

AN ATTEMPT TO DECIDE THE SPECIES OF KITA, DESCRIBED IN SUSHRUTA SAMHITA KALP STHAN (KITA KALPA) IN TERMS OF MODERN TAXONOMY

Ajay Kumar^{1*}, Santosh Kumar Vishwakarma² and Jai Kumar Singh³

Post Graduate Scholar¹, Asst. Prof.², Professor & H.O.D³

Agada Tantra Evam Vidhi Vaidyaka, Government Ayurvedic
College, Patna, Bihar, India

Article Received on
10 August 2021,

Revised on 30 August 2021,
Accepted on 20 Sept. 2021

DOI: 10.20959/wjpr202112-21852

*Corresponding Author

Dr. Ajay Kumar

Post Graduate Scholar
Agada Tantra Evam Vidhi
Vaidyaka, Government
Ayurvedic College, Patna,
Bihar, India.

ABSTRACT

Insect bite is serious public health problem worldwide beyond age barrier. With increasing use of traditional and complementary medicine or line of treatments, we fulfill the need of public health issues. This study was designed to re-identify the small animal or kita described in Sushruta Samhita Kalp Asthan (Kita Kalpa). This study was done on the basis of comparative study of information given in classical text and information present on internet search engine. Conclusively, knowledge of texon or zoological name of kita which present in this age must be identified so that the treatment described in classical text can be used in related insect bite. Hence, re-identification of kita in term of modern taxonomy is very essential for entire world.

KEYWORDS: Insect, *kita*, *kita kalpa*, classical text, taxonomy, identification.

INTRODUCTION

The word “*kita*” simply means insects, further in zoology referred to an arthropod. In the *kita kalpa* context *kita* comprises the small body animals originated from seminal fluid, excreta, rotten body, and broken eggs of snake and have a potency to produce toxic effect if their toxins get administered to human beings (etc). But there is a very deep gap in ancient classical text and contemporary text as most of the *kita* described in classics are not taxonomically established. It is very difficult to understand those terms because they are described in very brief. Further the process of evolution, mutation, extinction etc, also played their part, and made their identification more difficult. But whatever species present in this

age must be identified so that the treatment described in classical text can be used in related insect bite. Hence, this is an attempt to identify those species in the benefit of mankind.

The basis of the identification is the information given in classical text *Sushruta Samhita Kalpa Sthan (Kita Kalpa)*.

MATERIALS AND METHOD

This work is done on the basis of information given in classical text *Sushruta Samhita, Kalp Sthan (Kita Kalpa)* and different online site on Google search engine.

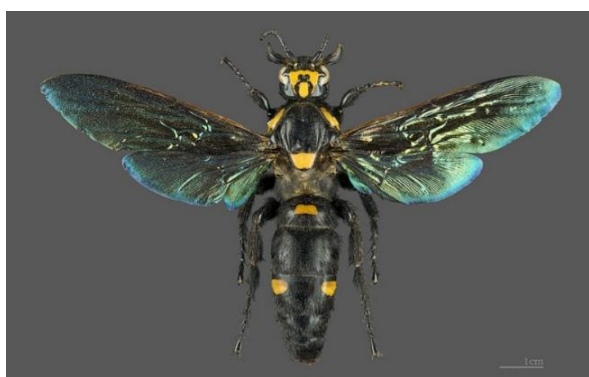
Study framework

According to *Acharya Sushruta*, there are majorly four types of *kita* (insect) present at that time on the basis of *dosha*. *Vataja-18, pittaja-24, kaphaja-13, sanipataja-12*. Also, he describes 100 other *kita* in their classification, contemporary known as genus level classification i.e as follows- *Kadambha-4, Vishakhopara-5, Galgolika-7, Gozar-8, Manduk-8, Pipilika (ant)-6, Makshika (fly)-6, Masak (mosquito)-5, Vrishchika (scorpion)-30, Luta (spider)- 16, Vishwambhra-1, Ahinduka-1, Kandumaka-1, Shukvrinta-1*.

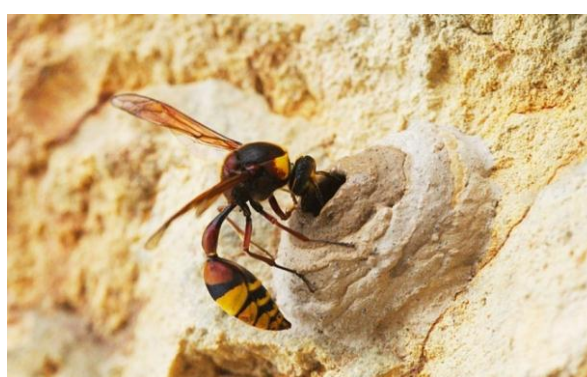
We try to identify the classical *kita* in term of modern taxonomy in this study.

Table 1: Kadabha (Wasp) Kingdom-Animalia, Phylum-Arthropoda, class- Insecta, order- Hymenoptera.

No	Classical name	Probable zoological name	Family	Picture reference
1	<i>Trikanta</i>			
2	<i>Karini</i>			
3	<i>Hastikaksha</i>	<i>Megascolia procer</i>	Athophila dae	https://en.wikipedia.org/wiki/Megascolia_procer
4	<i>Aparajita</i>	<i>Sceliphron caementarium</i>	Vespidea	https://www.researchgate.net/publication/316683383



3



4

Table 2: Vishakhopara (Monitor lizards) Kingdom- Animalia, Phylum- Chordata, Class-Reptilia.

No.	Classical name	Probable zoological name	Family	Picture & reference
1	<i>Pratisuryaka</i>	<i>Calotes calotes</i>	Agamidae	http://reptiledatabase.reptarium.cz/species?genus=Calotes&species=calotes
2	<i>Pingabhasa</i>			
3	<i>Bahu varna</i>	<i>Agama agama</i>	Agamidae	http://www.reptileknowledge.com/squamata/agamidae.php
4	<i>Nirupam</i>			
5	<i>Godheraka</i>	<i>Namazonurus peersi</i>	Agamidea	https://nextgenherpetologist.co.za/2018/03/10/peers-girdled-lizard-namazonurus-peersi/



1



3



5

Table 3: Galgolika Kingdom-Animalia, Phylum-Chordata, Class-Reptilia, Order-Squamata.

No.	Classical name	Probable zoological name	Family	Picture & Reference
1	<i>Sweta</i>	<i>Hemidactylus frenatus</i>	Gekkonidae	http://reptile-database.reptarium.cz/species?genus=Hemidactylus&species=frenatus
2	<i>Krishna</i>	<i>Heloderma charlesbogerti</i>	Helodermatidae	https://www.biolib.cz/en/image/id212913/
3	<i>Rakhtaraji</i>	<i>Leiocephalus personatus</i>	Agamidae	https://www.flickr.com/photos/12639178@N07/16004989195
4	<i>Sarwa sweta</i>			
5	<i>Sarshapika</i>	<i>Anguis fragilis</i>	Anguillidae	https://www.flickr.com/photos/126237772@N07/17497697514
6	<i>Rakhta mandala</i>	<i>Agama mwanzae</i>	Helodermatidae	https://www.dreamstime.com/photo-images/carnivore-lizard.html



Table 4: Gozar Kingdom-Animalia, Phylum- Arthropoda, Class- Chilopoda, Order- Scutigermorpha.

No.	Classical name	Probable zoological name	Family	Picture & Reference
1	<i>Parusha</i>			
2	<i>Krishna</i>	<i>Scolopendra gigantea/galapagoensis</i>	Scutigeridae	https://lost-tapes-fanon.fandom.com/wiki/Death_Crawler
3	<i>Chitra</i>	<i>Allothoreua maculate</i>	Scutigeridae	http://bugoftheweek.com/blog/2019/11/18/bug-in-the-bathtub-nah-house-centipede-scutigera-coleoprata
4	<i>Kapila</i>	<i>Scolopendra spinipriva</i>	Scutigeridae	https://www.flickr.com/photos/pedrohmartins/9518754457/in/album-72157633717687493/
5	<i>Pitika</i>	<i>Tygarrup javanicus</i> Order-Geophilomorpha	Family:Mecistocephalidae	https://en.m.wikipedia.org/wiki/Mecistocephalidae
6	<i>Rakhta</i>	<i>Cryptops hortensis</i>	Cryptopidae	https://en.wikipedia.org/wiki/Cryptops_hortensis
7	<i>Sweta</i>	<i>Scutigrella immaculate</i> Class-symphyla	Family-scutigerellidae	Unexplored
8	<i>Agniprabha</i>	<i>Scolopendra cingulata</i>	Scutigeridae	https://en.wikipedia.org/wiki/Scolopendra_cingulata



Table 5: Mendhaka (Frog) Kingdom-Animalia, Phylum- Chordata, Class-Amphibia, Order-Anura, Clade-Hyloidea.

No.	Classical name	Probable zoological name	family	Picture
1	<i>Krishana</i>	<i>Ameerega trivittata</i>	Dendrobatoidea	https://en.wikipedia.org/wiki/Ameerega

2	Sara	<i>Colostethus fraterdanieli</i>	Dendrobatoidea	https://commons.wikimedia.org/wiki/Category:Colostethus_fraterdanieli
3	Kuhuka			
4	Harita	<i>Ranitomeya ventrimaculata</i>	Dendrobatoidea	https://www.revolvy.com/index.html
5	Rakhta	<i>Oophaga pumilia</i>	Dendrobatoidea	https://en.wikipedia.org/wiki/Oophaga
6	Yawavarna	<i>Phylllobates terribilis</i>	Dendrobatoidea	https://commons.wikimedia.org/wiki/Category:Phylllobates_terribilis
7	Bhrikuti			
8	Kotika			

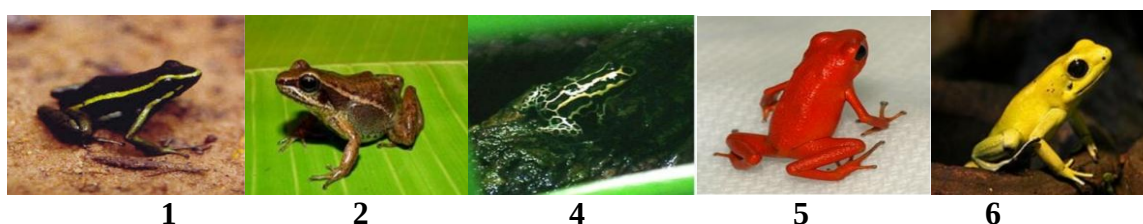


Table 6: Pipilika (ant) Kingdom-Animalia, Phylum- Arthropoda, Class- Insecta, Order- Hymenoptera.

No .	Classical name	Probable zoological name	family	Picture & reference
1	Samvahika	<i>Camponotus pennsylvanicus</i>	formicidae	https://www.alamy.com/stock-photo-a-queen-black-carpenter-ant-camponotus-pennsylvanicus-perches-on-a-48277125.html
2	<i>Sthula shirsha</i>	<i>Pheidole megacephala</i>	Formicidae	https://alchetron.com/Pheidole-megacephala
3	Brahmnika			
4	Angulika	<i>Paraponera clavata</i>	Formicidae	https://en.wikipedia.org/wiki/Paraponera_clavata
5	Kapilika	<i>Pogonomyrmex barbatus</i>	Formicidae	https://www.tumblr.com/search/pogonomyrmex%20barbatus
6	Chitra varna	<i>Harpegnathos saltator</i>	formicidae	https://en.wikipedia.org/wiki/Harpegnathos_saltator



Table 7: Makshika (fly) Kingdom-Animalia, Phylum- Arthropoda, Class- Insecta, Order-Diptera.

No.	Classical name	Probable zoological name	Order	Picture & Reference
1	<i>Kantarika</i>		Diptera	
2	<i>Krishna</i>			
3	<i>Pingala</i>	<i>Polistes olivaceus</i>	Diptera	http://macroid.ru/showcat.php?action=last_added&cat=15684&lang=en
4	<i>Madhulika</i>	<i>Syrphus ribesii</i>	Diptera	http://www.raywilsonbirdphotography.co.uk/Galleries/Invertebrates/Diptera/Syrphidae/Syrphus_ribesii.html
5	<i>Kashayi</i>			
6	<i>Sthalika</i>			



3



4

Table 8: Mashak (Mosquito) Kingdom-Animalia, Phylum-Arthropoda, Class-Insecta, Order-Diptera, Family.

No.	Classical name	Probable zoological name	Family	Picture & Reference
1	<i>Samudra</i>			
2	<i>Parimandala</i>	<i>Culiseta longiareolata</i>	Culicidae	https://en.wikipedia.org/wiki/Culiseta_longiareolata
3	<i>Hastimashaka</i>	<i>Toxorhynchites speciosus</i>	Culicidae	https://en.wikipedia.org/wiki/Toxorhynchites
4	<i>Krishna</i>	<i>Aedes aegypti</i>	Culicidae	https://en.wikipedia.org/wiki/Aedes_aegypti
5	<i>Parwatiye</i>			

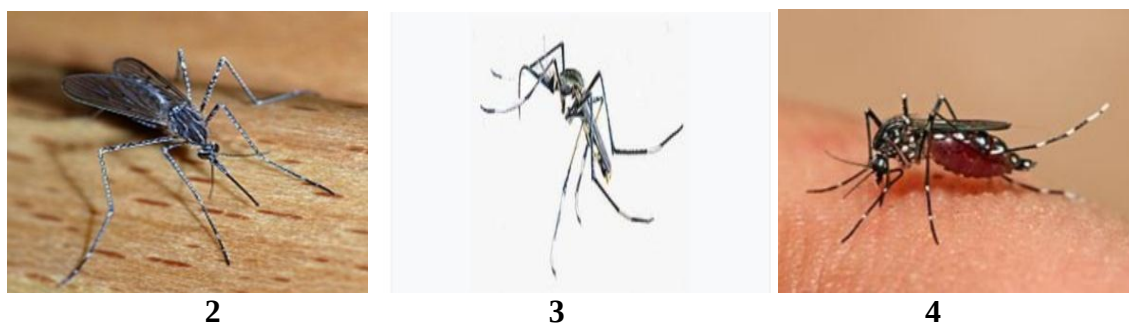
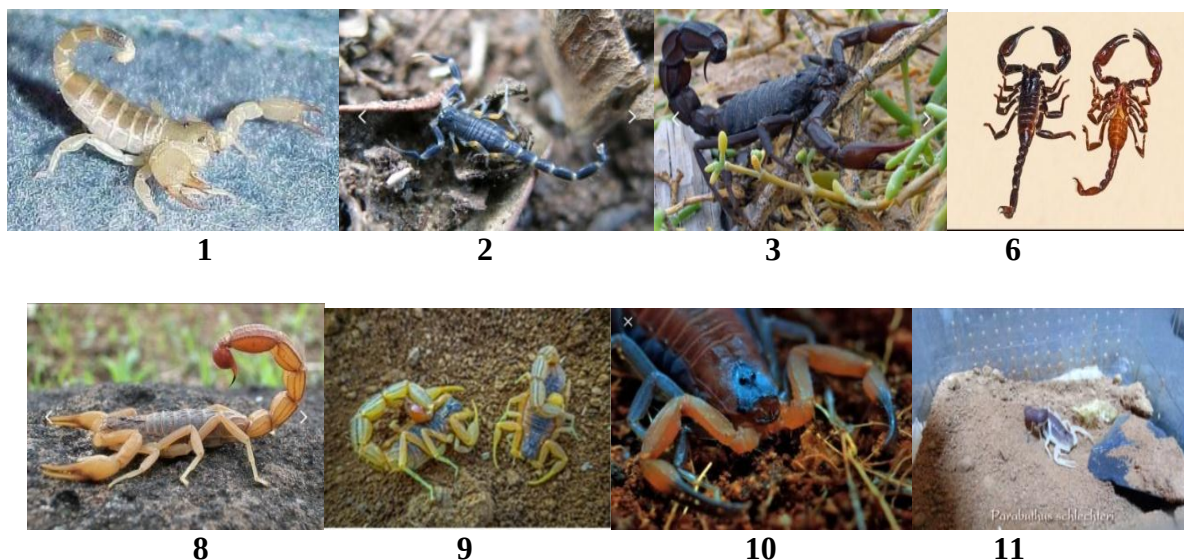


Table 9: Vrishchika (Scorpion) Kingdom-Animalia, Phylum-Arthropoda, Class-Arachnida, Order-Scorpiones Highly Poisonous.

No.	Classical name	Probable zoological name	Family	picture reference
1	Sweta	<i>Neobuthus erigavoensis</i>	Buthidea	https://www.revolvvy.com/index.html
2	Chitra	<i>Uroplectes flavoviridis</i>	Buthidea	https://en.wikipedia.org/wiki/Uroplectes
3	Shyamala	<i>Androctonus crassicauda</i>	Buthidea	https://simple.wikipedia.org/wiki/Fattail_scorpion
4	Lohitabha			
5	Rakktasweta			
6	Rakktodra	<i>Heterometrus longimonus</i>	Scorpionoidea	http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.581.2763&rep1&type=pdf
7	Nilodra			
8	Pittarakkta	<i>Hattentotta tumulus</i>	Buthidae(mangao n)	https://en.wikipedia.org/wiki/Hottentotta_tamulus
9	Nilapita	<i>Hottentatta tumulus</i>	Buthidae(satara)	https://en.wikipedia.org/wiki/Hottentotta_tamulus#/media/File:Hottentotta_tamulus.jpg
10	Rakktanila	<i>Rhopaiurus junceus</i>	Buthidae	https://www.flickr.com/photos/_papilio/8428169997/
11	Nilasweta	<i>Parabuthus schlechteri</i>	Scorpionoidea	http://www.paraecologist.org/index.php?title=Reginald_Christiaan_Scorpions
12	Rakktababhru			
13	Punchh(parwarahita)			
14	Punchh(ekparwa)			
15	Punchh(doparwa)			

**Moderate poisonous**

No.	Classical name	Probable zoological name	Family	Picture Reference
1	<i>Rakhta</i>	Hottentotta tumulus	Buthidae	https://www.dreamstime.com/photos-images/hottentotta.html
2	<i>Pita</i>	Hadrurus arizonensis	Caraboctonidae	https://www.shutterstock.com/search/cara-boctonidae
3	<i>Kapila</i>	Odonturus dentatus	Buthidae	https://alchetron.com/Babycurus

**Mild Poisonous**

No.	Classical name	Probable zoological name	Family	picture Reference
1	<i>Krishna</i>	<i>Heterometrus laoticus</i>	Scorpionidae	https://alchetron.com/Heterometrus
2	<i>Shyawa</i>			
3	<i>Karbura</i>			
4	<i>Pandu varna</i>	<i>Neobuthus erigavoensis</i>	Buthidae	https://en.wikipedia.org/wiki/Neobuthus_erigavoensis
5	<i>Gomutrabha</i>	<i>Leiurus</i>	Buthidae	https://en.wikipedia.org/w

		<i>quinguestriatus</i>		iki/Deathstalker
6	<i>Karkasha</i>	<i>Hadrurus arizonensis/spadix</i>	Caraboctonidae	https://www.dreamstime.com/photosimages/scorpionidae.html
7	<i>Mechaka</i>			
8	<i>Pita(pila)</i>	<i>Tityus serrulatus</i>	Buthidae	https://www.flickr.com/photos/jose_roberto_peruca/22768698194
9	<i>Dhumavarna</i>			
10	<i>Romash</i>	<i>Hadrurus arizonensis/spadix</i>	Caraboctonidae	https://www.flickr.com/photos/jose_roberto_peruca/22768698194
11	<i>Shaddhalabha</i>			
12	<i>Rakhta</i>			



1



4



5



6



8



10

CONCLUSION

This work is a step in the course of identifying and establishing the contemporary knowledge of the small animal described in *Sushruta Samhita Kalp Sthan (kita kalpa)*. This work may prove to be significant because it may render the treatment given in classical text useful in the management of *kita dansha* as we can't use the line of treatment given in the classical text without identify the *kita*. This work is an initial attempt and might contain many errors but are tried to keep the least as per my knowledge and effort. Further work can improve the knowledge of *kita* for the benefit of mankind.

ACKNOWLEDGEMENT

The present article entitled “an attempt to decide the species of *kita*, described in *sushruta samhita kalp sthan (kita kalpa)* in terms of modern taxonomy” is outcome of the efforts put up by the teachers of department of *Agadatantra*, G.A.C.H patna-3. I am very thankful to my respected teachers & batch met for their support.

REFERENCES

1. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary edited by Vaidya Yadavji Trikamji Acharya, Chaukhamba Orientalia, Varanasi, 2007.
2. Sharma Priyavrat, Susruta Samhita, Reprint. Varanasi: Chaukhamba Visvabharati. *kita kalpa*, 2005.
3. Murthy K R; Astanga Sangraha, Varanasi; Chaukhamba Sanskrita Samsthana.
4. Sharma Ram Karan, Dash Bhagwan. Charaka Samhita with Ayurveda Dipika Commentary. Varanasi; Choukamba Krishnadas Academy.
5. Murthy K R; Astanga Hridaya, Chaukhambha Orientalia Varanasi.
6. Murthy Srikantha K.R., Astanga Hridaya, Varanasi; Chaukhamba Sanskrit Series.
7. Sharma Priyavrat, Susruta samhita, Reprint. Varanasi: Chaukhamba Visvabharati, 2005.
8. Murthy K R; Astanga Hridaya, Chaukhamba Sanskrita Samsthana, Varanasi.
9. Dalhan Acharya, Sushuts Samahita With Nibandhasangrha Commentary Edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Surbharti Prakashan Varansi, 2012.
10. Shastri Ambikadutta Susruta Samhita Edited with Ayurveda-Tattva-Sandipika. Chaukhambha Sanskrit Sansthan, Varanasi, 2015.