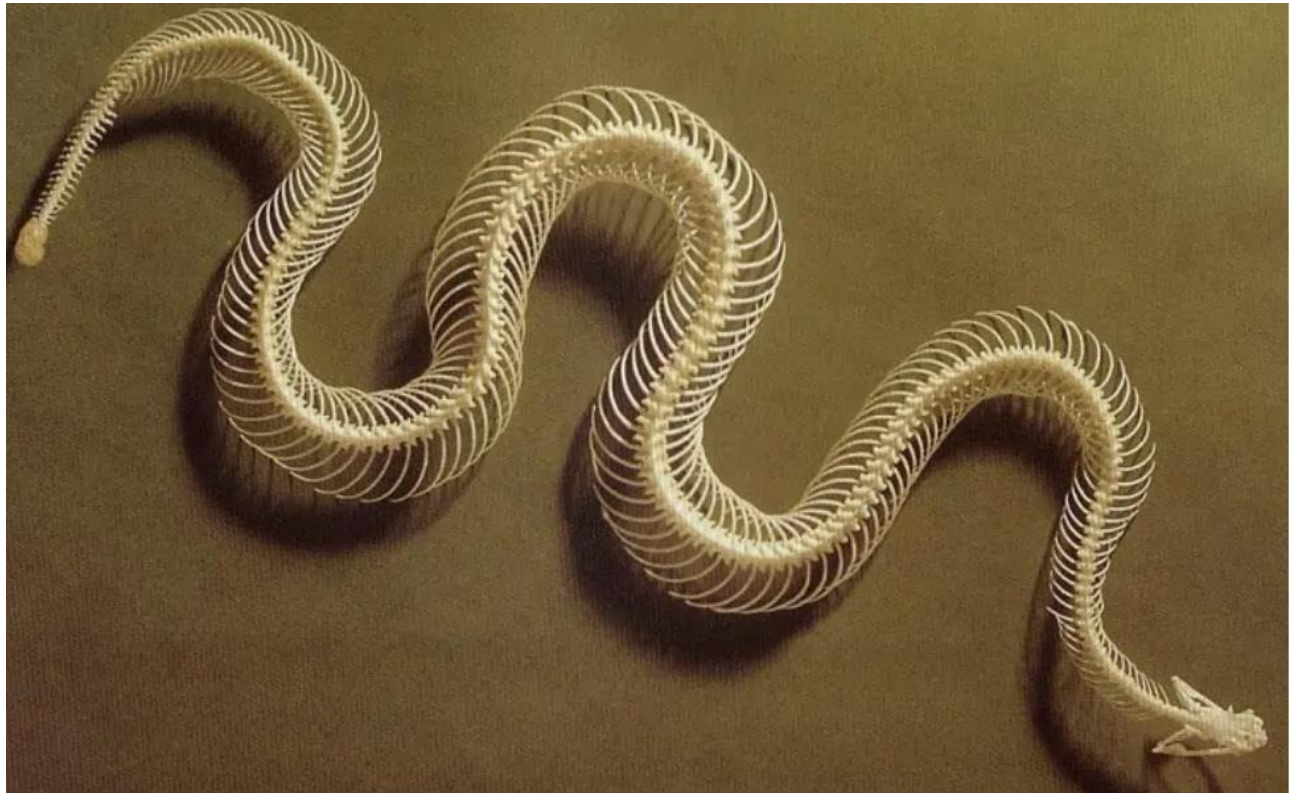


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# PYTHON SKELETON



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## **HISTORY OF PYTHON**

The programming language Python was conceived in the late 1980s and its implementation was started in December 1989 by Guido van Rossum at CWI in the Netherlands as a successor to capable of exception handling and interfacing with the Amoeba operating system.

Van Rossum is Python's principal author, and his continuing central role in deciding the direction of Python is reflected in the title given to him by the Python community, Benevolent Dictator for Life. (However, van Rossum stepped down as leader on July 12, 2018)

Python 2.0 was released on October 16, 2000, with many major new features, including a cycle-detecting garbage collector (in addition to reference counting) for memory management and support for Unicode. However, the most important change was to the development process itself, with a shift to a more transparent and community-backed process.[8]

Python 3.0, a major, backwards-incompatible release, was released on December 3, 2008[9] after a long period of testing. Many of its major features have also been backported to the backwards-compatible, though now-unsupported, Python 2.6 and 2.7.

## **EARLY HISTORY OF PYTHON**

In February 1991, Van Rossum published the code (labeled version 0.9.0) to all sources. Already present at this stage in development were classes with inheritance, exception handling, functions, and the core datatypes of list, dict, str and so on. Also in this initial release was a module system borrowed from Modula-3; Van Rossum describes the module as "one of Python's major programming units". Python's exception model also resembles Modula-3's, with the addition of an else clause. In 1994 comp.lang.python, the primary discussion

forum for Python, was formed and formed, marking a milestone in the growth of Python's userbase.

## **INTRODUCTION**

The pathonidae, commonly known as python are a family of nonvenomous snake found in Africa,Asia,and Australia. Among its member are some of largest snake in the world. Ten genera and 42 species are currently recognised.

## **SCIENTIFIC CLASSIFICATION**

**Kingdom** --- Animalia

**Phylum** --- Chordata

**Class** \_--- Reptilia

**Order** --- squamata

**Sub order** – serpentes

**Superfamily** – Pythonoidea

**Family** — Pythonidae

## **DISTRIBUTION OF HABITAT**

Python are found in sub Saharan Africa,Nepal, India, Bangladesh,Sri Lanka,south east Asia ,South eastern Pakistan, Southern china , philipines and Australia.In United State , as introduced population of burmesa pythonPython Bivittatus has existed as an invasive species in Everglades National Park since the late 1990'S

## CONSERVATION

Many species have been hunted aggressively which has been greatly reduced the population of some ,such as Indian python ie python molurus

## BEHAVIOUR

Most member of this family are ambush predator in that they typically remains motionless in a comouflaged position and then strike suddenly at passing prey. Attacks on human although known to occur are extremely rare.

## FEEDING

Python use their sharp – backward-curving teeth four rows in upper jaw, two in lower, to grasp prey which is then killed by constriction after an animal has been grasped to restrain it, python quickly wraps a no. Of coil around it. Death occur primarily by cardiac arrest.

Larger specimen usually eat animal about the size of house cat, but larger food item are known some large axon species have been known to take down adult deer and the African rock python .Python seliae has been known to eat antelope

In 2017, there was recorded case of human devoured by a python in Indonesia, all prey is swallowed whole , and may take several days Or even week to fully digest.

Contrary to popular belief,even in the larger species such as reticulated python,Malayopython reticulatus do not crush their prey to death infact prey is not even noticeably deformed before it is swallowed. The speed with which the coil are applied is impressive and to the force they exert may be significant but death is caused by cardiac arrest.

- **REPRODUCTION**

Python are oviparous. This sets them apart from the family Boidae.

Most of which bear live young (Ovoviviparous).

After they lay their egg, female typically incubate them until they hatch.

This is achieved by causing muscle to “shiver” which raises the temperature of body to certain degree and thus that of egg. Keeping the egg at constant temperature is essential for healthy embryo development.

During the incubation period, female do not eat and only bask to raise their body temperature.

## **CAPTIVITY**

Most species in the family are available in exotic pet trade, However caution must be exercised with large species, they can be dangerous, rare cases of large specimen kill snakes

## **TAXONOMY**

Obsolete classification scheme, such as that of Boulenger (1890), place python in Pythonidae, a subfamily of Boa family, Boidae, However despite a superficial resemblance to boas, pythons are more closely related to sunbeam snake (*Xenopeltis*) to burrowing python (*Loxocemus*)

<b>Genus</b>	<b>Toxoauthor</b>	<b>Species</b>	<b>Subspecies</b>
Antoresia	Wellington (1984)	4	2
Apodora	klunge(1993)	1	0
Aspidites	Peter (1877)	2	0
Bothrochilus	Futzunger(1843)	1	0
Leiopython	Hubrecht(1879)	3	0
Liasis	Gray(1842)	3	5
Malayopython.	Reynold(2014)	2	3
Morelia.	Gray (1842)	6	0
Nictophylophython	Grow(1977)	1	0
Python	Daudin(1803)	10	2
Simalia	Gray(1849)	6	0

## **TRADITIONAL USE**

- i. **Skin:**Python skin has traditionally been used as the attire of choice for medicine men and healers. Typically,south african tulu traditional healers Python skin in use monical regolia are viewed as a sign of power .

## **ii. Fat**

It is very common to the body that by thorns to be used to treat large variation of issues such as joint pain, rheumatic pain, toothache and eye sight.

Python fat has been used to treat people suffering from mental issues like psychosis. The fat of the python is rubbed on the body part that is in pain to improve mental issues it is often rubbed on temple.

## **iii. Blood**

It is believed that Python blood the accumulation of fatty acids, triglycerides and lipids from releasing critically high levels.

Additionally, this blood has been used as a source of iron for people who are anemic, which helps reduce fatigue.

## **iv. Feces**

The Sukuma tribe of Tanzania have been known to use python feces in order to treat back pain. The feces are frequently mixed with a little water placed on the back and left for 2-3 days.

## **v. Organs**

In Nigeria, the gallbladder and liver of a python are used to treat poison or bites from other snakes.

## **POACHING PYTHON**

Poaching python is a lucrative business with the global python skin trade being an estimated US \$1 billion as of 2012.

Python are poached for their meat, mostly consumed locally as bushmeat and their skin, which is sent to Europe and North America for manufacture of accessories like bags, belts & shoes.

The demand for poaching is increased because python farming is very expensive.

Python poaching in Africa occurs for bushmeat, usually for local use and for skin, which is traded internationally for accessories.

In Cameroon bushmeat markets, the African rock python is commonly sold for meat and is very expensive at US. The poaching of the pythons is illegal in Cameroon under their wildlife law, but there is little to no enforcement.

In Kenya, there has been an increase in snake farms to address the demand for snake skin internationally, but there are health concerns for the workers and danger due to poachers coming to the farms to hunt the snakes.

## **PYTHON AND HUMAN HEALTH**

- While pythons are not venomous. They do carry a host of potential health issues for humans.

- Pythons are disease vectors for multiple illnesses, including salmonella, chlamydia, leptospirosis, aeromoniasis, caneylodacterosis and zygomycosis. These diseases may be transmitted to humans through excreted waste, open wounds and contaminated water.

- A 2013 study that found reptile-associated salmonella (RAS) is most common in young children who had been in contact with invasive pythons, with symptoms including " sepsis, meningitis and bone joint infection.

- Pythons are also integrated into some aspects of African health and belief use, often with the added risks of contacting zoonotic disease



- Python bodies and blood are used for African traditional medicines.
- African python is used to cure rheumatism, snake poison, appearing witches, and accident prevention.
- Pythons habitats, diets and invasion into new areas also impact human health and prosperit .
- A university of florida institute of food and agriculture sciences study found that the Burmese python , as an imasive species, enter new habitats and eats an increasing number of mammals, leasing limited species Burmese python ,as an immasive species enters new habitats and eats an increasing number of mammals , living limited species for mosquitos for bites , forcing them to bite disease –carrying hidpid cotton rats and then infect humans with the everglades virus, a dangerous infection that is carried by very few animals .
- while direct human –python intraction can be potentially dangerous risk of zoonotic disease is always are concern wheather considering medical for belief use in Nigeria or when addressing invasive species impact in florida.

### **COMMON NAMES :**

**SINHALA** -Pimbura

**TELUGU** – Kondachiluva

**ODIA** - Ajagara

**MALYALAM** – Perumpamp

## **Conservation :**

Many species have been hunted aggressively , which has greatly reduced the population of some such as

The indian python , python molorus

## **Folklore**

In northwestern Ghana ,people see python as a saviour and have taboos to prevent the snake from being harmed or eaten . there folklore states that is because a python once helped them free from there enemies by transforming into a log to allow them to cross a river .

In Botswana , san ritual practices surrounding pythons date back 70,000 years ,

In san mythology the python is a sacred creature that is highly respected . they believe that man kind was made by a python that moved in between hills to create stream beds .

In Benin vedun practitioners believe that pythons symbolize strength and the spirit

Annually people sacrifice animals and proclaim their sins to pythons that are kept inside temple .

## **PYTHON TYPES :**

1. Bau python
2. Children python
3. Spotted python

## 1. BAU PYTHON

Also called royal python is a python .species native to west central Africa ,  
Where is lives in grass land , shrub lands and open forest

This non venomous constrictor is the smallest of the African python , growing to a  
maximum lengthen 182 cm ,

The name bau python referred to its tendency to curl into a bau when spressed  
frightened .



### DESCRIPTION :

The bau python is black or albino and dark brown with light brown blotches on the  
back & sides .

Its white or cream belly is scattered with black markings.

It is a stocky snake with a relatively small head and smooth scales . it reaches a maximum adult length of 182 cm .

Males typically measure 8-10 subcaudal scales ,

Female typically measure 2-4 subcaudal scales ,

Both sex have pelvic spurs on both sides of the vents. During copulation , males use these spurs for gripping females .

Males tend to have larger spurs & sex is best determined by manual eversion of the male hemipenes or inserting a probe into the cloaca to check presence of an inverted hemipenes

### **DISTRIBUTION & HABITAT –**

Native to west sub Saharan Africa from Senegal , mali , guinea Bissau .

It preferred grass land , savannas ,& sparsely wooded areas .

### **DIET :**

Diet of B.P in the wild consist mostly of small mammals birds,

Young bau pythons of less than to an prey foremost on small birds.

Made prey more frequently on birds, & female frequently on mammals,rodents make up of a large 7-age of the diet

### **REPRODUCTION –**

Females are oviparous & lay 3-11 rather large, leathery eggs.

The eggs hatch after 55 – 60 days.

Young male pythos reach sexual maturity at 11 – 18 months, & female at 20 -36 month age is only one factor in determining sexual maturity & the ability to breed , it is the 2<sup>nd</sup> factor .

Parental care of the eggs ends once they hatch and the female leaves the offspring to fend for themselves

## **2 – CHILDRENS PYTHON**

Children python is a species of nonvenomous snake in the family pythonidae.

It is a neotropical species occurring in the northern half of Australia & generally found on the ground, although it often climbs trees usually growing to about 1 meter. In length or more depending on the polymorphic variant it is typically reddish and brown color, darker on the upper surface & with many darker patches especially on younger specimens. It feeds mostly on small mammals and birds as with other pythons, constricts its prey before swallowing it whole.



## **DESCRIPTION**

scales on the top of the head are enlarged , while those on the upper surface of the body are small and smooth with a rainbow sheen that can be seen when purposed to direct sunlight . the upper surface niof the snake is brown with darker spots in 5/6 long . series in the type variant.

A dark streak on each side of the head passes a cross the eye . the lips are yellowish , spotted with brown . the lower surface of the snake is uniformly yellowish .

## **HABITAT :**

C.P is found in a variably of natural habitat, including forest, savanna , shrub land, desert , grassland

## **DIET :**

Consist of reptiles , birds and small mammals , particularly micro bats , which it catches by dangling.

## **REPRODUCTION :**

Female brood their eggs through a incubation period by coiling around them & warm which also affords the egg some protection from predators .

Juveniles are highly blotched but gradually become reddish brown as they mature .

Males in captivity have been seen to fight our females, suggesting these snakes will fight for males in the wild.

However , combat in wild individuals this species has never been witnessed when the male fight, they use their spurs to scratch their opponents and will also strike and bite one another one submits .

## **3 .SPOTTED PYTHON**

The spotted python is a python species found in northern Australia and New Guinea. It is a popular pet among Australian reptile enthusiasts.

No subspecies were originally recognized, however, two subspecies are currently recognized as of 2020.



### **DESCRIPTION :**

Adults average about 100-140 cm in length though a record exists of a 69 in specimen.

It is the largest species of the genus *Antaresia*.

It has an irregular blotched color pattern throughout its life . The blotched have ragged edges because the dark pigmentation occurs only on complete scale .

Interestingly the largest recorded example of this species was a male . suggesting male of this species as well as others in genus antaresia may complete for females .

This behaviour has never been cuitnessed in the wild ,and has only been in captive specimens.

These snakes are the oldest species within the genus Antarasia , having diverged from other species in the species 27 million year ago.

## **Distribution and habitat**

Found in Australia from the extreme north of the Cape York peninsula , South through Easten Queensland to northern new and south wales.

Found in the most types of habitas ,but prefers rocky hillsides & outcrops with crevices & caves.

## **Feeding**

One of its favourite foods are the insectivorous bats that it catches at the entrance of their caves.

Being the largest members of this genus, captive specimens will usually accept mice and other small rodents.

They also frequently feed on the other reptile species such as local gecko.



## Reproduction

The spotted python is oviparous, with females laying up to 15 eggs in a clutch.

Spotted pythons are often kept as pets due to their small size, docile temperament, strong feeding responses, resiliency and easy captive care.

The varying coloration between individuals also makes them quite attractive to many herpetoculturalists who work and breed exotic reptiles.

In captivity, this species is very tolerant of differing humidity levels ranging from 20-80% due to the wide range of habitats they occur in throughout their range and shedding problems that occur in captive animals are usually the result of temperature being too high or low rather than a problem with humidity. Spotted pythons are also fairly easy to breed, though some individuals may refuse to eat for a few weeks when they are interested in mating.

## ACCORDING TO AYURVEDA CLASSIFICATION OF SNAKE

दर्वीकर मंडली और राजिमान साँप की पहचान

### 1. सर्प की पहचान

- आचार्य सुश्रुत के अनुसार

दर्वीकर सर्प ( फणावन्तः) फणीयर साँप के शिरोभाग पर रथाङ्ग (चक्रम ) लंगल (हल) छत्र , स्वास्तिक अंकुश के सदृश निशान होते हैं ।

ये फन युक्त और तेज भागने वाले होते हैं।

## 2 .मण्डली सर्पों की पहचान

जो नाना प्रकार मण्डलों से चित्रित ,वाले तथा मन्द गति वाले होते हैं।

अग्नि सूर्य सदृश प्रभायुक्त होते हैं। वे मण्डली सर्प कहलाते हैं।

## 3 .राजिमान सर्प की पहचान

स्निग्ध विविध वर्ण की तिरछी एवं अध्व रेखाओं वाले होते है।

चित्रित से लगते हैं।

## सर्प दंश के सामान्य लक्षण

यहां सभी प्रकार के सर्पों के दंश से उत्पन्न सामान्य लक्षणों का उल्लेख किया गया है।

विष तीक्ष्ण खड्ग वज्र ( अग्नि ) और अग्नि के समान शीघ्र फैलकर आशुकारी होता है । और क्षणमात्र में की गई उपेक्षा से व्यक्ति को मार डालता है।

उसे कुछ वात करने का समय भी नहीं मिलता सर्पदष्ट व्यक्ति के कहे गए सभी लक्षण तीन प्रकार के होते हैं /

इनका वर्णन किया जाएगा तो आतुर के लिए हितकर है तथा चिकित्सक के लिए सन्देह रहित हैं।

इसी में सभी प्रकार के सर्पों के दंश के लक्षणों में समावेश हो जाता है।

### दर्वीकर सर्पदंश के लक्षण

- **आचार्य सुश्रुत के अनुसार**

त्वचा, आँखे, नाखून, दाँत, मुख, मूत्र, पुरीष, और दंश का रंग कृष्ण वर्ण का हो जाता है।

शरीर में रुक्षता (dryness) हो जाती है।

सिर में भारीपन (heaviness) हो जाता है।

सन्धियों में वेदना (Arthalgia) होता है।

कमर, पीठ और ग्रीवा में दुर्बलता (weakness)

जम्भाइयाँ आना (yawning)

स्वरभंग (hoarseness of voice) हो जाता है।

शरीर में जकड़ाहट (stiffness) हो जाती है।

कास (cough) हो जाता है।

श्वास (dyspnea) हो जाता है।

तृष्णा (thirst)

लालास्त्राव (salivation)

मुख से झाग आने लगते हैं (froathing oral cavity).

स्त्रोतो का अवरोध हो जाता है (Obstruction in channel).

तोदन, भेदन आदि वात वेदनाएँ(numerous type of pain).

### मण्डली सर्प दंश के लक्षण

i.आदि का रंग पीला पड़ना(yellowish discoloration skin).

ii.ठण्डी वस्तुओं की अभिलाषा (craving for cold food).

iii.सारे शरीर में जलन (burning sensation in body).

iv.दाह होना (cocaline burning)

v. तृष्णा (thirst).

vi. मद (intoxication).

vii. मूर्च्छा (fainting).

viii .ज्वर (hyperpyrexia).

ix. रोगी को सभी वस्तुएँ पीली नज़र आती हैं।

शीघ्र क्रोध आता है।

### राजिमान सर्पदंश के लक्षण

i .त्वचा आदि का रंग सफेद पड जाना(white discoloration).

ii.ठण्ड लगाकर ज्वर आना (fever with chills).

iii .रोमाञ्च (hoerripilation)

iv. स्तब्धता (stiffness).

v. दंशस्थान पर सूजन

vi. वमन (vomiting) .

vii. आँखों में बार - बार कण्डु होना।

viii. अन्धकार होना।

ix. कण्डु आदि श्लेष्मिक वेदनाएँ होती हैं।

### आचार्य वृद्धवाग्भट के अनुसार सर्पदंश के लक्षण

दंश स्थान कछुए की पीठ के समान ऊपर को उठा हुआ काला, रुक्ष और वष्ट्राओं के सूक्ष्म चिह्नों से युक्त होता है।

त्वचा, नख, नैत्र, दाँत, मूत्र सभी काले पड़ जाते हैं।

रुक्षता, सिर में भारीपन, सान्धियों में वेदना, कटि पृष्ठ और ग्रीवा में दुर्बलता, जम्भाई, कम्पन्न, स्वरभंग गले में घुरघुराहट, जड़ता सूखे उद्गार होते हैं।

कास, श्वास, हिचकियाँ उर्ध्ववात शुल ऐंठन प्यास लालास्राव मूँह से फेन आना स्रोतों का अवरोध और वातजन्य अन्य प्रकार की वेदनाएँ होती हैं।

## मण्डली सर्पदंश के लक्षण

दंश स्थान पीले, लाल वर्ण वाला कुछ सूजा चपटा और फेलने वाली सूजन दाह ओष क्लेद से युक्त सडने वाला होता है।

मुख नेत्र मल मूत्र नख तथा दाँत पीले पड जाते हैं।

प्यास थकान चक्कर आना दाह मूर्च्छा ज्वर मुख में तिक्तता सभी चीजों का पीला दिखाई देना।

मुख, नाक, कान, मूत्रमार्ग तथा गुदद्वार से रक्तस्राव शीत की चाह धुएं के उद्गार और मद के लक्षण होते हैं।

विष शीघ्रता से फैलता है तथा अन्य पित्तजन्य लक्षण भी दिखलाई पड़ते हैं।

## राजीमान सर्पदंश के लक्षण

दंशस्थान, चिकना, स्थिर, पिच्छिल और शोफयुक्त होता है।

इसमें रक्त घट्ट ठण्डा और पाण्डुवर्ण का होता है।

सिरदर्द, वमन, अरुचि, आलस्य, जी मिचलाना, मुख में मधुरता, कण्ठ में घुरघुराहट, गले का जकडना।

आँखों में कण्डु शीतज्वर, श्वासावरोध, निद्रा, कास, नख, मल, मूत्र, त्वचा, तथा आँखों में सफेदी जड़ता अंगों में भारीपन, नासिका, मुख और आँखों से स्राव।

रोमांच, तमकश्वास, तथा कफजन्य अन्य लक्षण प्रकट होते हैं।

# अजगर सर्प

## अजगर सर्प का वर्णन

अजगर एक विशाल शरीर वाला सर्प है। यह विषहीन सर्प होता है।

इसका रंग भूरे रंग का होता है।

### स्वरूप

इसका शरीर भारी और बड़ा होता है।

यह भारी शरीर होने के कारण मन्द गति वाले होते हैं।

भारी शरीर तथा मन्द गति वाले होने के कारण यह मण्डली सर्पों के समान होते हैं।

रंग के आधार पर भूरे और चित्रित रेखा युक्त होने के कारण इनको मण्डली और दर्वीकर सर्प के समान माना जाता है।

## लक्षणों के आधार पर अजगर

अजगर के दंश करने पर दंश स्थान पर लालिमा, सूजन हो जाती है।

वमन - राजिमान सर्पों के समान होता है

श्वास अवरोध राजिमान सर्पों के समान लक्षण होता है।

मद तथा मूर्च्छा मण्डली सर्पों के लक्षण के समान होता है।

● **COMPARATIVE STUDY OF PYTHON AND AYURVEDA SNAKE**

<b>PYTHON NAME</b>	<b>ACC.TO MODERN</b>	<b>ACC. TO AYURVEDA</b>
<b>Ball python</b>	Black	मण्डली सर्प
<b>Children python</b>	Red brown with dark spot	नपुंसक सर्प
<b>spotted Python</b>	Dark brown with irregular spot	मण्डली सर्प
<b>Reticulated python</b>	Diamond shape pattern	दर्वीकर सर्प
<b>Burmese python</b>	Tan color with dark blotches	दर्वीकर सर्प
<b>Carpet python</b>	Brown skin with cream blotches rocky cervics	मण्डली सर्प
<b>Green tree python</b>	Diamond shape head with irregular shape	दर्वीकर सर्प
<b>woma python</b>	Brown with patches	राजिमान सर्प
<b>D'Albertis python</b>	Brown -violet or blue black with white labial sacules	राजिमान सर्प
<b>black headed Python</b>	Black hood that entire cranium	राजिमान सर्प
<b>Amethystine Python</b>	Brick red	वैश्य सर्प
<b>Pygmy python</b>	Reddish brown head	नपुंसक सर्प
<b>Water Python</b>	Dark blackish brown	वैश्य सर्प (वाग्भट ) नपुंसक सर्प ( आ. सुश्रुत )
<b>Timor python</b>	Green brown	नपुंसक सर्प
<b>African rock python</b>	Brownish grey	मण्डली सर्प
<b>Black tailed python</b>	Light brown patches	राजिमान सर्प
<b>Papuan spotted python</b>	Brown with irregular spot along its back	मण्डली सर्प
<b>Stimson's python</b>	Light brown, irregular patch	मण्डली सर्प



<b>Papuan olive python</b>	Olive green with lighter flanks and belly	शुद्र सर्प
<b>Ramsay's python</b>	Brown, black body with brown patches	मण्डली सर्प
<b>Bismarck ringed python</b>	Orange - brown to black head	मण्डली सर्प
<b>Karimui basin white – lipped python</b>	Black head	ब्राह्मण सर्प

## ● Reference

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