

# Fauna of Mallikarjun and Santoshgiri Hills, Sangli District, Maharashtra, India

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**Abstract:-** Present study was undertaken to survey of fauna carried out in selected area of Mallikarjun and Santoshgiri hills, Sangli District, Maharashtra during May 2016 to December 2019. The hilly area lies between 16<sup>o</sup>,95' latitude and 74<sup>o</sup>, 30' longitude. During survey we reported 111 species of birds from 50 families, 70 species of butterflies from 6 families, 6 species of moths from 3 families, 17 species of snakes from 6 families, 4 species of lizards from 2 families and 2 species of gecko from 1 family.

**Keywords:-** Fauna, Mallikarjun and Santoshgiri Hills.

## I. INTRODUCTION

The study area comprises 14-15 kilometer. It is located near Yede-Nipani, a small village. There are mainly three ways to go to Mallikarjun.

## II. MATERIALS AND METHODS

### ➤ Study Area



Fig 1:- Mallikarjun Hills and Surrounding Area

Mallikarjun hill is famous for the historic Mallika temple of Lord Shiva. Mallikarjun hill is also called as “Vilasad” or “Balekilla.”

On the top of this hill there is Bavardin Chan Bukhari Darga. People visit there only for philotheism and enjoying the nature.

And Santoshgiri hill is famous for Santoshgiri temple. Both the hills are joined with each other. Distance between two hills is 3.5 Km. Approximate 30-40 Km around this hill there is no any other hill. These two hills which are located at centre fulfilled with biodiversity. From May 2016, in different season we recorded so many species of birds, butterflies and reptiles which are represented in checklist.

Present study area lies between 16<sup>o</sup>,95' 59.50" and 74<sup>o</sup>, 30' 24.51" elevation, having a total area of 14-15 Km with rich flora and fauna. Mallikarjun and Santoshgiri hills having moderate climate with three different seasons viz. the manson, winter, and summer . The average rainfall from last three years 56-65. The temperature ranges between 25<sup>o</sup>C-40<sup>o</sup>C. Most of the soil in studied area is black and reddish brown type. This survey conducted from May 2016 to December 2019. The conducted survey was done by field observation, walking across small roads, turning rocks, collecting some plant specimen and by taking phtographs for record and identification.

➤ Survey

• Birds

Around this hill there are agricultural lands and small villages.. There are different types of plant, hurbs and shrubs which is habitat of different types of birds. Sometimes residential migratory birds are also found there.

Sr.no	Species	Scientific Nmae	Family
1.	Asian paradise flycatcher	<i>Terpsiphone paradise</i>	Monarchidae
2.	Ashy prinia	<i>Prinia socialis</i>	Cisticolidae
3.	Ashy crowned finch lark	<i>Eremopterix griseus</i>	Alaudidae
4.	Asian koel	<i>Eudynamys scolopaceus</i>	Cuculidae
5.	Barn owl	<i>Tyto alba</i>	Tytonidae
6.	Black breasted weaver	<i>Ploceus benghalensis</i>	Ploceidae
7.	Baya weaver	<i>Ploceus philippinus</i>	Ploceidae
8.	Black kite	<i>Milvus migrans</i>	Acciptridae
9.	Black shouldered kite	<i>Elanus axillaris</i>	Acciptridae
10.	Brahminy kite	<i>Haliastur Indus</i>	Acciptridae
11.	Bonellis eagle	<i>Aquila fasciata</i>	Acciptridae
12.	Black drongo	<i>Dicrurus macrocercus</i>	Dicruridae
13.	Brahminy starling	<i>Sturnia pagodarum</i>	Sturnidae
14.	Booted warbler	<i>Iduna caligata</i>	Acrocephalidae
15.	Bluethroat stonechat	<i>Saxicola rubetra</i>	Muscicapidae
16.	Blue rockthrush	<i>Monticola solitaries</i>	Muscicapidae
17.	Brown shrike	<i>Lanius cristatus</i>	Laniidae
18.	Cattle egret	<i>Bubulcus ibis</i>	Ardeidae
19.	Common crow	<i>Corvus brachyrhynchos</i>	Corvidae
20.	Common hawk cuckoo	<i>Hierococcyx varius</i>	Cuculidae
21.	Common wood shrike	<i>Tephrodornis pondicerianus</i>	Vangidae
22.	Common stonechat	<i>Saxicola torquatus</i>	Muscicapidae
23.	Common hoopoe	<i>Upupa</i>	Upupidae
24.	Common iora	<i>Aegithina tiphia</i>	Aegithinidae
25.	Common myna	<i>Acridotheres tristis</i>	Sturnidae
26.	Common kingfisher	<i>Alcedo atthis</i>	Alcedinidae
27.	Copper smith barbet	<i>Psilopogon haemacephalus</i>	Megalaimidae
28.	Crested bunting	<i>Emberiza lathamii</i>	Emberizidae
29.	Dusky crag martin	<i>Ptyonoprogne concolor</i>	Hirundinidae
30.	Eurasian collard dove	<i>Streptopelia decaocto</i>	Columbidae
31.	Eurasian coot	<i>Fulica atra</i>	Rallidae
32.	Grey francolin	<i>Francolinus pondicerianus</i>	Phasianidae
33.	Greater coucal	<i>Centropus sinensis</i>	Cuculidae
34.	Great tit	<i>Parus major</i>	Paridae
35.	Green bee eater	<i>Merops orientalis</i>	Meropidae
36.	Green sandpiper	<i>Tringa ochropus</i>	Scolopacidae
37.	Golden fronted leafbird	<i>Chloropsis aurifrons</i>	Chloropseidae
38.	Golden backed woodpecker	<i>Dinopium benghalense</i>	Picidae
39.	House crow	<i>Corvus splendens</i>	Corvidae
40.	Indian eagle owl	<i>Bubo bengalensis</i>	Strigidae
41.	Indian roller	<i>Coracias benghalensis</i>	Coraciidae
42.	Indian golden oriole	<i>Oriolus kundoo</i>	Oriolidae
43.	Indian robin	<i>Copsychus fulicatus</i>	Muscicapidae
44.	Indian liitle nightjar	<i>Caprimulgus asiaticus</i>	Caprimulgidae
45.	Indian silverbill	<i>Euodice malabarica</i>	Estrildidae
46.	Indian pond heron	<i>Ardeola grayii</i>	Ardeidae

47.	Jungle crow	<i>Corvus macrorhynchos</i>	Corvidae
48.	Jerdons nightjar	<i>Caprimulgus atripennis</i>	Caprimulgidae
49.	Jacobian cuckoo	<i>Clamator jacobinus</i>	Cuculidae
50.	Jungle babbler	<i>Argya striata</i>	Leiothrichidae
51.	Jungle myna	<i>Acridotheres fuscus</i>	Sturnidae
52.	Jungle quail	<i>Perdica asiatica</i>	Phasianidae
53.	Little egret	<i>Egretta garzetta</i>	Ardeidae
54.	Little cormorant	<i>Phalacrocorax niger</i>	Phalacrocoracidae
55.	Laughing dove	<i>Spilopelia senegalensis</i>	Columbidae
56.	Large grey babbler	<i>Turdoides plebejus</i>	Leiothrichidae
57.	Long tailed shrike	<i>Lanius schach</i>	Laniidae
58.	Large cuckooshrike	<i>Coracina macei</i>	Campephagidae
59.	Long billed pipit	<i>Anthus similis</i>	Motacillidae
60.	Marshalls iora	<i>Aegithina nigrolutea</i>	Aegithinidae
61.	Magpie robin	<i>Copsychus saularis</i>	Muscicapidae
62.	Night heron	<i>Nycticorax nycticorax</i>	Ardeidae
63.	Oriental white eye	<i>Zosterops palpebrosus</i>	Zosteropidae
64.	Purple rumped sunbird	<i>Leptocoma zeylonica</i>	Nectariniidae
65.	Purple sunbird	<i>Cinnyris asiaticus</i>	Nectarinnidae
66.	Painted francolin	<i>Francolinus pictus</i>	Phasianidae
67.	Paddy field pipit	<i>Anthus rufulus</i>	Motacillidae
68.	Plain prinia	<i>Prinia inornata</i>	Cisticolidae
69.	Plum headed parakeet	<i>Psittacula cyanocephala</i>	Psittaculidae
70.	Pied bush chat	<i>Saxicola caprata</i>	Muscicapidae
71.	Pecock	<i>Peafowl</i>	Phasianidae
72.	Purple swamphen	<i>Porphyrio porphyrio</i>	Rallidae
73.	Rock bush quail	<i>Perdica argoondah</i>	Phasianidae
74.	Rufous tailed lark	<i>Ammomanes phoenicura</i>	Alaudidae
75.	Red rumped swallow	<i>Cecropis daurica</i>	Hirundiniidae
76.	Red vented bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae
77.	Red wattled lapwing	<i>Vanellus indicus</i>	Charadriidae
78.	Red avadavat	<i>Amandava amandava</i>	Estrildidae
79.	Red naped ibis	<i>Pseudibis papillosa</i>	Threskiornithidae
80.	Rose ringed parakeet	<i>Psittacula krameri</i>	Psittaculidae
81.	Red throated pipit	<i>Anthus cervinus</i>	Motacillidae
82.	Rufous treepie	<i>Dendrocitta vagabunda</i>	Corvidae
83.	Shikra	<i>Accipiter badius</i>	Accipitridae
84.	Scaly breasted munia	<i>Lonchura punctulata</i>	Estrildidae
85.	Sykes's lark	<i>Galerida deva</i>	Alaudidae
86.	Small minivet	<i>Pericrocotus cinnamomeus</i>	Campephagidae
87.	Spotted dove	<i>Spilopelia chinensis</i>	Columbidae
88.	Spotbill duck	<i>Anas poecilorhyncha</i>	Anatidae
89.	Spotted owlet	<i>Athene brama</i>	Strigidae
90.	Southern grey shrike	<i>Lanius meridionalis</i>	Laniidae
91.	Siberian stonechat	<i>Saxicola maurus</i>	Muscicapidae
92.	Tailor bird	<i>Orthotomus</i>	Cisticolidae
93.	Tricoloured munia	<i>Lonchura Malacca</i>	Estrildidae
94.	Vernal hanging parrot	<i>Loriculus vernalis</i>	Psittaculidae
95.	Wire tailed swallow	<i>Hirundo smithii</i>	Hirundinidae
96.	White throated kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae
97.	White rumped munia	<i>Lonchura striata</i>	Estrildidae
98.	White wagtail	<i>Motacilla alba</i>	Motacillidae
99.	White browed wagtail	<i>Motacilla maderaspatensis</i>	Motacillidae
100.	Western yellow wagtail	<i>Motacilla flava</i>	Motacillidae
101.	White browed bulbul	<i>Pycnonotus luteolus</i>	Pycnonotidae
102.	White breasted waterhen	<i>Amaurornis phoenicurus</i>	Rallidae
103.	White throated faintail	<i>Rhipidura albicollis</i>	Rhipiduridae
104.	White browed faintail	<i>Rhipidura aureola</i>	Rhipiduridae

105.	White bellied minivet	<i>Pericrocotus erythropygius</i>	Campephagidae
106.	Woolly necked stork	<i>Ciconia episcopus</i>	Ciconiidae
107.	Wood sandpiper	<i>Tringa glareola</i>	Scolopacidae
108.	Yellow eyed babbler	<i>Chrysomma sinense</i>	Sylviidae
109.	Yellow billed babbler	<i>Argya affinis</i>	Leiotherichidae
110.	Yellow footed green pigeon	<i>Treron phoenicoptera</i>	Columbidae
111.	Yellow throated sparrow	<i>Gymnoris xanthocollis</i>	Passeridae

Table 1:- Checklist of Birds found in Mallikarjun and Santoshgiri Hills

- *Butterflies*

On the hill there are so many plants such as *Capparis zeylanica*, *Butea monosperma*, *Barleria sp.*, *Gliricidia sepium*, *Lanata camara*, *Passiflora foetida* which are host and nectar plant of different species of butterflies.

Sr. no	Species	Scientific name	Family
1.	Angled castor	<i>Ariadne ariadne</i>	Nymphalidae
2.	Blue pansy	<i>Junonia orithya</i>	Nymphalidae
3.	Blue tiger	<i>Tirumala limniace</i>	Nymphalidae
4.	Brown king crow	<i>Euploea klugii</i>	Nymphalidae
5.	Quaker	<i>Neopithecops zalmora</i>	Lycaenids
6.	Common sailer	<i>Neptis hylas</i>	Nymphalidae
7.	Chestnut streaked sailer	<i>Neptis jumbah</i>	Nymphalidae
8.	Chestnut bob	<i>Lambrix salsala</i>	Hesperiidae
9.	Chestnut angle	<i>Odontoptilum angulata</i>	Hesperiidae
10.	Chocolate pansy	<i>Junonia iphita</i>	Nymphalidae
11.	Common emigrant	<i>Catopsilia Pomona</i>	Pieridae
12.	Common castor	<i>Ariadne merione</i>	Nymphalidae
13.	Common evening brown	<i>Melanatis leda</i>	Nymphalidae
14.	Common grass yellow	<i>Eurema hecabe</i>	Pieridae
15.	Common gull	<i>Cepora nerissa</i>	Pieridae
16.	Common jezebel	<i>Delias eucharis</i>	Pieridae
17.	Common wanderer	<i>Pareronia hippie</i>	Pieridae
18.	Common treebrown	<i>Lethe rohria</i>	Nymphalidae
19.	Common silverline	<i>Cigaritis vulcanus</i>	Lycaenidae
20.	Crimson tip	<i>Colotis danae</i>	Pieridae
21.	Common fivering	<i>Ypthima baldus</i>	Nymphalidae
22.	Common yamfly	<i>Loxura atymnus</i>	Lycaenidae
23.	Common albatross	<i>Appias albino</i>	Pieridae
24.	Common mime	<i>Papilio clytia</i>	Papilionidae
25.	Common jay	<i>Graphium doson</i>	Papilionidae
26.	Common red eye	<i>Matapa aria</i>	Hesperiidae
27.	Common spotted flat	<i>Celaenorhinus leucocera</i>	Hesperiidae
28.	Common leopard	<i>Phalanta phalantha</i>	Nymphalidae
29.	Common mormon	<i>Papilio polytes</i>	Papilionidae
30.	Common lime	<i>Papilio demoleus</i>	Papilionidae
31.	Common rose	<i>Pachliopta aristolochiae</i>	Papilionidae
32.	Crimson rose	<i>Pachliopta hector</i>	Papilionidae
33.	Common baron	<i>Euthalia aconthea</i>	Nymphalidae
34.	Common crow	<i>Euploea core</i>	Nymphalidae
35.	Fulvus pied flat	<i>Pseudocoladenia dan</i>	Hesperiidae
36.	Forget me not	<i>Catochrysops strabo</i>	Lycaenidae
37.	Grass jewel	<i>Chilades trochylus</i>	Lycaenidae
38.	Grass denom	<i>Udaspes folus</i>	Hesperiidae
39.	Great orange tip	<i>Hebomoia glaucippe</i>	Pieridae
40.	Great eggfly	<i>Hypolimnas bolina</i>	Nymphalidae
41.	Grey count	<i>Tanaecia lepidae</i>	Nymphalidae
42.	Grey pansy	<i>Junonia atlites</i>	Nymphalidae
43.	Lemon pansy	<i>Junonia lemonias</i>	Nymphalidae
44.	Lesser grass blue	<i>Zizina otis</i>	Lycaenidae
45.	Leaf blue	<i>Amblypodia anita</i>	Lycaenidae

46.	Malbar banded swallowtail	<i>Papilio liomedon</i>	Papilionidae
47.	Malbar tree nymph	<i>Idea malabarica</i>	Nymphalidae
48.	Mottled emigrant	<i>Catopsilia pyranthe</i>	Pieridae
49.	Monkey puzzle	<i>Rathinda</i>	Lycaenidae
50.	Palm bob	<i>Suastus gremius</i>	Hesperiidae
51.	Painted lady	<i>Vanessa cardui</i>	Nymphalidae
52.	Peablu	<i>Lampides boeticus</i>	Lycaenidae
53.	Pioneer	<i>Belenois aurota</i>	Pieridae
54.	Planis cupid	<i>Luthrodes pandava</i>	Lycaenidae
55.	Plane banded owl	<i>Hasora vita</i>	Hesperiidae
56.	Pale grass blue	<i>Pseudozizeeria maha</i>	Lycaenids
57.	Plain tiger	<i>Danaus chrysippus</i>	Nymphalidae
58.	Plum judy	<i>Abisara echerius</i>	Riodinidae
59.	Rustic	<i>Cupha erymanthis</i>	Nymphalidae
60.	Stripped tiger	<i>Danaus genutia</i>	Nymphalidae
61.	Small grass yellow	<i>Eurema brigitta</i>	Pieridae
62.	Small orange tip	<i>Colitis etrida</i>	Pieridae
63.	Indian sunbeam	<i>Curetis thetis</i>	Lycaenidae
64.	Indian small flat	<i>Sarangesa dasahara</i>	Hesperiidae
65.	Tailed jay	<i>Graphium Agamemnon</i>	Papilionidae
66.	Tawny coster	<i>Acraea terpsicor</i>	Nymphalidae
67.	White orange tip	<i>Ixias marianne</i>	Pieridae
68.	Yellow orange tip	<i>Ixias pyrene</i>	Pieridae
69.	Yellow pansy	<i>Junonia hierta</i>	Nymphalidae
70.	Zebra blue	<i>Leptotes plinius</i>	Lycaenidae
71.	Sandalwood defoliator	<i>Amata passalis</i>	Erebidae
72.	Owl moth	<i>Erebus macropus</i>	Erebidae
73.	Fruit sucking moth	<i>Eudocima materna</i>	Erebidae
74.	Salt and pepper moth	<i>Uttetheisa lotrix</i>	Erebidae
75.	White swallowtail moth	<i>Micronia aculeata</i>	Uraniidae
76.	Moon moth	<i>Actias luna</i>	Saturniidae

Table 2:- Checklist of Butterflies and Moths found on Mallikarjun and Santoshgiri Hills

Sr. no	Species	Scientific name	Family
1.	Brahminy worm snake	<i>Ramphotyphlops braminus</i>	Typhlopidae
2.	Common trinklet	<i>Coelognathus helena Helena</i>	Colubridae
3.	Common wolf snake	<i>Lycodon aulicus</i>	Colubridae
4.	Common sand boa	<i>Gongylophis conicus</i>	Boidae
5.	Common Indian krait	<i>Bungarus caeruleus</i>	Elapidae
6.	Common kukri	<i>Oligodon arnensis</i>	Colubridae
7.	Checkered keelback	<i>Xenochropis piscator</i>	Colubridae
8.	Green vine snake	<i>Ahetulla nasuta</i>	Colubridae
9.	Green keelback	<i>Macropisthodon plumbicolor</i>	Colubridae
10.	Red sand boa	<i>Eryx johnii</i>	Boidae
11.	Rat snake	<i>Ptyas mucosa</i>	Colubridae
12.	Russel's viper	<i>Daboia russelii</i>	Viperidae
13.	Saw scaled viper	<i>Echis carinatus</i>	Viperidae
14.	Spectacled cobra	<i>Naja naja</i>	Elapidae
15.	Stripped keelback	<i>Amphiesma stolatum</i>	Colubridae
16.	Slender coral snake	<i>Calliophis melanurus</i>	Elapidae
17.	Sheildtail snake	<i>Uropeltis macrolepis macrolepis</i>	Uropeltidae
18.	Common Indian rock lizard	<i>Psammophilus blanfordanus</i>	Agamidae
19.	Indian monitor lizard	<i>Varanus bengalensis</i>	Varanidae
20.	Indian garden lizard	<i>Calotes versicolor</i>	Agamidae
21.	Fan throated lizard	<i>Sitana ponticeriana</i>	Agamidae
22.	Spotted house gecko	<i>Hemidactylus cf brooki</i>	Gekkonidae
23.	Yellow bellied house gecko	<i>Hemidactylus flaviviridis</i>	Gekkonidae

Table 3:- Checklist of Reptiles (snakes, lizards, gecko) found on Mallikarjun and Santoshgiri Hills

There are different species of insects like damselflies, dragonflies, sting bugs, beetles are also present in large number.

In 2018 we also record the presence of Lepord (*Panthera pardus*; family-Felidae) in these two hills. During survey we got the footprints of lepard (Fig no. 2). Chandoli Wildlife Sanchury (75 Km) and Panhala fort (50 Km) are close to Mallikarjun hills so these leporids are easily walk around from this places. Other wild animals like Jackals and Hyenas are also found on mallikarjun and surrounding area.



Fig 2:- Footprint of Lepord, 2018



Fig 3:- Saw Scaled Viper



Fig 4:- Vernel Hanging Parrot

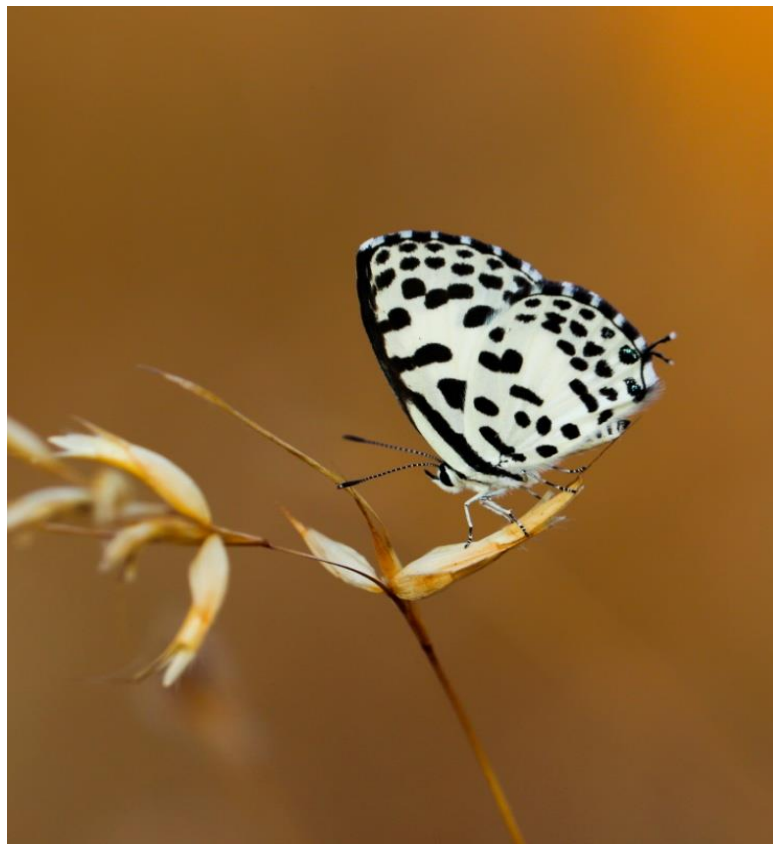


Fig 5:- Common Peirrot Butterfly

### III. RESULT

From above studies of birds, butterflies and reptiles revealed that there is presence of 111 species of birds from 50 families, 70 species of butterflies from 6 families, 6 species of moths from 3 families, 17 species of snakes from 6 families, 4 species of lizards from 2 families and 2 species of gecko from 1 family.

From above observation (Table no 1), *Treron phoenicoptera*, *Pycnonotus luteolus*, *Loriculus vernalis*, *Caprimulgus atripennis*, *Clamator jacobinus*, *Terpsiphone paradise*, *Emberiza lathami*, *Saxicola maurus* these species are seasonally found and first time recorded.

*Ahetulla nasuta* and *Uropeltis macrolepis macrolepis* (Table no 3.) first time recorded in monsoon of 2018.

*Echis carinatus* (Fig no. 3) which is critically endangered species of snake for these two hills. first time recorded in 2017. They are found very less in number.

Due to many host plants, butterfly species are found in large number. From these, butterflies from Nymphalidae and Pieridae family are mostly found.

From the study it is come to know that Mallikarjun and Santoshgiri Hills are habitat of, not only birds and butterflies but also it is the home for wild animals like Jackals, Hyena and Leopards.

This was just preliminary study of diversity of Mallikarjun and Santoshgiri hills with less number of visit. It is sure that present study represents actual fauna of the hills and in depth study reveal more unrecorded species from this study.

### IV. CONCLUSION

Due to agricultural land near the hills and grassland on the top of the hills, there is presence of large number of birds, butterflies and reptiles. From the above species, Saw scaled viper, Bonellis eagle, and Leopard are the main key species. Since there is not high disturbance of humans, these species are live from many years. From above study it seems like Mallikarjun and Santoshgiri hills are fulfilled with great biodiversity. And we need to conserve them.

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