



## Spiders of Katepurna sanctuary from the family Salticidae (Blackwall, 1841)

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### Abstract

A detail survey of spiders from Salticidae family was carried out in Katepurna Sanctuary near Akola (Maharashtra). We have reported 20 species from 07 different genera. The maximum species diversity was noted from August 2015 to February, 2018.

**Key words:** Spiders, Katepurna, Salticidae.

### Introduction

Jumping spiders are easily distinguished from other spiders by their four big eyes on the face and four smaller eyes on top of the head. There are around more than 5000 species jumping spiders in the world. These are small to large arenomorph spiders: two tarsal claws: ecribellate: rntelegyne: eight eyes: carapace square fronted with four, forwardly directed eyes of which the anterior median eyes are very large (Coddington, 1991). The adults not making snare-webs; actively pursuing their prey on walls, ground vegetation and foliage, leaping onto their prey in characteristic fashion (Coddington, 1996; Gajbe, 1995a; Gajbe, 1995b; Koh, 2000).

### Material and Methods

**Study Area:** The *Katepurna Sanctuary* Akola, Maharashtra is an exotic sanctuary, dotted with an abundance of flora and fauna geographically located at - 20°25'0.54"N 77°10'50.14"E. The land vegetation is southern tropical dry deciduous forest. There are over 115 species of plants at this sanctuary etc. Katepurna Wildlife Sanctuary is renowned for the migratory birds, four-horned antelope and barking deer. Other animals include Black buck, Leopard, Wolf, Wild boar, Hyena, Hare, Nilgai, Jungle cat and Monkeys and other species. The Katepurna water reservoir is a site for many water birds. The salticids were captured in

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the bottles by Visual search, Sweeping, Beating, Pitfall trapping and Litter sampling methods. After collecting they were photographed with the help of Macro Lens- camera Canon 60D, in case of small spiders stereo-zoom binocular microscope used (Kunter and Sereg, 2002; Platnick, 2011).

**Preservation:** Collected specimens were preserved in a separate vial in 70% alcohol if necessary for the observations of pedipalp and epigyne structures.

**Identification:** Identification was carried out on the basis of morphometric characters of various body parts. The help was mainly taken from the keys and catalogues provided by Tikader (1982), Platnick (2011), and other relevant literature. Juveniles and some immature specimens could not be identified up to species level (Taylor, 1999 and Tikader, 1973a; Tikader, 1973b).

### Results and Discussion

**Morphology:** The adult spiders 2–10 mm long; of medium build, plump-bodied; decidedly short-legged with eight eyes. The eyes eight: in three or four rows; eyes occupying entire width of carapace; anterior median eyes very large; anterior lateral eyes slightly smaller, both pairs directed forward; other eyes directed to the sides or backward. Legs: two claws usually with claw tufts, anterior pair in some genera longer or stronger than other legs, frequently decorated with tufts of setae. Female palp: tarsus without claw. Abdomen: variable, short to oblong or elongated. Spinnerets: short, anterior and posterior pairs, similar in length; without cylindrical glands and spigots. Respiratory System:



two booklungs; tracheal spiracle close to spinnerets were observed to confirm the genus upto species level (Shirbhate and Shirbhate, 2017).

A detail survey of spiders from salticidae family was carried out in Katepurna Sanctuary during 2018. We have reported 21 species from 7 genera. The maximum species diversity was noted from August to January. Among the collected species 10 are males and 11 are females.

**Table-1: Spider genera and species of family Salticidae from Katepurna Sanctuary Akola (Maharashtra, India) during 2015-2016.**

| SN | Genus              | Number of species |
|----|--------------------|-------------------|
| 1  | <i>Marpissa</i>    | 07                |
| 2  | <i>Rhene</i>       | 03                |
| 3  | <i>Euophrys</i>    | 01                |
| 4  | <i>Myrmarachne</i> | 02                |
| 5  | <i>Phidippus</i>   | 04                |
| 6  | <i>Telonomia</i>   | 02                |
| 7  | <i>Plexippus</i>   | 02                |

Thus Katepurna Sanctuary is having a good salticid spider diversity. *Marpissa* is represented by 7

species followed by *Phidippus* 4 and *Rhene* 3. Results are compared. Thus the Katepurna Sanctuary is having rich diversity of Salticid Jumping spiders as these spiders are very useful to maintain the ecological balance. If the spiders will conserve ultimately it helps the prey predator chain in the sanctuary area (Tikader, 1987 and Tikader, 1982).

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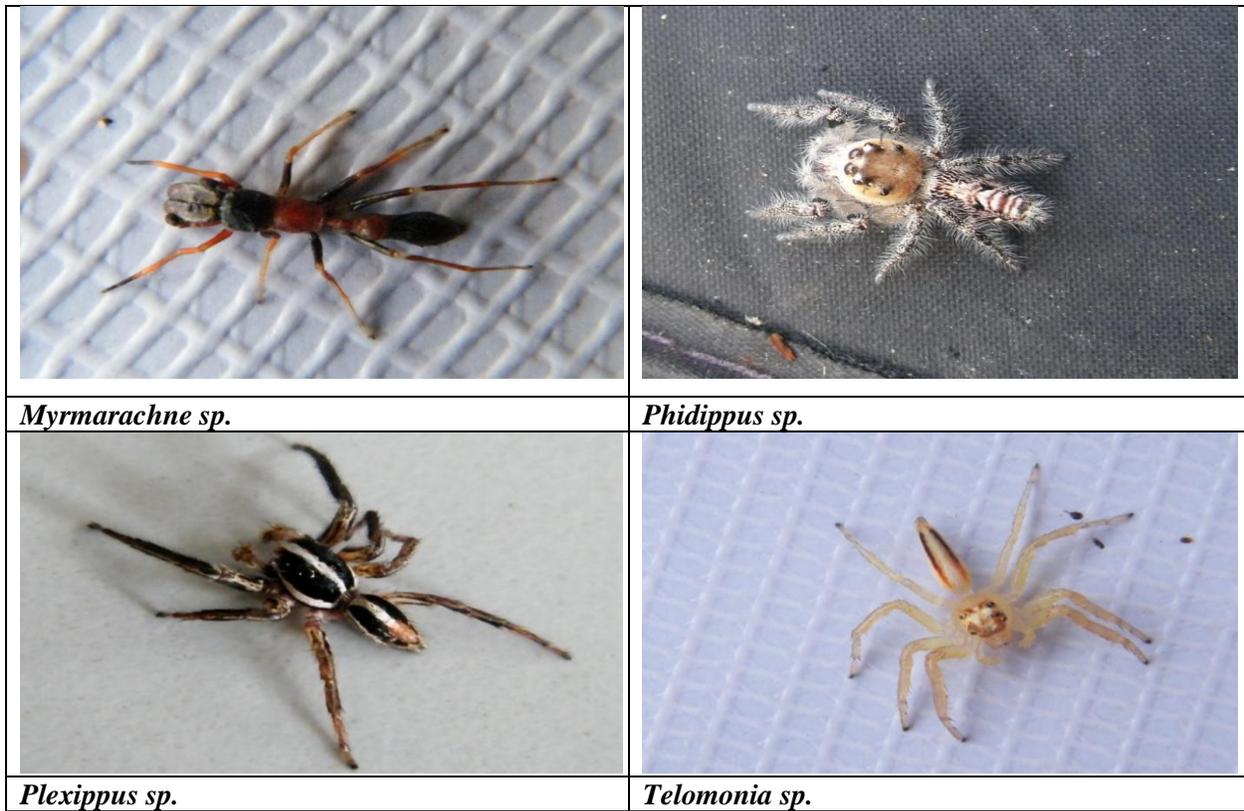


Fig 1. Photograph showing the generic diversity of family Salticidae from Katepurna Sanctuary, Akola (Maharashtra, India).

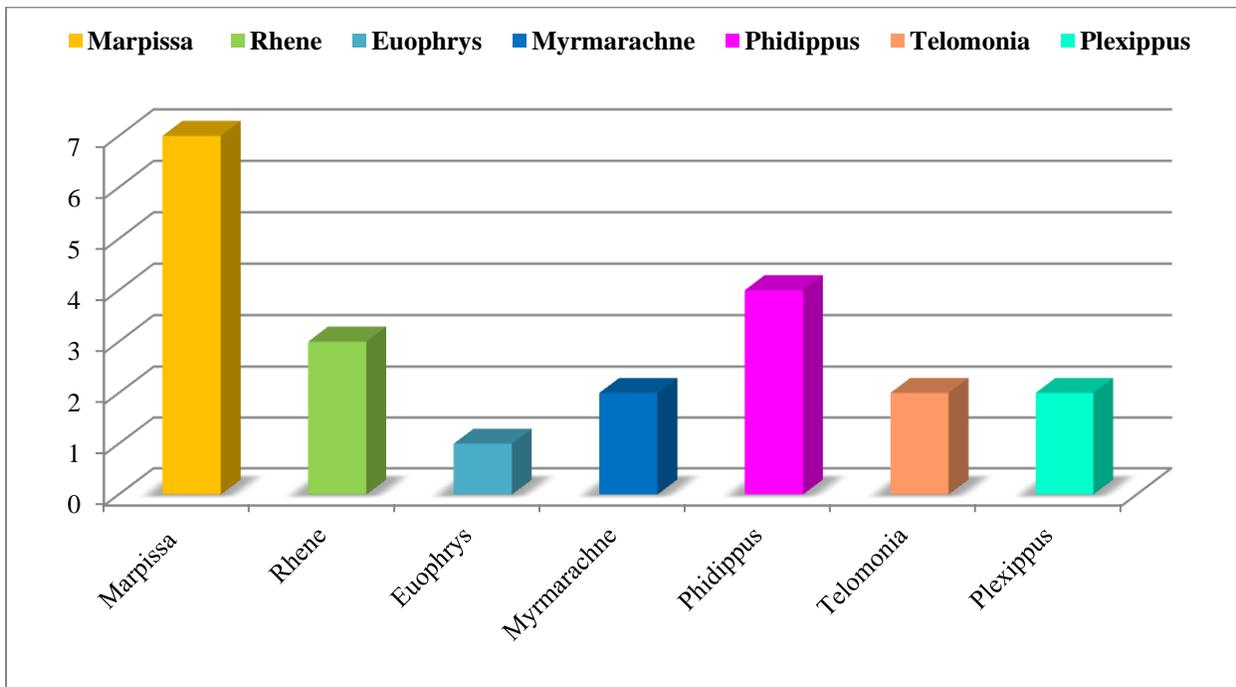


Fig. 2- Generic Diversity of Family Salticidae in Katepurna Sanctuary Akola, India

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