

# A Checklist of Spider Fauna (Arachnida: Araneae) of Sangli District (MS, India)

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**Abstract:** *The survey of spider was carried out from the Sangli District which is located in the western part of Maharashtra. Tehsils in Sangli District includes Atpadi, Jath, Kadegaon, Kavathe Mahankal, Khanapur, Miraj, Palus, Shirla, Tasgaon and Walwa. Sangli district has distinct kind of environment. Eastern talukas of Shirala, Walwa, Palus are famous for high rainfall with hills and slopes with some bushy plants, grass and trees. Total area of Sangli is 8.572 km<sup>2</sup>. Chandoli National Park is established in Sangli district of Shirla Tehsil notable as the southern portion of the Sahyadri Tiger Reserve. This region shows good number of spiders during the month of September to December. This is because of availability of food and breeding ground. Sagareshwar Wildlife Sanctuary is a protected area in the Sangli district at the meeting of three Tehsils of Sangli district: Kadegaon, Walva and Palus. It is an artificially cultivated forest with an area of 10.87 km<sup>2</sup>. This region also shows good number of spider diversity. During study we reported 32 spider families, 155 genera and 345 species during year 2012-2017, with a dominance of Araneidae, Salticidae and Lycosidae spiders.*

**Keywords:** Spider, Arachnida:Araneae, diversity, Sangli district

## 1. Introduction

Spiders belong to class Arachnida, order Araneae of Phylum Arthropoda. They vary in size, shape and behavior. They comprise one of the largest orders of animals. The body of spider is divided into cephalothorax and abdomen with pedipalps and eight legs. They use the silk to wrap the prey, to hang from and to make egg sacs and nests (1867, 1968, 1975). The spider fauna of India has never been studied in its entirety despite of contributions by many arachnologists since Stoliczka (1869). The pioneering contribution on the taxonomy of Indian spiders is that of European arachnologist Stoliczka (1869). Review of available literature reveals that the earliest contribution by Blackwall (1867); Karsch (1873); Thorell (1895) and Pocock (1900) were the pioneer workers of Indian spiders. They described many species from India. Tikader (1980, 1982), Tikader, and Malhotra (1980a,b) described spiders from India. Tikader (1980) compiled a book on Thomisidae spiders of India, comprising two subfamilies, 25 genera and 115 species. Pocock (1900) and Tikader (1980, 1987) made major contributions to the Indian Arachnology, have high lightened spider studies to the notice of other researcher. Tikader (1987) also published the first comprehensive list of Indian spiders, which included 1067 species belonging to 249 genera in 43 families. From the last three decades, contribution of Gajbe (1995-2003) to the field of spiders is noteworthy. He described 147 new spider species from different habitats of India. He published 69 papers on Araneid, Gnaphosid, Lycosid, Thomisid and Oxyopid spiders and also State Fauna series (2007, 2008a, 2009). Platnick in his World Spider Catalog (2005) has estimated that, there are about 38000 species worldwide, arranged in 110 families. The updated spider checklist given by Keswani et al. (2012) of SGB Amravati University. According to world spider catalogue there are Spiders of protected areas in India, are studied by Gajbe (1995a) in Indravati Tiger Reserve and recorded 13 species. Rane and

Singh (1977) recorded five species and Gajbe (1995b) 14 species from Kanha Tiger Reserve, Madhya Pradesh. Gajbe (2003) prepared a checklist of 186 species of spiders in 69 genera under 24 families distributed in Madhya Pradesh and Chhattisgarh. Patel (2003) described 91 species belonging to 53 genera from Parabikulam Wildlife Sanctuary, Kerala. Manju Silwal et al. (2003) recorded 116 species from 66 genera and 25 families of spiders from Puma wildlife Sanctuary, Dangs, Gujarat. Bastawade (2004) described arachnid fauna of orders Araneae, Scorpionida and Solifugi from Melghat Tiger Reserve, Amravati, Maharashtra State. John Celab (2020) documented the spider fauna in the vicinity of asuburban lake (Araabath Lake) in Chennai. So far nobody has worked out or studied the spider fauna of Sangli district; therefore we are going to explore the diversity of spiders from this region.

## 2. Methods and Materials

A site wise distribution table was prepared for Sangli district. Sangli district has a latitude of 16°51'8.63"N and a longitude of 74°34'53.32"E. Various places visited during year. For present study selected various places from each tehsils of Atpadi, Jath, Kadegaon, Kavathe Mahankal, Khanapur, Miraj, Palus, Shirla, Tasgaon and Walwa including Chandoli National Park. (Fig.1). The Taxonomic list of spiders was recorded during the period of 2012 to 2017. The survey was carried out every month of year. The habitat, behavior of spiders and movements and identification marks was studied. The techniques used for spider study was active visual search, litter sampling, grass sweep netting, pitfall trapping and tree beating. The survey was made during early morning hours (6 hours to 9 hours) and day time (16 hours to 18 hours), from different parts of the microhabitats, like, rolled or folded leaves, plant branches, leaf litter, tree trunks, rock surface, grass blades, dry hay and grasses, moist places, under stones, pebbles, humus, bushes, on the bark and



76. Indithele sp.  
77. Plesiophrictus sp.  
78. Tigidiae rutilofronis

**6. Family: Dictynidae – Mesh Web Spider**

79. Dictyna sp. (Simon, 1905)  
80. Nigma puella

**7. Family: Eresidae – Social Spiders**

81. Stegodyphus sarasinorum (Karsch, 1891) Female  
82. Stegodyphus tibialis (O. P. Cambridges 1869)

**8. Family: Filistatidae – Crevice Weavers**

83. Pritha insularis (Thorell 1891)

**9. Family: Gnaphosidae – Ground Spiders/Mouse Spiders**

84. Drassodes sitjbe (Tikadar and Gajbe 1975)  
85. Drassodes deoprayagensis (Tikadar and Gajbe 1975)  
86. Drassodes tikaderi (Gajbe 1987)  
87. Drassodes villosus (Thorell 1856)  
88. Drassodes viveki (Gajbe 1992)  
89. Drassodes cupresus (Blackwell 1834)  
90. Drassodes sp. (Westring 1851)  
91. Gnaphosa poonaensis (Tikadar 1973)  
92. Haplodrassus sp. (Emerton 1909)  
93. Poecilochroa harmani (Tikadar 1982)  
94. Scotophaesis bharaatae (Gajbe 1989 )  
95. Scotophaeus blackwalli (Thorell 1871)  
96. Sergiolus montanus (Emerton 1890)  
97. Zelotes nasikensis (Tikadar and Gajbe 1976)  
98. Zelotes poonaensis (Tikadar 1982)  
99. Zelotes naliniae (Tikadar and Gajbe 1979)

**10. Family: Hexathelidae – Tunnel Web Spider**

100. Hexathele sp. (Simon 1892)

**11. Family: Hersiliidae – Two Tailed Spiders/Bark Spiders**

101. Hersilia Savignyi (Lucas 1836) Female  
102. Hersilia tibialis (Baehr and Baehr 1993)

**12. Family: Idiopidae – Trapdoor Spiders**

103. Heligmomerus barkudensis Idiops (Simon 1889)  
104. Idiops rubrolimbatus (Mirza & Sanap 2012)

**13. Family: Lycosidae – Wolf Spiders**

105. Archtosa indica (Tikadar and Malhotra 1980)  
106. Arctosa mulani (Dyal 1935)  
107. Evippa baneraensis (Tikadar and Malhotra 1980)  
108. Evippa mandlaensis (Gajbe 2004)  
109. Evippa shivajii (Tikadar and Malhotra 1980)  
110. Geolycosa curli (Reimoser 1934)  
111. Hippasa agelenoides (Simon 1884)  
112. Hippasa greenalliae (Blackwell 1867)  
113. Hippasa hansae (Gajbe and Gajbe 1999)  
114. Hippasa holmerae (Thorell 1895)  
115. Hippasa loundesi (Gravely 1924)  
116. Hippasa madhuae (Tikadar and Malhotra 1980)  
117. Hanga stictopyga (Thorell 1895)  
118. Lycosa balaranai (Patel and Reddy 1993)  
119. Lycosa bhatnagari (Sadana 1969)  
120. Lycosa fuscana (Pocock 1901)

121. Lycosa geotubalis (Tikadar and Malhotra 1980)  
122. Lycosa praegrans (C. L. Koch 1836)  
123. Lycosa poonaensis (Tikadar and Malhotra 1980)  
124. Lycosa thoracica (Patel and Reddy 1993)  
125. Lycosa mackenziei (Gravely 1924)  
126. Pardosa birmanica (Simon 1884)  
127. Pardosa leucopalpis (Gravely 1924)  
128. Pardosa partita (Simon 1885)  
129. Pardosa ranjani (Gajbe 2004)  
130. Pardosa subhadrae ( and Rrddy 1993)  
131. Pardosa milvina (Hentz 1844)  
132. Trochosa gunturifera (Gravely 1924)  
133. Wadicosa quadrifera (Gravely 1924)  
134. Zoica puellula (Simon 1898)

**14. Family: Miturgidae – Dark Sac Spiders**

135. Argocentrus sp. (L. Koch, 1878)  
136. Cheiracanthium danieli (Tikader 1975) Female  
137. Cheiracanthium indicum (O. P. Cambridge 1874)  
138. Cheiracanthium inclusum (Hentz 1847)  
139. Cheiracanthium melanostomum (Thorell 1895)  
140. Cheiracanthium erraticum (Walckenaer 1802)  
141. Cheiracanthium oncognathum (Thorell 1871)  
142. Miturga sp. (Thorell )

**15. Family: Oonopidae – Dwarf Hunting Spiders**

143. Opopaea indica sp. Female (Simon 1890)

**16. Family : Oecobiidae - Disc Web Spiders**

144. Uroctea durandi (Lucas 1846)  
145. Oecobius annulipes (Lucas 1846)

**17. Family: Oxyopidae – Lynx Spiders**

146. Hamataliwa sp. (Keyserling 1887)  
147. Hamadruas sp. (Thorell 1887)  
148. Hamadruas sp. (New) (Thorell 1887)  
149. Oxyopes javanus (Thorell 1887) Female  
150. Oxyopes chittrae (Tikader 1965) Female  
151. Oxyopes bharaatae (Gajbe 1999)  
152. Oxyopes biramanicus (Thorell 1887)  
153. Oxyopes indicus (Walekenaer 1805)  
154. Oxyopes kamalae (Gajbe 1999 Gajbe and Gajbe 1999)  
155. Oxyopes ketani (Gajbe and Gajbe 1999)  
156. Oxyopes pankaj (Gajbe and Gajbe 2001)  
157. Oxyopes shweta (Tikadar 1970)  
158. Oxyopes sameeri Female  
159. Oxyopes tikaderi (Biswas and Majumdar 1995)  
160. Oxyopes sweta (Tikader 1970 )  
161. Oxyopes quadrifasciatus (Latreille 1804)  
162. Peucetia elegans (Blackwell 1864)  
163. Peucetia viridians (Stoliczka 1869)

**18. Family: Philodromidae – Running Crab Spiders**

164. Philodromus barman ( Tikadar 1980)  
165. Philodromus pali (Gajbe 2000)  
166. Tmarus angulatus (Walckenaer 1837)  
167. Tibellus oblongus (Tikadar 1960)  
168. Tibellus sp. (Tikadar 1960)  
169. Tibellus elongates (Tikadar 1960)  
170. Tibellus poonaensis (Tikadar 1962)  
171. Tibellus vitilis (Simon 1906)  
172. Thanatus ketani (Bhandari and Gajbe 2001)  
173. Thanatus dhakuricus (Tikadar 1960)

174. *Thanatus indicus* (Simon 1885)

**19. Family: Pholcidae – Daddy Long Leg Spiders/Cellar Spiders**

175. *Artema atlanta* (Walckenaer 1837)  
176. *Grossopriza lyani* (Blackwell 1867)  
177. *Pholcus phalangioides* (Artema Fuesslin 1775)  
178. *Smeringopus pallidus* (Blackwell 1858)  
179. *Physocyclus globus* (Taczanowski 1874)

**20. Family: Pisauridae – Nursery Web Spiders**

180. *Dendrolycosa gracilis* (Thorell 1981)  
181. *Dolomedes tenebrosus* (Hentz 1844)  
182. *Dolomedes plantarius* (Clerck 1757)  
183. *Pisaura gitae* (Tikadar 1970) Female  
184. *Pisaura putiana* (Barrion and litsinger 1995)  
185. *Nilus marginatus* (Simon 1888)  
186. *Thalassius albocinctus* (Doleschall 1859)  
187. *Thaumasia velox* (Simon 1898)

**21. Family : Psecridae - Jungle Cribellate Spiders**

188. *Psecrus* sp. ( Pocock 1899)

**22. Family : Salticidae – Jumping Spiders**

189. *Aelurillus quadrimaculatus* (Simon 1889)  
190. *Asemonea tenuipes* O. P. (Cambridge 1869)  
191. *Bianor angulosus* (Karsch 1879)  
192. *Cosmophasis miniaceomicans* (Simon 1888)  
193. *Epeus albus* (Proszynski 1992)  
194. *Epeus fl avobilineatus* (Doleschall 1859)  
195. *Epocilla aurentiaca* sp. (Simon 1885)  
196. *Hasarius adansonii* (Audouin 1826)  
197. *Hyllus semicupreus* (Simon 1885)  
198. *Harmochirus insulanus* (Simon 1885)  
199. *Ligura latidens* (Simon,1903)  
200. *Lyssomanes* sp. (Hentz 1845)  
201. *Mopsus penicillatus* (Karch 1878)  
202. *Marpissa tigrina* (Tikadar 1965)  
203. *Marpissa muscosa* (Clerck 1757)  
204. *Marpissa singhi* (Monga, Singh and Sadana 1989)  
205. *Menemerus bivittatus* (Dufour 1831)  
206. *Myrmarachne incerta* (Narayan 1915)  
207. *Myrmarachne jajpurensis* (Proszynski 1992)  
208. *Myrmarachne Maratha* (Tikadar 1973)  
209. *Myrmarachne orientalis* (Tikadar 1973)  
210. *Myrmarachne plateleoides* (O. P. Cambridge 1869)  
211. *Myrmarachne providens* (Peckham and Peckham 1892)  
212. *Myrmarachne satarensis* (Narayan 1915)  
213. *Myrmarachne uniseriata* (Narayan 1915)  
214. *Phintella vittata* (C. L. Koch 1846)  
215. *Phintella versicolor* (C. L. Koch 1846)  
216. *Plexippus paykulli* (Savigny and Audouin 1825)  
217. *Plexippus petersi* Female (Karsch 1878)  
218. *Paraphidippus aurantius* (Lucas 1833)  
219. *Portia fi mbriata* (Doleschall 1859)  
220. *Portia labiata* (Thorell 1887)  
221. *Portia* sp. (New)  
222. *Rhene danieli* (Tikadar 1973)  
223. *Rhene decorate* (Tikadar 1977)  
224. *Rhene fl avicomans* (Simon 1902)  
225. *Rhene haldanei* (Gajbe 2004)  
226. *Rhene indica* (Tikadar 1973)  
227. *Rhene danieli* Female Tikader 1973

228. *Rhene fl avigera* (Tikader 1873)

229. *Telamonia dimidiata* (simon 1899) Female  
230. *Telamonia peckhami* (Thorell 1891)  
231. *Tellamonia festiva* (Thorell 1887)  
232. *Thiania bhamoensis* Female (Thorell 1887)  
233. *Thyene imperialis* (Rossi 1846)  
234. *Zygoballus pashanensis* (Tikadar 1975)

**23. Family : Scytodidae – Spitting Spiders**

235. *Scytodes allfredi* (Gajbe 2004)  
236. *Scytodes fusca* (Walckenaer 1837)  
237. *Scytodes pallidae* (Doleschall 1859)  
238. *Scytodes thoracica* (Latreille 1802)

**24. Family : Sicariidae – Violin Spiders**

239. *Loxosceles rufescens* ( Dufour 1820)  
240. *Sicarius* sp. (Walckenaer 1847)

**25. Family : Sparassidae – Giant Crab Spiders**

241. *Heteropoda kandiana* (Pocock 1899) Female  
242. *Heteropoda venatoria* ( Linnaeus 1767)  
243. *Heteropoda maxima* (Latreille 1804)  
244. *Olios millet* (Pocock 1901)  
245. *Olios iranii* (Pocock 1901)  
246. *Olios lamarcki* (Latreille 1806)  
247. *Olios giganteus* (Keyserling 1884)  
248. *Olios correvoni* (Lessert 1921)  
249. *Olios argelasius* (Walckenaer1805)

**26. Family : Tetragnathidae - Long-jawed orb weavers**

250. *Leucauge decorate* (Blackwall 1864) Female  
251. *Tetragnatha mandibulata* (Walckenaer 1841) (Male and Female)  
252. *Tetragnatha javanus* (Thorell 1890)  
253. *Tetragnatha viridorufa* (Gravely 1921)  
254. *Tetragnatha Montana* (Simon 1874)  
255. *Opadometa fastigata* (Simon 1877) Female

**27. Family : Theridiidae – Comb Footed Spiders/Cob Web Spiders**

256. *Achaearanae mundulum* (L. Koch 1872)  
257. *Achaearanae triangularis* (Patel 2005)  
258. *Achaearanea durgae* (Tikader 1970)  
259. *Achaearanea tepidariorum* (C. L. Koch 1841)  
260. *Argyrodes elevates* (Taczanowski 1873)  
261. *Argyrodes fl agellum* ( Doleschall 1857)  
262. *Argyrodes jamkhedes* (Tikadar, 1963)  
263. *Argyrodes rainbow* (Rainbow W. J. 1920)  
264. *Argyrodes* sp. (Simon 1864)  
265. *Ariamnes* sp. (New) (Thorell 1869)  
266. *Ariamnes pavesii* (Leardi 1902)  
267. *Chryso picturata* (Simon 1895)  
268. *Chryso argyrodiformis* Female (Yaginuma 1952)  
269. *Chryso pulcherrima* ( Mella Loitao 1917)  
270. *Euryopsis* sp (Keyserling 1890)  
271. *Euryopsis flvomaculata* (C. L. Koch 1836)  
272. *Euryopsis episinoides* (Walckenaer 1847)  
273. *Euryopsis flavomaculata* (C. L. Koch 1836)  
274. *Latrodectus hasselti* (Thorell 1870)  
275. *Phycosoma* sp. (Cambridge 1879)  
276. *Phorodectus testudo* (O. P. Cambridge 1873)  
277. *Propostira quadraangulata* ( Simon 1894)  
278. *Rhomphaea projiciens* (O. P. Cambridge 1896)

279. Rhomphaea nasica (Simon 1873)  
 280. Steatoda rufoannulata (Somon 1899)  
 281. Steatoda bipunctata (False black widow spider) (Linnaeus 1758)  
 282. Theridion incertum (O. P. Cambridge 1885)  
 283. Theridion spinosissimum (Caporiacco 1934)  
 284. Theridion tikaderi (Patel 1973)  
 285. Theridion angula (Tikader 1970)  
 286. Theridion pyramidale (L. Koch 1867)  
 287. Theridion mundula Female (L. Koch 1872)  
 288. Thwaitesia sp. (Simon 1892)

**28. Family : Theridiosomatidae – Ray spider**

289. Theridisoma sp.

**29. Family : Thomisidae – Crab Spiders/Flower Spiders**

290. Amyciaea forticeps (O. P. Cambridge 1887)  
 291. Camaricus bipunctatus (Bastawade 2002)  
 292. Camaricus formosus (Thorell 1887)  
 293. Camaricus maugei (Thorell 1887)  
 294. Diaea bengalensis (Biswas and Majumdar 1981)  
 295. Diaea puncta (Thorell 1869)  
 296. Diaea dorata (Fabricius 1777)  
 297. Ebrechtella tricuspdata (Fabricius 1775)  
 298. Misumena vatia (Clerck 1757)  
 299. Misumena greenae (Tikadar 1965)  
 300. Misumena indra (Tikadar 1963)  
 301. Misumenops khandalaensis (Tikadar 1965)  
 302. Otylate elongate (Tikadar 1980)  
 303. Otylate virens (L. Koch 1878)  
 304. Ozyptila chandosiensis (Tikadar 1980)  
 305. Ozyptilia Maratha (Tikadar 1971)  
 306. Runcinia khandari (Gajbe 2004)  
 307. Runcinia pooneus (Tikadar 1965)  
 308. Runcinia affinis (Simon 1897)  
 309. Strigoplus molur (Patel 2003)  
 310. Thomisus granulifrons (Simon 1906)  
 311. Thomisus pathaki (Gajbe 2004)  
 312. Thomisus pooneus (Tikadar 1965)  
 313. Thomisus viveki (Gajbe 2004)  
 314. Thomisus anustus (Walckenaer 1805)  
 315. Tmarus rimosus (Paik 1973)  
 316. Tmarus jabalpurensis (Gajbe and Gajbe 1999)  
 317. Tmarus kotigeharus (Tikadar 1963)  
 318. Xysticus bharaatae (Gajbe and Gajbe 1999)  
 319. Xysticus breviceps (O. P. Cambridge 1885)  
 320. Xysticus robustus (Hahn 1832)  
 321. Xysticus khasiensis (Tikadar 1980)  
 322. Xysticus tikaderi (Bhandari and Gajbe 2001)  
 323. Indixysticus mimutus (Tikader 1960)

**30. Family : Theraphosidae – Mygalomorphs - Tarantula**

324. Haploclastus sp. (Simon 1892)  
 325. Thrigmopoeus insignis (Pocock 1899)  
 326. Chilobrachys fibriatus (Pocock 1899)  
 327. Chilobrachys hardwickii (Pocock 1985)  
 328. Poecilotheria regalis (Pocock 1899)

**31. Family : Uloboridae - Cribellate Orb Weavers**

329. Miagrammopes indicus (Tikadar 1971)  
 330. Miagrammopes poonaensis (Tikadar 1971)  
 331. Miagrammopes sp. (Tikadar 1971)  
 332. Miagrammopes sp. (Tikadar 1971)

333. Miagrammopes sp. (New)  
 334. Miagrammopes sp. (Akerman, C. 1932)  
 335. Uloborus khasiensis (Tikadar 1969)  
 336. Uloborus krishnae (Tikadar 1970)  
 337. Uloborus plumipes (Thorell 1869)  
 338. Uloborus variabilis (Keyserling 1986)  
 339. Zosis geniculata (Oliver 1789)

**32. Family : Zodariidae – Ant Hunting Spiders**

340. Zodarion styliferum (Simon 1870)  
 341. Zodarion italicum (Canestrini 1868)  
 342. Storsosa obscura (Jacque 1991)  
 343. Asceua cingulata (Simon 1905)  
 344. Lutica bengalensis (Tikadar and Patel 1975)  
 345. Lutica deccanensis (Tikadar and Malhotra 1976)

**4. Discussion**

Considering the duration of the current study and the large number of specimens in the study provides a good representation of spider families occurring in the Sangli district. The abundance of grasses like; *Andropogon pumilus*, *Aristida adscensionis*, *Brachiaria eruciformis*, *Chrysopogon fulvus*, *Cyperus rotundus*, *Dactyloctenium aegyptium*, *Digitaria ciliaris*, *Dinebra retroflexa*, *Lepopogon tridentatus* etc. are favourable for spiders from family Oxyopidae and philodromidae. During study of year 2012 to 2017 we reported that 32 spider families with 155 genera and 345 species from Sangli district including Chandoli National Park (Sahyadri Tiger Reserve ) which provides wonderful vistas of the surrounding landscape. The most distinct feature of this national park is the presence of numerous barons rocky and laetile plateau called as Zolambi Sada. This plateau is good source of lycosidae and thomisidae spiders. Additionally the study provided new information on the distribution of all species concerned and provides material that can be used in future taxonomic work.

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