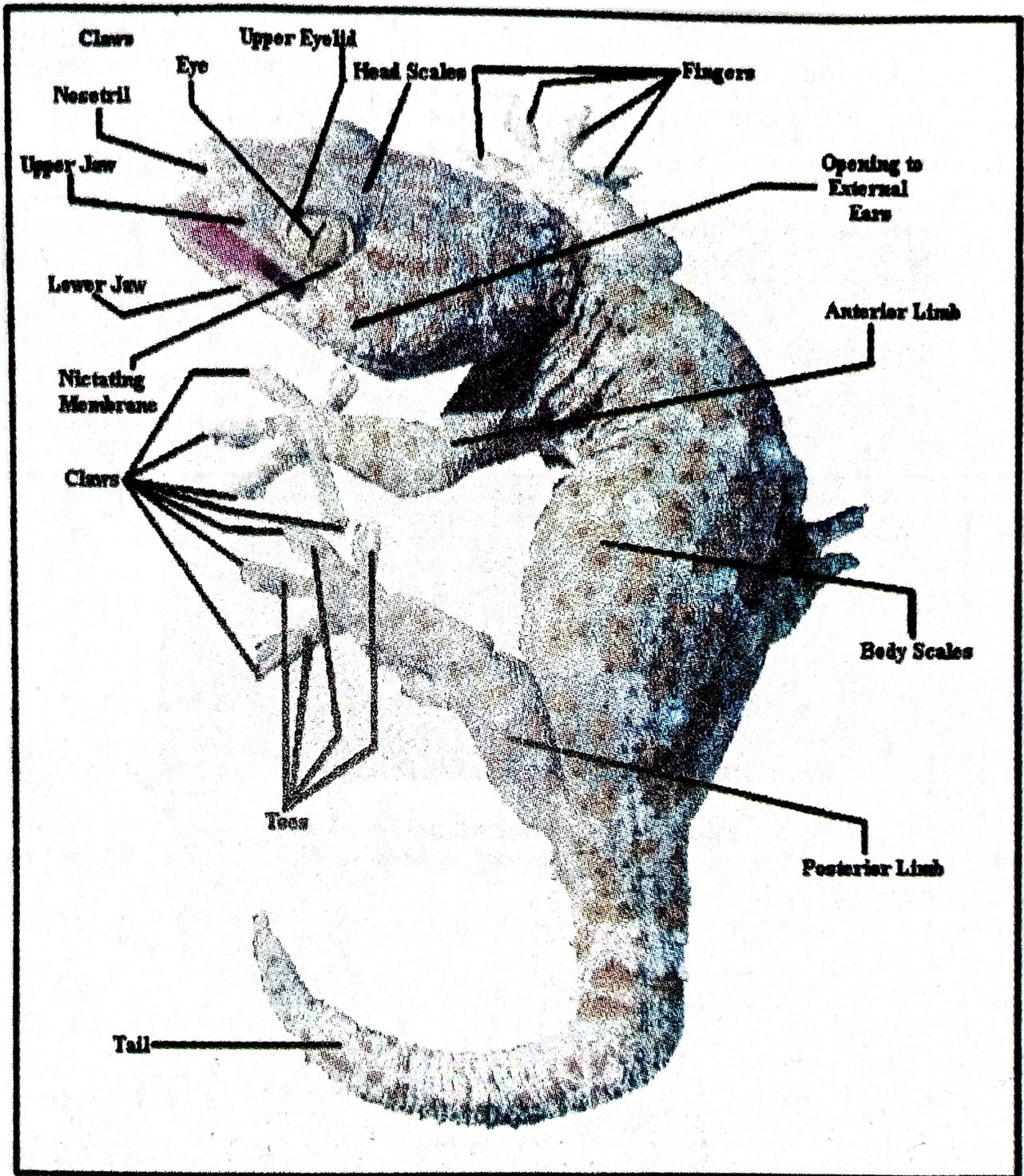
All geckos are alike in a lot of ways, but they are different from one another in many ways, too. For example, day geckos are out during daylight. Their bright colors may help them keep track of others of their own kind. Leaf-tailed geckos and most others are usually active at night. During the day, they try to stay out of sight. Their colors often match the rocks, sand, leaves or tree trunks they climb on.

The researcher is interested in the study of geckos because most of them are harmless and are beneficial to mankind. Many geckos have attached themselves to human dwellings. This is really a type of mutualism since the insects that are attracted to houses provide food for the geckos. By feeding on the insects, they help keep these pests populations under control. Some species of gecko are sources of food. Some are killed for their skins, although it is now illegal to do so in many countries. A number of species are threatened by human encroachment on their habitat.

General Description

A gecko has a head, a body, two anterior limbs, and two posterior limbs. It lacks a neck, but unlike a frog, it sports a tail (Fig. 1). The overall shape of a gecko is elongated. In the head region, the nostrils, the eyes, and the mouth are easily identified. The eye has movable eyelids, the lower one having a transparent dorsal portion already referred to as the nictitating membrane. In the mouth, the teeth are found in the upper and lower jaws. The tongue is well developed but differs from that of the frog in not being attached to the tip of the lower jaw. In the gecko, the tongue is used to detect the odor of objects, e.g., food (Alcala, 1976).

In addition, geckos could whip out their long tongue and wipe their eyes to clean them (Fig. 2). Geckos also use their tongue when eating. They do not catch prey with it as frogs often do. Instead, they



(Photo by A.A. Alicante)

Fig. 1 The external parts of a Gekkota Lizard

use the back of their tongue to help swallow food. After a really messy meal, a gecko may also use its tongue to lick its lips clean—just as a cat or even a human being does.

On the head of a gecko are scales, the number and arrangement of which are generally constant in a species as to be useful in differentiating one species from another. In the posterior part of the head, on the left and the right sides, are the openings for the external ears.



Fig. 2 The long tongue of Gecko wiping its eyes
(Photo from Gerry Bishop, "Great Gecko."
National Wildlife Federation
Washington, D.C.: 1985)

The body is covered with scales. The number of scale rows is also used to separate geckos into species. On the ventral side of the body below the tail is the cloacal opening. The tail is the posterior continuation of the axial skeleton of the body. In many geckos, it of easily broken off due to the peculiar nature of the skeleton in this part. A new tail is regenerated to replace the broken end after some time.

The anterior limbs and the posterior limbs project from the body. They are each divided into three regions as in a frog. The fingers and toes number five and end in claws (Fig. 1).

Some geckos are extremely colorful, such as the Tokay Gecko, *Gekko gekko*. Most are stoutly built little lizards, nocturnal and arboreal. They have catlike eyes, the pupils contracting to slits in daylight and opening wide at night. The vertebrae are precocious or amphicoelos. The digits frequently have both claws and friction pads for climbing. Males usually have pre-anal and demoral pores, as well as post-anal sacs and bones.

House geckos have a granular scaly skin that appears, at times, to be transparent. It is mainly yellowish brown to beige with darker blotches, some have stripes running along the upper flanks.

Of all the world's lizards, geckos are the only ones with a voice. Geckos get their name because of their chirping sound. Some geckos are named after the sounds they make, for example, the tokay and the cheechak geckos. Another makes a call that sounds like "geck-oh." It has been variously transcribed as "checo," "tocktoo," "toki," "tok," or "chick chick." From that sound people gave the name for the whole group of geckos. The name gekko probably arose as an attempt to imitate the call of some species. Scientists are not sure why geckos make noise. Maybe it is to tell other geckos to stay out of their territory. Maybe it is attract a mate. Or maybe it is just to say "I'm me. Who are you?"

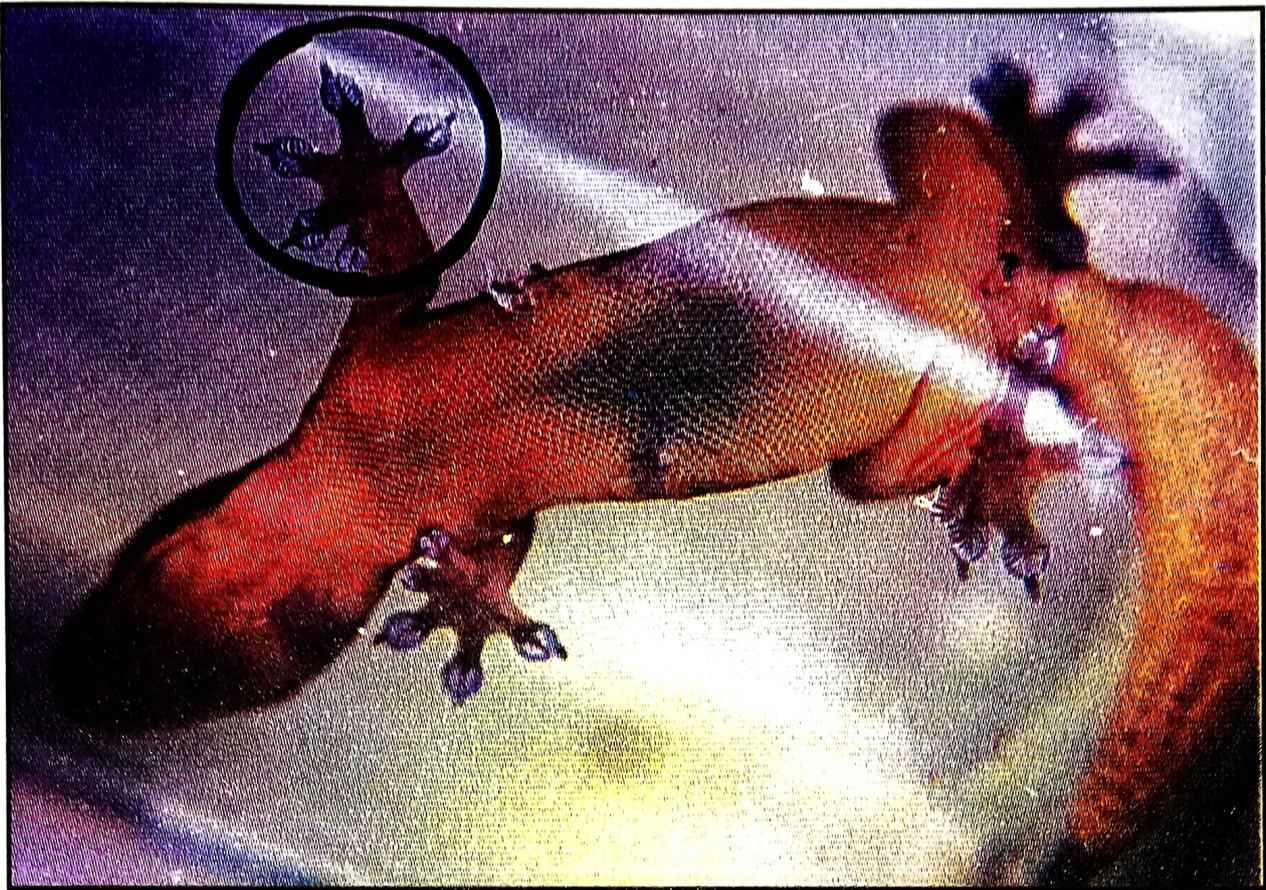
The large and colorful geckos are plentiful in Bali and throughout Southeast Asia, but one hears them much more often than

see them (Tokay Gecko.com 1999). In the tropics, people may have geckos as “house guests.” During the day the geckos may hide in cracks and dark corners. But at night they gobble up insect pests that gather near lights.

Perhaps the most spectacular thing about geckos to people seeing them for the first time is their ability to run over a windowpane or up a vertical wall. They have no trouble walking up walls or even across ceilings. How do they climb without falling? If the surface is rough, they use their sharp claws to get a good grip. But if the surface is smooth, they use their amazing toe pads.

On each pad are rows of ridges (Fig. 3). On each ridge are millions of tiny brushes, each with about 2000 bristles. When a gecko walks, it pushes its toes down against the smooth surface. The tiny ends of the bristles poke into the smallest pits and cracks. The geckos that are capable of this sort of climbing have some parts of their digits dilated to form adhesive discs. In the most arboreal forms, the underside of the discs is made of a transverse on fan-shaped series of narrow plates bearing minute, hair-like processes or papillae which can be pressed into tiny irregularities of the surface. Even something as smooth as glass has them. There the bristles hold tight-until the gecko pulls its toes free.

In general, geckos may be divided into two primary groups: species with immovable eyelids (Gekkoninae, Teratoscinceinae, and Diplodactylinae), and species with movable eyelids (Aleuroscalabotinae & Eublepharinae). Geckos which possess fixed eyelids can be further divided on the basis of the presence (generally terrestrial) of sub-digital lamellae. Normally, the tail length of most gecko species is nearly equal to the snout-vent length and is expressed in a great variety of textures, shapes, and sizes. Additionally, the presence of either round pupils (diurnal) or vertically-oriented pupils (nocturnal) helps to distinguish several genera. A number of arboreal species exhibit a stunning degree of beautiful green, red, and blue coloration (notably, the species of *Phelsuma* and *Naultinus*). Finally, scalation characteristics range from the tile-like network (smooth, clycloid, imbricate) to be found on



(Photo by A.A. Alicante)

Fig. 3 Gecko's hair-like papillae in the toe pads

Teratoscincus, *Geckolepis*, and *Teratolepis*, to among some of the most minute, velvety-textured granular scales exhibited in several *Oedura* species.

The gecko characteristics are very distinct for each individual gecko. Some can be all kinds of different colors from red to blue to green to rainbow. People think that geckos have suction cups on their feet, but they really do not. They actually have microscopic hair on their feet that can grab onto any surface-even glass (Tokay Gecko.com, 1999).

Defense Mechanism

Most geckos are small. Being small means being bite-size for many snakes, birds, monkeys and other enemies. But geckos have lots of ways to keep from becoming a meal. Many geckos just run for cover at the first sign of trouble. Being small, they usually can find some place nearby to hide in. But if an enemy gets too close too fast, it will pop the end of its tail right off, a defense mechanism called autotomy. If the enemy sees the gecko it may become confused and attack the tail instead of the head. The twitching tail tip catches the enemy's attention while the gecko dashes off to safety thereby saving the gecko's life.

In time a new tail tip will grow back. It will not be as large or even have the same shape as the original. This process is known as regeneration. Sometimes a gecko's tip does not break off completely. Then when a new one grows back, the gecko will have two tails. This defense mechanism is used so often by some species that it is nearly impossible to find an adult specimen with its original tail.

Feeding and Care

In some countries, geckos are used as pets. Hence, diet is often the item of greatest importance for the health of the pet lizard. Most of the common diseases and deaths seen in pet lizards are related to improper diet or environment.

Dietary needs and feeding schedules can vary greatly. Green iguanas require a balanced mixture of fresh vegetables and fruits on a daily basis, while some may go on for weeks or months without a meal. Crickets, wax, worms, small mealworms are all readily taken. Always use a good calcium/vitamin dusting supplement. Best time to feed is early evening. Always provide fresh drinking water daily for your pet gecko. Insects (for the majority of species), small reptiles (also other geckos) and occasionally rodents may be eaten. Some species have been recorded to eat fruits and nectar.

House geckos are hardy, inexpensive small lizards which are fairly easy to maintain in captivity. They are very fast moving which makes them almost impossible to handle.

Habitat

Males can be territorial. Give them lots of places to hide if you intend to keep them in groups, since all of these geckos hail from broadly the same area and very similar habitats, i.e., tropical rainforest and areas of high humidity. They live in jungles, deserts, swamps usually where it is warm year-round. Some scurry around in backyards and some live in people's houses and buildings.

Cages for these lizards should be vertically spacious rather than horizontal and furnished with a good selection of branches, if not living plants. Overwhelming heat is not needed but a basking light at the top to bring the temperature down is useful.

Behavior

Predominantly, geckos are nocturnal. Some genera are diurnal (*Gonatodes*, *Phelsuma*, *Roptropella*, *Rhoptropus*, *Quedenfeldtia*), while others exhibit the interesting peculiarity of having both diurnal and nocturnal activity like *Agamura*, *Prisurus*, *Ptyodactylus*, *Sphaerodactylus* and several others.

Reproduction and Development

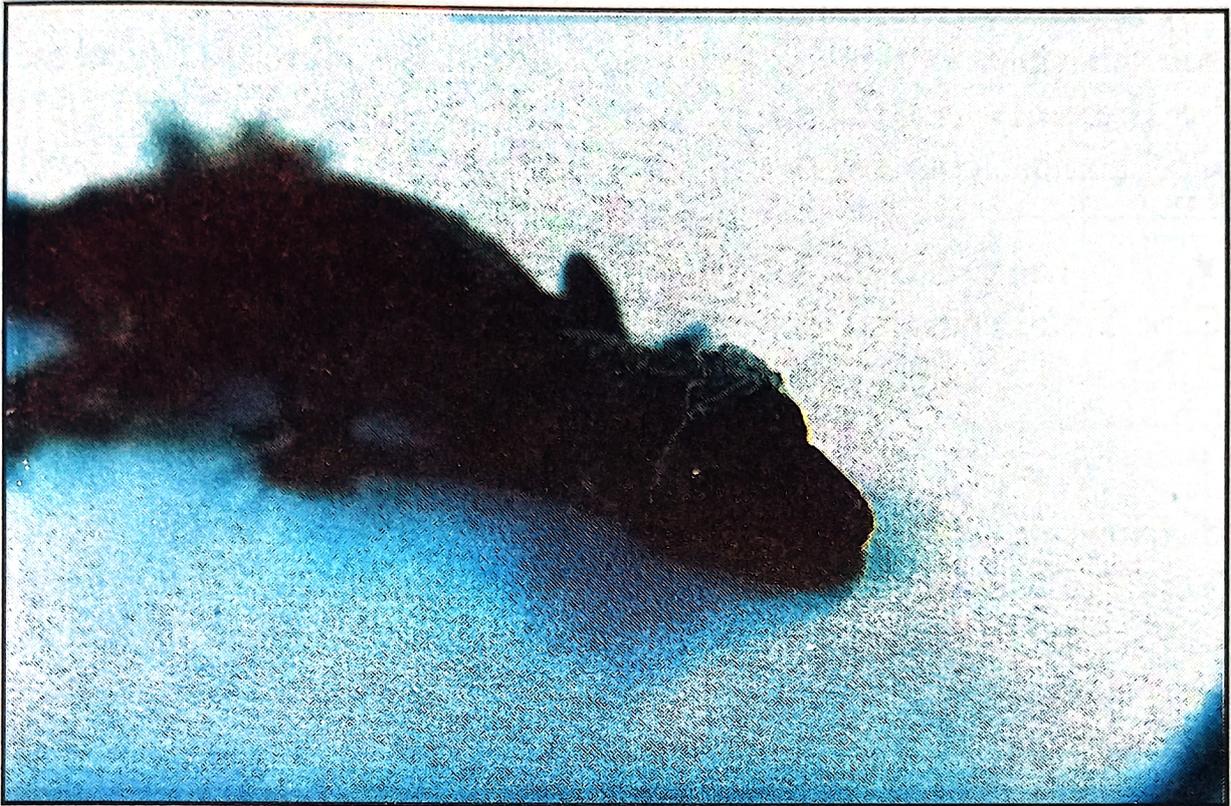
Geckos tend to lay hard-shelled eggs. Most lizards are not good mothers and ignore their eggs once they have been laid. The tokay gecko, like many geckos, lays eggs two at a time. The eggs are soft and sticky at first but they soon harden when exposed to the air. As the eggs dry, they stick to the surface on which they were laid (Reptile, 1991). Most geckos lay eggs, but some species, notably from New Caledonia and New Zealand, give birth to live young (Family Gekkonidae, 1999).

The moderately big species of geckonids tend to have an incubation period of 2-3 months. *Gecko gecko* appears to have the longest maximum incubation period (182 days), as given by Honegger (1969). The record for the single clutch of *Gekko gecko* eggs which hatched in the laboratory is about three months (Alcala 1976). Incubation temperature is 88 F. Eggs hatch between 50-65 days. Hatchlings measure about 2”.

Most geckos produce two eggs per clutch. They may lay several clutches per year (up to 10, or even more). Some species deliver live offspring (*Hoplodactylus* sp., *Naultimus* sp. and *Rhacodactylus trachyrhynchus*). After about two or three months, the eggs hatch and the baby geckos crawl out. Those that do not get eaten by a predator will grow up quickly. And as they grow, they shed their skin, known as molting (Fig. 4), to accommodate increase in body size.

Most of the gecko’s skin just comes loose and falls off in pieces. But sometimes the skin clings to its feet. When that happens, the geckos may pull the skin off like someone removing a tight glove. Then it just gulps it down (Bishop, 1985).

Among the genera which attain the smallest size is the *Spaerodactylus* species. These are mostly recognized with several growing to only 30 mm in total length. The largest recorded species are *Racondactylus leachianus*, *Gecko gecko*, *Gekko smithi*, *Uroplatus fimbriatus* and *Saltuarius cormutus*, with total length in excess of 350 mm. Presently, *Rhacodactylus leachianus* is regarded as having the greatest snout-vent length of 240mm, with a tail length of less than the 50% of the snout-vent length. The largest known (recent) fossil species are *Phelsuma gigas* (total length was more the 500mm) and *Hoplodactylus delcorti* (the only known specimen whose body length measures 622 mm). Both species are presumed extinct, yet the possibility for the continued existence of the latter has been recorded. Average size of geckos is 3” but large adults can reach up to 5”. Most of the gekkonids are robust. The upper size of the gecko range usually 8-12”. The largest living gecko, the Komodo dragon is on the endangered species list (Lizard, Microsoft Encarta, 2000 [http](http://)).



(Photo by A.A. Alicante)

Fig. 4 Young Gekko shedding off skin

Classification & Distribution

Geckos have found their way into nearly every corner of the world. They even live on tiny islands far out at sea. How did they get to such places? By hitchhiking! When a ship stops at a port in the tropics to take on a load, it may also take in a few geckos. The little lizards may be hiding in the cargo being carried aboard. Or they may run up to the ropes.

There are many different species of house geckos and geckos occur worldwide. The most common is *Hemidactylus frenatus*. They can be found in many different tropical countries around the world. They inhabit the desert, tropical and sub-tropical regions.

Geckos having fully movable eyelids are placed in the Family Eublepharidae. This include the popular leopard geckos of the pet trade.

The 300 plus remaining species are in the Gekkonidae, or “true” geckos. These lizards are widely distributed around the tropics and subtropics worldwide. In the South Pacific, geckos and skinks may be the only lizards to inhabit very remote islands (Family Gekkonidae.com 1999).

The gecko and its distribution in New South Wales, Australia; Cape York Peninsula; Florida; Peruano; Ecuador and in the Philippines are shown in Tables 1-6.

Table 1 presents the geckos of New South Wales and its distribution, while Table 2 shows the classification of geckos of Cape York Peninsula. On the other hand, Table 3 presents the different types of Geckonid specimens in Florida Museum of Natural History Herpetology Collection of United States of America. Meanwhile, Table 4 presents the Preliminary Listing of the Geckos in Peruanos and Table 5 indicates the classification and distribution of Sauria, Gekkonidae in Ecuador. Finally, table 6 shows the list of Geckonid Lizards and its distribution in the Philippines.

Table 1. The Geckos & Its Distribution in New South Wales, Australia

<i>Scientific Name</i>	<i>Original Taxonomic Description</i>	<i>Common Name/s</i>	<i>Distribution</i>
<i>Carphodactylus laevis</i>	<i>Gunther, 1897</i>	<i>Chameleon Gecko</i>	<i>Qld</i>
<i>Christinus guentheri</i>	<i>(Boulenger, 1885)</i>	<i>Lord Howe Island Southern Gecko Gunther's Mabled Gecko Lord Hower Island (and Norfolk Island) Southern Gecko</i>	<i>LHI, NI</i>

<i>Christinus marmoratus</i>	(Gray, 1845)	Marbled Southern Gecko Marbled Gecko	NSW, SA WA
<i>Crenadactylus ocellatus</i>	(Gray, 1845)	Clawless gecko	NT, Qld SA, WA
<i>Crenadactylus ocellatus horni</i>	(Lucas and Frost, 1895)	Horn's Clawless Gecko	
<i>Crenadactylus ocellatus naso</i>	(Storr, 1978)	Northern Clawless Gecko	
<i>Crenadactylus ocellatus ocellatus</i>	(Gray, 1845)	Western Clawless Gecko	
<i>Crenadactylus ocellatus rostralis</i>	(Storr, 1978)	Kimberly Clawless Gecko	
<i>Cyrtodactylus lousiadensis</i>	(De Vis, 1892)	Ring-tailed Gecko Banded Gecko	Qld
<i>Cyrtodactylus lousiadensis tuberculatus</i>	(Lucas and Frost, 190)	Giant banded Gecko	
<i>Cyrtodactylus sadleiri</i>	Wells and Wellington, 1985	Christmas Island Gecko	CI
<i>Diplodactylus assimilis</i>	Storr, 1988	Goldfields Spiny-tailed Gecko Western Spiny-tailed Gecko	WA
<i>Diplodactylus alboguttatus</i>	Werner, 1910	White-spotted Ground Gecko White-bellied Gecko	WA
<i>Diplodactylus byrnei</i>	Lucas and Frost, 1896	Gibber Gecko Byrne's Gecko	NSW, NT Qld, SA
<i>Diplodactylus ciliaris</i>	Boulenger 1885	Northern Spiny-tailed Gecko Spiny-tailed Gecko	NSW, NT, Qld, SA WA
<i>Diplodactylus ciliaris aberrans</i>	(Glaueri, 1952)	Eyrean Spiny-tailed Gecko	
<i>Diplodactylus ciliaris ciliaris</i>	(Boulenger, 1985)	Northern Spiny-tailed Gecko	

<i>Diplodactylus conspicillatus</i>	(Lucas and Frost, 1897)	Burrow-plug Gecko Fat-tailed Gecko	NSW, NT Qld, SA WA
<i>Diplodactylus damaeus</i>	(Lucas and Frost, 1896)	Beaded Gecko	NSW, NT, Qld, SA WA
<i>Diplodactylus elderi</i>	Stirling and Zitz, 1893	Jewelled Gecko	NSW, NT Qld, SA WA
<i>Diplodactylus fulleri</i>	Storr, 1978	Lake Disappointment Ground Gecko	WA
<i>Diplodactylus galeatus</i>	Kluge, 1963	Fuller's Gecko Helmeted Gecko Quartz Gecko	NT, SA
<i>Diplodactylus granariensis</i>	Storr, 1979	Wheat-belt Stone Gecko	SA, WA
<i>Diplodactylus granariensis</i>	Storr, 1979	Western Wood Gecko	
<i>Diplodactylus granariensis granariensis</i>	Storr, 1979	Northern Wood Gecko	
<i>Diplodactylus hilli</i>	(Longman, 1915)	Hill's Gecko	
<i>Diplodactylus immaculatus</i>	Storr 1988	Pale-striped Ground Gecko Immaculate Gecko	NT, Qld
<i>Diplodactylus intermedius</i>	Ogilby, 1892	Southern Spiny- tailed Gecko Eastern Spiny-tailed Gecko	NSW, NT, SA, Vic, WA
<i>Diplodactylus jeanae</i>	Storr, 1988	Southern Phasmid Gecko Jean's Triodia Gecko	NT, WA
<i>Diplodactylus kenneallyi</i>	Storr, 1988	Lake Buchanan Gecko Kenneally's Gecko	WA
<i>Diplodactylus maini</i>	Kluge, 1962	Main's Ground Gecko Main's Gecko	WA

<i>Diplodactylus mcmillani</i>	Storr, 1978	Short-tailed Striped Gecko	WA
<i>Diplodactylus michaelsoni</i>	Werner, 1910	McMillan's Gecko Robust Striped Gecko Striped Spinifex Gecko	WA
<i>Diplodactylus mitchelli</i>	Kluge, 1963	Pilbara Stone Gecko Mitchell's Gecko	WA
<i>Diplodactylus occultus</i>	King, Braithwaite & Wombey, 1982	Yellow-snouted Ground Gecko Northern Stone Gecko	NT
<i>Diplodactylus ornatus</i>	Gray, 1845	Ornate Stone Gecko Ornate Gecko	WA
<i>Diplodactylus platyurus</i>	(Parker, 1926)	Parker's Gecko	
<i>Diplodactylus polyophthalmus</i>	Gunther, 1867	Speckled Stone Gecko South-western Wood Gecko	WA
<i>Diplodactylus pulcher</i>	(Steindachner, 1870)	Fine-faced Gecko Blotched Wood Gecko	SA, WA
<i>Diplodactylus rankini</i>	Storr, 1979	Exmouth Spiny-tailed Gecko Rankin's Spiny-tailed Gecko	WA
<i>Diplodactylus savagei</i>	Kluge, 1963	Yellow-spotted Pilbara Gecko Pilbara Stone Gecko	WA
<i>Diplodactylus spinigerus</i>		South-western Spiny- tailed Gecko	WA
<i>Diplodactylus spinigerus inortus</i>	(Storr, 1988)	Inornate Spiny-tailed Gecko	
<i>Diplodactylus spinegerus gerus</i>	(Gray, 1842)	Western Spiny-tailed Gecko	
<i>Diplodactylus squarrosus</i>	Kluge, 1962	Mottled Ground Gecko	WA
<i>Diplodactylus steindachneri</i>	Boulenger, 1885	Box-patterned Gecko Steindachner's Gecko	NSW, Qld, SA(?)

<i>Diplodactylus stenodactylus</i>	<i>Boulenger</i> 1896	<i>Pale-snouted Ground Gecko</i> <i>Crowned Gecko</i>	NSW, NT, Qld, SA WA
<i>Diplodactylus strophurus</i>	(<i>Dumeril and Bibron</i> , 1836)	<i>Western Spiny-tailed Gecko</i> <i>Slender Spiny-tailed Gecko</i>	WA
<i>Diplodactylus taeniatus</i>	(<i>Lonnerberg and Andersson</i> , 1913)	<i>Phasmid Striped Gecko</i> <i>Striped Triodia Gecko</i> <i>White-striped Gecko</i>	NT, Qld WA
<i>Diplodactylus taenicaudus</i>	<i>De Vis</i> , 1886	<i>Golden Spiny-tailed Gecko</i> <i>Golden-tailed Gecko</i>	Qld
<i>Diplodactylus tessellatus</i>	(<i>Gunther</i> , 1875)	<i>Tesselated Gecko</i>	NSW, NT, Qld, SA, Vic
<i>Diplodactylus vittatus</i>	<i>Gray</i> , 1832	<i>Eastern Stone Gecko</i> <i>Wood Gecko</i> <i>Stone Gecko</i>	NSW, Qld SA, Vic
<i>Diplodactylus wellingtonae</i>	<i>Storr</i> , 1988	<i>Western Shield Spiny-tailed Gecko</i> <i>Wellington's Gecko</i>	WA
<i>Diplodactylus williamsi</i>	<i>Kluge</i> , 1963	<i>Eastern Spiny-tailed Gecko</i> <i>Soft-spined Gecko</i>	NSW, Qld, SA(?)
<i>Diplodactylus wilsoni</i>	<i>Storr</i> , 1983	<i>Mount Augustus Spiny-tailed Gecko</i> <i>Wilson's Gecko</i>	WA
<i>Diplodactylus wombeyi</i>	<i>Storr</i> , 1978	<i>Pilbara Ground Gecko</i> <i>Wombey's Stone Gecko</i>	WA
<i>Gehyra australis</i>	<i>Gray</i> , 1845	<i>Top-end Dtella</i> <i>Northern Dtella</i> <i>House Gecko</i>	NT, Qld, WA
<i>Gehyra baliola</i>	(<i>Dumeril and Dumeril</i> , 1851)	<i>Short-tailed Dtella</i> <i>New Guinea Dtella</i>	Qld (Torres Strait Islands)

<i>Gehyra borrooloola</i>	King, 1983	<i>Borrooloola Dtella</i> <i>Gulf Dtella</i>	NT
<i>Gehyra catenata</i>	Low, 1979	<i>Chain-backed Dtella</i> <i>Zig-zag Dtella</i>	Qld
<i>Gehyra dubia</i>	(Macleay, 1877)	<i>Dubious Dtella</i> <i>Northern Dtella</i>	NSW, Qld
<i>Gehyra fenestra</i>	Mitchell, 1965	<i>Pilbara Spotted Gecko</i> <i>Western Spotted Dtella</i>	WA
<i>Gehyra minuta</i>	King, 1982	<i>Dwarf Dtella</i> <i>Short-snouted Dtella</i>	NT
<i>Gehyra montium</i>	Storr, 1982	<i>Centralian Dtella</i> <i>Red Dtella</i>	NT, SA, WA
<i>Gehyra mutilata</i>	(Wiegmann, 1835)	<i>Skin-shedding Dtella</i>	CI, CKL
<i>Gehyra nana</i>	Storr, 1978	<i>Northern Spotted Rock Dtella</i> <i>Northern Spotted Dtella</i>	NT, Qld SA, WA
<i>Gehyra occidentalis</i>	King, 1984	<i>Kimberly Plateau Dtella</i> <i>Western Dtella</i>	WA
<i>Gehyra oceanica</i>	(Lesson, 1830)	<i>Pacific Dtella</i> <i>Oceanic Dtella</i>	Qld (Torres Strait Islands)
<i>Gehyra pamela</i>	(King, 1982)	<i>Arnhemland Watercourse Dtella</i> <i>Arnhem Land Dtella</i> <i>Arnhemland Spotted Dtella</i>	NT
<i>Gehyra pilbara</i>	Mitchell, 1965	<i>Pilbara Dtella</i>	NT, WA
<i>Gehyra punctata</i>	(Fry, 1914)	<i>Spotted Dtella</i> <i>Spotted Gecko</i>	WA
<i>Gehyra purpurascens</i>	Storr, 1982	<i>Purplish Dtella</i> <i>Purple Dtella</i>	NT, Qld, SA, WA
<i>Gehyra robusta</i>	King, 1983	<i>Robust Dtella</i> <i>Eastern Rock Dtella</i>	Qld
<i>Gehyra variegata</i>	(Dumeril and Bibron, 1836)	<i>Varied Dtella</i> <i>Tree Dtella</i>	NSW, NT, Qld, SA, Vic, WA

<i>Gehyra xenopus</i>	Storr, 1978	Crocodile-faced <i>Dtella</i> Long-snouted <i>Dtella</i>	WA
<i>Hemidactylus frenatus</i>	Dumeril and Bibron, 1836	House Gecko Asian House Gecko Cheechak Common House Gecko	CI, CKL, NT, Qld, WA
<i>Heteronotia binoei</i>	(Gray, 1845)	Prickly Gecko Bynoe's Gecko	NSW, NT, Qld, SA, Vic, WA
<i>Heteronotia planiceps</i>	Storr, 1989	Bynoe's Prickly Gecko Kimberly Cave Gecko	WA
<i>Heteronotia spelea</i>	(Kluge, 1963)	Cave Prickly Gecko Desert Cave Gecko	NT, WA
<i>Lepidodactylus listeri</i>	(Boulenger, 1885)	Christmas Island Chained Gecko Lister's Gecko	CI
<i>Lepidodactylus lugubris</i>	(Dumeril and Bibron, 1836)	Mourning Chained Gecko Oceanian Palm Gecko Mourning Gecko	CKL, Qld
<i>Lepidodactylus pumilus</i>	(Boulenger, 1885)	Slender Chained Gecko Torres Strait Palm Gecko	Qld (Torres Strait Islands)
<i>Lucasium damaeum</i>	(Lucas and Frost, 1896)	Beaded gecko Pelagic Gecko	NSW, NT, Qld, SA, Vic, WA
<i>Nactus arnouxi</i>			Qld
<i>Nactus galgajuga</i>	(Ingram, 1978)	Black Mountain Gecko Trevanthen Range Gecko	Qld
<i>Nactus pelagicus</i>	(Girard, 1858)	Pelagic Gecko Australian Pelagic Gecko	Qld
<i>Nephrurus amyae</i>	Couper in Couper & Gregson, 1994	Centralian Rough Knob-tail Giant Centralian Knob-tailed gecko	NT

<i>Nephrurus asper</i>	Gunther, 1876	<i>Rough Knob-tail Rough Knob-tailed Gecko Spiny Knob-tailed Gecko</i>	T, Qld, WA
<i>Nephrurus deleani</i>	Harvey, 1983	<i>Pernatty-Knob-tail Pernatty Knob-tailed Gecko</i>	SA
<i>Nephrurus laevissimus</i>	Martens, 1958	<i>Smooth Knob-tail Sand Dune Knob- tailed Gecko Smooth Knob-tailed Gecko</i>	NT, SA, WA
<i>Nephrurus levis</i>	De Vis, 1886	<i>Three-lined Knob-tail Smooth Knob-tailed Gecko Common Knob-tailed Gecko</i>	NSW, NT, Qld, SA, WA
<i>Nephrurus levis levis</i>	De Vis, 1886	<i>Plains Knob-tailed Gecko Three-lined Knob-tailed Gecko</i>	
<i>Nephrurus levis occidentalis</i>	Storr, 1963	<i>Western Knob-tailed Gecko</i>	
<i>Nephrurus levis pilbarensis</i>	Storr, 1963	<i>Pilbara Knob-tailed Gecko</i>	
<i>Nephrurus sheai</i>	Couper in Couper & Gregson, 1994	<i>Kimberly Rough Knob-tail Shea's Knob-tailed Gecko</i>	NT, WA
<i>Nephrurus stellatus</i>	Storr, 1968	<i>Stellate Knob-tail Southern Knob-tailed Gecko</i>	SA, WA
<i>Nephrurus vertebralis</i>	Storr, 1963	<i>Midline Knob-tail Midline Knob-tailed Gecko</i>	SA, WA

<i>Nephrurus wheeleri</i>	Loveridge 1932	<i>Banded Knob-tail</i>	WA
<i>Nephrurus wheeleri cinctus</i>	Storr, 1963	<i>Five-banded Knob-tailed Gecko</i>	
<i>Nephrurus wheeleri wheeleri</i>	Loveridge, 1932	<i>Four-banded Knob-tailed Gecko</i>	
<i>Oedura castelnaui</i>	(Thominot, 1889)	<i>Northern Velvet Gecko</i> <i>Castelnaud's Velvet Gecko</i>	Qld
<i>Oedura coggeri</i>	Butard, 1966	<i>Northern Spotted Velvet Gecko</i> <i>Cogger's Velvet Gecko</i>	Qld
<i>Oedura filicipoda</i>	King, 1984	<i>Fringe-toed Velvet Gecko</i> <i>Mitchel Plateau Velvet Gecko</i>	WA
<i>Oedura gemmata</i>	King and Gow, 1983	<i>Dotted Velvet Gecko</i> <i>Jewelled Velvet Gecko</i>	NT
<i>Oedura gracilis</i>	King, 1984	<i>Gracile Velvet Gecko</i>	WA
<i>Oedura lesueurii</i>	(Dumeril and Bibron, 1836)	<i>Lesueur's Velvet Gecko</i> <i>Lesueur's Gecko</i>	NSW, Qld
<i>Oedura marmorata</i>	Gray, 1842	<i>Marbled Velvet Gecko</i>	NSW, NT, Qld, SA, WA
<i>Oedura monilis</i>	De Vis, 1888	<i>Ocellated Velvet Gecko</i> <i>Ocellated Gecko</i> <i>Blotched gecko</i>	NSW, Qld
<i>Oedura obscura</i>	King, 1984	<i>Slim Velvet Gecko</i> <i>Kimberly Velvet Gecko</i>	WA
<i>Oedura reticulata</i>	Bustard, 1969	<i>Reticulated velvet Gecko</i>	WA
<i>Oedura rhombifer</i>	Gray, 1845	<i>Zigzag Velvet Gecko</i> <i>Zig Zag Gecko</i>	NT, Qld WA
<i>Oedura robusta</i>	Boulnger 1885	<i>Robust Velvet Gecko</i> <i>Robust Gecko</i>	NSW, Qld

<i>Oedura tryoni</i>	<i>De Vis, 1884</i>	<i>Southern Spotted Velvet Gecko Tryon's Velvet gecko</i>	<i>NSW, Qld</i>
<i>Phyllodactylus guentheri</i>	<i>(see Christinus guentheri)</i>		
<i>Phyllodactylus marmoratus</i>	<i>(see Christinus marmoratus)</i>		
<i>Phyllurus caudiannulatus</i>	<i>Covacevich 1975</i>	<i>Ringed Thin-tailed Gecko Ringed Leaf-tailed Gecko</i>	<i>Qld</i>
<i>Phyllurus cornutus</i>	<i>(see Saltuarius cornutus)</i>		
<i>Phyllurus isis</i>	<i>Couper, Covacevich & Moritz, 1993</i>	<i>Mount Jukes Broad- tailed Gecko Mount Blackwood Leaf-tailed Gecko</i>	<i>Qld</i>
<i>Phyllurus nephys</i>	<i>Couper, Covacevich & Moritz, 1993</i>	<i>Peppered-belly Broad- tailed Gecko Eungella Leaf-tailed Gecko</i>	<i>Qld</i>
<i>Phyllurus ossa</i>	<i>Couper, Covacevich & Moritz, 1993</i>	<i>Mount Ossa Broad- tailed Gecko Mount Ossa Leaf-tailed Gecko</i>	<i>Qld</i>
<i>Phyllurus platurus</i>	<i>(White, 1790)</i>	<i>Broad-tailed Gecko Southern Leaf-tailed Gecko</i>	<i>NSW</i>
<i>Phyllurus salebrosus</i>	<i>(see Saltuarius salebrosus)</i>		
<i>Pseudothecadactylus australis</i>	<i>(Gunther, 1877)</i>	<i>Cape York Pad-tail Gecko Prehensile-tailed Gecko</i>	<i>Qld</i>
<i>Pseudothecadactylus Cavaticus</i>	<i>Cogger, 1975</i>	<i>Western Cave Gecko</i>	

<i>Pseudothecadactylus lindneri</i>	Cogger, 1975	Giant Cave Gecko Lindner's Giant Cave Gecko	NT, WA
<i>Rhynchedura ornata</i>	Gunther, 1867	Beaked Gecko	NSW, NT Qld, SA, Vic, WA
<i>Saltuarius cornutus</i>	(Ogilby, 1892)	Northern Leaf-tail Gecko Leaf-tailed Gecko	NSW, Qld
<i>Saltuarius occultus</i>	Couper, Covacevich & Moritz, 1993	Long-necked Northern Leaf-tailed Gecko Peninsular Leaf-tailed Gecko	Qld
<i>Saltuarius salebrosus</i>	Covacevich 1975	Rough-throated Leaf-tail Gecko Covacevich's leaf-tailed Gecko	Qld
<i>Saltuarius swaini</i>	(Wells and Wellington, 1985)	Southern Leaf-tailed Gecko	SW, Qld
<i>Strophurus assimilis</i>	(see <i>Diplodactylus assimilis</i>)		
<i>Strophurus ciliaris</i>	(see <i>Diplodactylus ciliaris</i>)		
<i>Strophurus elderi</i>	(see <i>Diplodactylus elderi</i>)		
<i>Strophurus intermedius</i>	(see <i>Diplodactylus intermedius</i>)		
<i>Strophurus jeanae</i>	(see <i>Diplodactylus jeanae</i>)		
<i>Strophurus mcmillani</i>	(see <i>Diplodactylus mcmillani</i>)		
<i>Strophurus michaelsoni</i>	(see <i>Diplodactylus michaelsoni</i>)		

<i>Strophurus rankini</i>	(see <i>Diplodactylus rankini</i>)		
<i>Strophurus spinigerus</i>	(see <i>Diplodactylus spinigerus</i>)		
<i>Strophurus strophurus</i>	(see <i>Diplodactylus strophurus</i>)		
<i>Strophurus taeniatus</i>	(see <i>Diplodactylus taeniatus</i>)		
<i>Strophurus taenicauda</i>	(see <i>Diplodactylus taenicauda</i>)		
<i>Strophurus wellingtonae</i>	(see <i>Diplodactylus wellingtonae</i>)		
<i>Strophurus williamsi</i>	(see <i>Diplodactylus williamsi</i>)		
<i>Strophurus wilsoni</i>	(see <i>Diplodactylus wilsoni</i>)		
<i>Underwoodisaurus milii</i>	(Bory de Saint-Vincent, 1825)	<i>Think tailed Gecko</i> <i>Barking Gecko</i>	NSW, NT, Qld, SA, Vic, WA
<i>Underwoodisaurus sphyrurus</i>	(Ogilby, 1892)	<i>Border Think-tailed Gecko</i> <i>Montane Thick-tailed Gecko</i>	NSW, Qld

Legend: WA = Western Australia, SA = South Australia, Vic-Victoria, Tas = Tasmania, NSW = New South Wales, Qld = Queensland, NT = Northern Territory, CI = Christmas Island, CKI = Cocos & Keeling Islands, LHI = Lord Howe Island, NI = Norfolk Island.

Table 2. Geckos of Cape York Peninsula

Family	Genus	Species	Common Name
Gekkonidae	<i>Oedura</i>	<i>coggeri</i>	Northern Spotted Velvet Gecko
Gekkonidae	<i>Oedura</i>	<i>marmorata</i>	Marbled Velvet Gecko
Gekkonidae	<i>Oedura</i>	<i>rhombofer</i>	Zig-zag Gecko
Gekkonidae	<i>Pseudothecadactylus</i>	<i>australis</i>	Cape York Tree Gecko
Gekkonidae	<i>Rhynchoedura</i>	<i>ornata*</i>	Beaked Gecko
Gekkonidae	<i>Saltuarius</i>	<i>cornatus</i>	A gecko
Gekkonidae	<i>Saltuarius</i>	<i>occultus</i>	A gecko

Table 3. Types of Geckonid Specimens in the Florida Museum of Natural History Herpetology Collection

Family	Genus	Species	Subspecies	Holo-type	Para types
Gekkonidae	<i>Sphaerodactylus</i>	<i>Difficilis</i>	<i>Anthracomus</i>	0	5
Gekkonidae	<i>Sphaerodactylus</i>	<i>Asterulus</i>	-----	0	14
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Ateles</i>	0	3
Gekkonidae	<i>Sphaerodactylus</i>	<i>Decoratus</i>	<i>Atessares</i>	0	6
Gekkonidae	<i>Sphaerodactylus</i>	<i>Callocritus</i>	-----	0	7
Gekkonidae	<i>Tenudactylus</i>	<i>Rohtastortai</i>	-----	0	2
Gekkonidae	<i>Sphaerodactylus</i>	<i>Beattyi</i>	<i>Seamani</i>	0	6
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Spanius</i>	0	2
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Stibarus</i>	0	6
Gekkonidae	<i>Sphaerodactylus</i>	<i>Thompsoni</i>	-----	1	1
Gekkonidae	<i>Cyrtodactylus</i>	<i>Leavigatus</i>	<i>Uniformis</i>	1	1
Gekkonidae	<i>Sphaerodactylus</i>	<i>Difficilis</i>	<i>Diolenius</i>	0	5
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Guarionex</i>	0	4
Gekkonidae	<i>Phallodactylus</i>	<i>Wirshingi</i>	<i>Hispaniolae</i>	0	1
Gekkonidae	<i>Cyrtodactylus</i>	<i>Indusoani</i>	-----	0	1

Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Inigo</i>	0	6
Gekkonidae	<i>Sphaerodactylus</i>	<i>Notatus</i>	<i>Juanilloensis</i>	0	6
Gekkonidae	<i>Tenuidactylus</i>	<i>Kohsulai-manai</i>	-----	0	1
Gekkonidae	<i>Sphaerodactylus</i>	<i>Micropithecus</i>	-----	1	1
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Mimetis</i>	0	4
Gekkonidae	<i>Hemiphyllodactylus</i>	<i>Typus</i>	<i>Pallidus</i>	1	1
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Parvus</i>	1	19
Gekkonidae	<i>Sphaerodactylus</i>	<i>Macrolepis</i>	<i>Phoberus</i>	0	10

Table 4. Listado Preliminar de los geckos Peruanos

Orden Squamata		
Suborden Sauria		
Familia	Genero	Numero de Especies
Gekkonidae	<i>Gonatodes</i>	4
Gekkonidae	<i>Hemidactylus</i>	1
Gekkonidae	<i>Lepidoblepharis</i>	1
Gekkonidae	<i>Phyllodactylus</i>	11
Gekkonidae	<i>Pseudogonatodes</i>	3
Gekkonidae	<i>Thecadactylus</i>	1

Table 5. Classification and Distribution of SAURIA, Gekkonidae in Ecuador

Genero, especie y Subespecie	Autor, ano de publicacion	Zona
<i>Gonatodes caudiscutatus</i>	(Gunther, 1859)	Tropical occidental Galapagos
<i>Gonatodes concinnatus</i>	(O'Shaughnessy, 1881)	Tropical oriental
<i>Gonatodes humeralis</i>	(Guichenot, 1855)	Tropical oriental
<i>Hemidactylus mabouia</i>	(Moreau de Jonnes, 1818)	Tropical oriental
<i>Lepidoblepharis buchwaldi</i>	Werner, 1910	Tropical oriental
<i>Lepidoblepharis festae festae</i>	Peracca, 1897	Tropical oriental, templada oriental

<i>Lepidoblepharis grandis</i>	Miyata, 1985	Tropical occidental subtropical occidental
<i>Lepidoblepharis intermedius</i>	Boulenger, 1914	Tropical occidental
<i>Lepidoblepharis ruthveni</i>	Parker, 1926	Tropical occidental
<i>Lepidoblepharis lugubris</i>	(Dumeril and Bibron, 1836)	Tropical occidental, Galapagos
<i>Phyllodactylus barringtonensis</i>	Van Denburgh, 1912	Galapagos
<i>Phyllodactylus baurii</i>	Garman, 1892	Galapagos
<i>Phyllodactylus darwini</i>	Taylor, 1942	Galapagos
<i>Phyllodactylus galapagensis</i>	Peters, 1869	Galapagos
<i>Phyllodactylus gilberti</i>	Heller, 1903	Galapagos
<i>Phyllodactylus leei</i>	Cope, 1889	Galapagos
<i>Phyllodactylus pumilus</i>	Dixon and Huey, 1970	Tropical occidental
<i>Phyllodactylus reissii</i>	Peters, 1862	Tropical occidental subtropical occidental
<i>Pseudogonatodes guianensis</i>	Parker, 1935	Tropical oriental
<i>Sphaerodactylus scapularis</i>	Boulenger, 1902	Tropical occidental
<i>Thecadactylus rapicauda</i>	(Houttuyn, 1782)	Tropical occidental, Tropical oriental

Table 6. List of Geckonid Lizards & Its Distribution in the Philippines

Scientific Name	Common Name	Distribution
<i>Cosymbotus platyurus</i>	Flat-bodied House Gecko	This species is widely distributed in the Philippines. Its range is from India through the East-Indian Archipelago.

<i>Cyrtodactylus annulatus</i>	Small Bent-toed Gecko	Mindanao, Basilan, Jolo, Bohol, Camiguin, Leyte, Cebu, Pacijan, Negros, Palawan and several islands in central and western Philippines.
<i>Cyrtodactylus philippinicus</i>	Philippine Bent-toed Gecko	Found in Polillo, Lubang, Luzon, Mindoro, Tablas, Sibuyan, Masbate, Negros and other small islands in the west central Philippines.
<i>Cyrtodactylus agusanensis</i>	Agusan Bent-toed Gecko	Mindanao, Dinagat and Leyte
<i>Cyrtodactylus redinicus</i>	Palawan Bent-toed Gecko	Known from Thumb Peak area in Palawan
<i>Gehyra mutilata</i>	Tender-skinned House Gecko	It is widely distributed on both small and large islands of the Philippines.
<i>Gekko gekko</i>	Toko Narrow-disked Gecko	This species is very common in man's dwellings and also occurs in cultivated areas and in other vegetative types other than grassland.
<i>Gekko mindorensis</i>	Mindoro Narrow-disked Gecko	Includes northern and central Philippines: Mindoro, Calagna-an, Caluya, Carabao, Negros, Cebu, Mactan, Semiraara, Sicogon and Masbate.
<i>Gekko monarchus</i>	Variable-backed Narrow-disked Gecko	Found on Palawan, Sulu Archipelago, Mindanao Dinagat, Camiguin, Leyte, Luzon, Tatayan. Altitudinal distribution is sea level to 350 meters.

<i>Gekko athymus</i>	Smooth-scaled Narrow-disked Gecko	Known only from the Thumb peak area on Palawan Island.
<i>Gekko gigante</i>	Gigante Narrow-disked Gecko	Found only on Gigante Island, Iloilo Province.
<i>Gekko palawensis</i>	Palawan Narrow-disked Gecko	Known only from Palawan Island at low elevations.
<i>Gekko porosus</i>	Batan Narrow-disked Gecko	Found only in Batanes
<i>Gekko romblon</i>	Romblon Narrow-disked Gecko	Found on Tablas and Sibuyan Islands at low altitudes.
<i>Hemidactylus frenatus</i>	Common House Gecko	Found throughout the Philippines.
<i>Hemidactylus brooki</i>	Brook's House Gecko	Known from Mindanao and Luzon.
<i>Hemidactylus garnoti</i>	Large Hemidactylid Gecko	The species has been recorded from Luzon, Mindoro, Negros, Cebu, and Mindanao Islands.
<i>Hemiphyllodactylus typus typus</i>	Small Smooth-scaled Gecko	Has a wide range from southern India throughout the East Indies and Islands of the Pacific, including the Philippines.
<i>Lepidodactylus aureolineatus</i>	Yellow-lined Smooth-scaled Gecko	Found on Mindanao, Camiguin, Basilan, Samar, and Antique.
<i>Lepidodactylus herrei</i>	White-lined Smooth-scaled Gecko	Negros and Siquijor (<i>L. herrei Herrei</i>), and Bohol, Cebu, Camotes and Leyte (<i>L. herrei medianus</i>)
<i>Lepidodactylus lugubaris</i>	Mangrove Smooth-scaled Gecko	Recorded from Negros, Cebu and many small islands in the Visayas.

<i>Lepidodactylus planicaudus</i>	Small Broad-tailed Smooth-scaled Gecko	South central Mindanao, Samar, Bohol, Cebu, Panay, Tablas, Sibuyan, Guimaras, Masbate, Mindoro and other small islands adjacent to these bigger islands mentioned.
<i>Lepidodactylus christiani</i>	Negros Broad-tailed Smooth-scaled Gecko	This species is found only on Negros Island.
<i>Luperosaurus cumingi</i>	Cuming's Flap-legged Gecko	Found and recorded only on Negros and Luzon.
<i>Luperosaurus joloensis</i>	Jolo Flap-legged Gecko	Found only on Jolo and Mindanao.
<i>Luperosaurus mcgregori</i>	Mcgregor's Flap-legged Gecko	Calayan Island and possibly Polillo Island.
<i>Luperosaurus palawensis</i>	Palawan Flap-legged Gecko	Known only from Thumb Peak area, Palawan Island.
<i>Pseudogekko brevipes</i>	Orange-spotted Smooth-Scaled Gecko	Samar, Negros, Bohol, and Cebu.
<i>Pseudogekko compressicarpus</i>	Cylindrical-bodied Smooth-scaled Gecko	Southern Luzon, Bohol, Zamboanga Peninsula, southern Mindanao and Masbate.
<i>Pseudogekko labialis</i>	Dark-spotted Smooth-Scaled Gecko	This gecko has been taken on Mindanao Island (southern and eastern parts).
<i>Pseudogekko smaragdinus</i>	Green Smooth-scaled Gecko	Known only from Polillo Island.
<i>Ptychozoon intermedium</i>	Philippine Flying Gecko	Known from Mindanao and Leyte Islands.

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