**Original Research Article**

DOI: 10.26479/2020.0606.02

DIVERSITY OF MARPISSOIDA, CHRYSILLINI AND HASARIINI (SALTICINAE: SALTICIDAE: ARANEA: ARACHNIDA) IN INDIA**Rajendra Singh^{1*}, Garima Singh², Bindra Bihari Singh³**

1. Department of Zoology, Deendayal Upadhyay University of Gorakhpur (U.P.), India.
2. Department of Zoology, Rajasthan University, Jaipur (Rajasthan), India.
3. Department of Agricultural Entomology, Janta Mahavidyalaya, Ajitmal, Auraiya (U.P.), India.

ABSTRACT: The diversity of 4 tribes (Ballini, Dendryphantini, Chrysillini and Hasariini) of subfamily Salticinae in Indian states and union territories is reported. The tribe Ballini (3 genera, 9 species) is reported only from Goa, Gujarat, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh and Uttarakhand while Dendryphantini (9 genera, 47 species) is widely distributed. Similarly, the tribe Chrysillini (19 genera, 56 species) and Hasariini (6 genera, 14 species) are also represented almost throughout India except few states and territories. Out of 126 species of these spiders reported in India, 79 species (62.7%) are endemic.

Keywords: Salticidae, Salticinae, Marpissoida, Chrysillini, Hasariini, distribution, jumping spiders, India.

Article History: Received: September 25, 2020; Revised: October 08, 2020; Accepted: November 01, 2020.

Corresponding Author: Prof. Rajendra Singh* Ph.D.

Department of Zoology, Deendayal Upadhyay University of Gorakhpur (U.P.), India.

1. INTRODUCTION

Spiders are the member of the order Araneae of class Arachnida. Till to date 48,783 described species under 4,182 genera and 128 families [1]. Indian spider fauna was updated up to 1850 species belonging to 470 genera and 61 families [2]. However, there are several species in wild and museum collections that await description and classification. Recently, the faunal record of mygalomorph spiders (tarantulas and their close kin), distributed in different states and union territories of India, was up to dated [3]. Salticidae Blackwall, 1841 (Arachnida: Araneae) includes jumping

spiders which is the largest family of the order Araneae containing 646 genera and 6231 species globally [1] and 268 species under 95 genera from India [2]. The classification of Salticidae of the world is still unsatisfactory because of several grounds [4]. Maddison [5] subgrouped Salticidae into 7 subfamilies: Asemoneinae, Eupoinae, Hispaninae, Lyssomaninae, Onomastinae, Salticinae and Spartaeinae. Out of all subfamilies, Salticinae comprises 93.7% of the species (5818 species, 576 genera, including few species of uncertain position, *incertae sedis*). Detail taxonomic features of all these subfamilies/tribes/subtribes and their phylogenetic relationship were already been explained [5, 6, 7]. Distribution of Asemoneinae, Eupoinae, Hispaninae, Lyssomaninae, Onomastinae, and Spartaeinae in India was already reported recently [8]. The Salticinae are grouped into 2 clades: Amycoidea and Salticoidea. Salticoidea again comprises three clades, Astioidea, Marpissoida and Saltafresia and each clade is further divided into tribes and subtribes. Recently, the distribution of clades Amycoidea and Astioidea was accounted by [9]. The present article deals with the distribution of only clade Marpissoida and two tribes of clade Salticoidea (Chrysillini and Hasariini) from different Indian states and union territories.

2. MATERIALS AND METHODS

This checklist is based on the literature published in recent past books, journals and few authentic theses and World Species Catalogue up to 31 August, 2020. Several species reported and described from India have been misidentified and seems to be reported erroneously. In addition, several species reported from India are said to be identified by using existing literature without a re-examination of the corresponding types [10] and without consulting any spider taxonomist. Hence, these reports need re-examination. Also, in most of the literature, published earlier, several errors crept in their scientific names even in the recent ones. It happened because such contents become outdated quickly and, due to their perceived comprehensiveness, readers sometimes overlook newer sources of data. Additionally, the researches on spider taxonomy are continued with the description of new taxa, their modified status, and the publication of other nomenclatural decisions. In the present compilation, attempts have been made to correct these errors in the scientific names of the spiders following WSC [1]. Only those synonymies were mentioned that were reported in India, for other synonymy WSC [1] may be consulted. All the endemic species are marked with (*).

3. RESULTS AND DISCUSSION

Representation of different clades, tribes, subtribes, genera and species in India is tabulated earlier [9]. Out of 27 tribes in Salticinae [5], only 17 tribes are recorded in India containing 314 species under 99 genera [9]. The Marpissoida includes 2 tribes: Ballini (3 genera, 9 species) and Dendryphantini (9 genera, 47 species). The tribe Ballini is reported only from Goa, Gujarat, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh and Uttarakhand while Dendryphantini is widely distributed. Like Dendryphantini, the tribe Chrysillini (19 genera, 56 species) and Hasariini (6 genera, 14 species) are also represented almost throughout India except few states and territories

(Figure 1). Most of these spiders are observed in 7 states: Gujarat (24 species), Karnataka (23 species), Kerala (26 species), Maharashtra (32 species), Tamil Nadu (27 species), Uttarakhand (21 species) and West Bengal (48 species). Extensive survey for these spiders is required in states like Bihar, Chattisgarh, Haryana, Jharkhand, Madhya Pradesh, Punjab, Telangana, and Uttar Pradesh that are poorly represented by these spiders. Despite the spiders are most diverse group of predators and being crucial to the health of terrestrial ecosystems, none of the species recorded in India is listed in IUCN Red List. These species are listed below along with suitable references in a taxonomic order: tribe, subtribe, genus and species. Out of 126 species of the spiders listed below, 79 species (62.7%) are endemic to India.

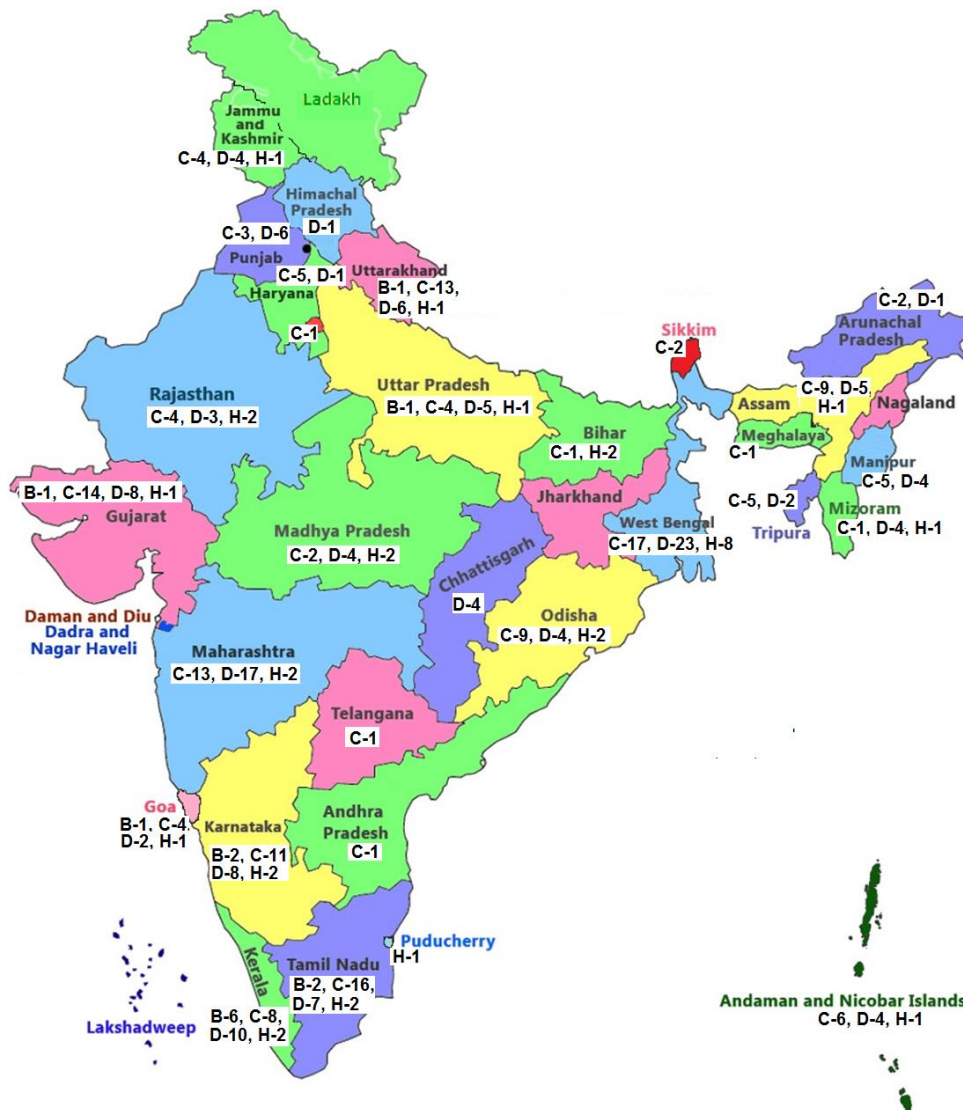


Figure 1. Number of species of jumping spiders belonging to different tribes of subfamily Salticinae (B-Ballini, C-Chrysillini, D-Dendryphantini and H-Hasariini) recorded in Indian states and union territories.

Clade 1: Marpissoida Maddison & Hedin, 2003

Tribe 1: Ballini Banks, 1892

1. *Colaxes nitidiventris* Simon, 1900*

© 2020 Life Science Informatics Publication All rights reserved

Peer review under responsibility of Life Science Informatics Publications

2020 Nov – Dec RJLBPCS 6(6) Page No.17

- Tamil Nadu [11, 12, 13, 14]

2. *Colaxes sazailus* Paul et al., 2020*

- Karnataka [15]

3. *Indomarengo chavarapater* Malamel et al., 2019*

- Kerala [16]

4. *Indomarengo* sp.

- Karnataka [17]

5. *Marengo batheryensis* Sudhin et al., 2019*

- Kerala [18]

6. *Marengo crassipes* Peckham & Peckham, 1892

- Uttar Pradesh [19, 20]; • Uttarakhand [21]

7. *Marengo nitida* Simon, 1900

- Kerala [22, 23]

8. *Marengo sachintendulkar* Malamel et al., 2019

- Gujarat [16]; • Kerala [16]; • Tamil Nadu [16]

9. *Marengo striatipes* Simon, 1900

- Kerala [23]

10. *Marengo zebra* Sudhin et al., 2019*

- Kerala [18]

11. *Marengo* sp.

- Goa [24]

Tribe 2: Dendryphantini Menge, 1879

Subtribe 1: Dendryphantina Menge, 1879

1. *Dendryphantes caporiaccoi* Roewer, 1951 (syn. *Dendryphantes variegatus* Caporiacco, 1935)

- Jammu & Kashmir [25]

2. *Hentzia palmarum* (Hentz, 1832)

- Karnataka [26]

3. *Phidippus audax* (Hentz, 1845) (syn. *Megatimus severus* Thorell, 1891)

- Andaman & Nicobar [27]; • Karnataka [26]; • Maharashtra [28]; • Mizoram [29]

4. *Phidippus bengalensis* Tikader, 1977*

- Gujarat [30, 31]; • Karnataka [32, 33, 34, 35]; • Maharashtra [28, 32, 33, 34, 35, 36]; • Odisha [37]
- Punjab [32, 33, 34, 35, 38]; • Tamil Nadu [39]; • West Bengal [32, 33, 40, 41]

5. *Phidippus bhimrakshiti* Gajbe, 2004*

- Chhattisgarh [42, 43]; • Madhya Pradesh [44, 45]; • Maharashtra [36, 46]

6. *Phidippus calcuttaensis* Biswas, 1984*

- Gujarat [31, 47]; • West Bengal [31, 48]

7. *Phidippus clarus* Keyserling, 1885

- Uttar Pradesh [49]

8. *Phidippus khandalaensis* Tikader, 1977*

- Maharashtra [50]

9. *Phidippus otiosus* (Hentz, 1846)

- Karnataka [26]; • Maharashtra [51]

10. *Phidippus punjabensis* Tikader, 1974*

- Gujarat [31, 47, 52]; • Jammu & Kashmir [53]; • Maharashtra [54, 55]; • Manipur [55, 56]; • Punjab [54, 55, 57]; • Tripura [57]

11. *Phidippus regius* C. L. Koch, 1846

- Maharashtra [51]

12. *Phidippus tirapensis* Biswas & Biswas, 2006*

- Arunachal Pradesh [58]

13. *Phidippus yashodharae* Tikader, 1977* (syn. *Ptocasius yashodharae* (Tikader, 1977))

- Andaman [50]; • Assam [59, 60, 61]; • Kerala [62, 63]; • Rajasthan [64]; • Tamil Nadu [65]; • Uttar Pradesh [49, 66, 67]

14. *Phidippus* sp.

- Chhattisgarh [68]; • Gujarat [69, 70]; • Jammu & Kashmir [71, 72]; • Karnataka [73]; • Kerala [74]; • Madhya Pradesh [75, 76, 77]; • Tamil Nadu [78]; • Uttar Pradesh [79]

15. *Rhene albigera* (C.L. Koch, 1846)

- Gujarat [31, 80, 81]; • Kerala [82]; • Rajasthan [83, 84]; • Maharashtra [10]; • West Bengal [85]

16. *Rhene callida* Peckham & Peckham, 1895*

- West Bengal [86]

17. *Rhene callosa* (Peckham & Peckham, 1895)* (syn. *Anamosa callosa* Peckham & Peckham, 1895)

- Himalaya [86]

18. *Rhene citri* (Sadana, 1991)* (syn. *Zygoballus citri* Sadana, 1991)

- Punjab [87]

19. *Rhene daitarensis* Proszynski, 1992*

- Kerala [82]; • Odisha [10]

20. *Rhene danieli* Tikader, 1973*

- Gujarat [88]; • Haryana [89]; • Kerala [62, 90, 91]; • Maharashtra [33, 35, 92, 93]; • Mizoram [29]; • Odisha [37, 94]; • Tamil Nadu [65]; • Tripura [95]; • Uttarakhand [96, 97]; • West Bengal [32, 33, 35, 93]

21. *Rhene darjeelingiana* Proszynski, 1992*

- West Bengal [10]

22. *Rhene decorata* Tikader, 1977* (syn. *Rhene decoratus* Tikader, 1977)

- Assam [98]; • Maharashtra [32, 33, 35, 99]; • West Bengal [32, 33, 35, 100]

23. *Rhene flavicomans* Simon, 1902

- Assam [101]; • Goa [24]; • Kerala [91]; • Karnataka [102]; • Maharashtra [103, 104]; • Tamil Nadu [23, 105]; • Uttarakhand [21, 97]; • West Bengal [85]

24. *Rhene flavigera* (C.L. Koch, 1846)

- Assam [106]; • Gujarat [88, 107]; • Karnataka [108, 109]; • Kerala [91, 110]; • Madhya Pradesh [111]; • Manipur [56]; • Uttar Pradesh [112, 113]; • Uttarakhand [96, 114]; • West Bengal [85]

25. *Rhene formosa* Rollard & Wesolowska, 2002

- West Bengal [85]

26. *Rhene haldanei* Gajbe, 2004*

- Chhattisgarh [42, 43]; • Madhya Pradesh [44, 45]; • Maharashtra [103, 104]

27. *Rhene indicus* Tikader, 1973* (syn. *Rhene indicus* Tikader, 1973)

- Andaman [40]; • Kerala [115]; • Maharashtra [28, 35, 103]; • Odisha [37]; • Punjab [32, 92]; • Uttar Pradesh [116]; • West Bengal [32, 35, 40, 85, 93]

28. *Rhene khandalaensis* Tikader, 1977*

- Goa [117]; • Gujarat [118]; • Maharashtra [33, 99, 117, 28]; • Punjab [38]; • West Bengal [33, 85]

29. *Rhene leucomelas* (Thorell, 1891) (syn. *Homalattus leucomelas* Thorell, 1891)

- Andaman & Nicobar [27, 119]

30. *Rhene mus* (Simon, 1889)* (syn. *Homalattus mus* Simon, 1889)

- Uttarakhand [120]

31. *Rhene pantharae* Biswas & Biswas, 1992*

- West Bengal [33]

32. *Rhene rubrigeria* (Thorell, 1887) (syn. *Homalattus albostriatus* Thorell, 1891; *Rhene albostriata* (Thorell, 1891); *Rhene phoenicea* (Simon, 1888))

- Andaman & Nicobar [23, 27, 121]; • Assam [122]; • Karnataka [17, 123]; • Kerala [90, 91]; • Manipur [56]; • Tamil Nadu [23]; • Uttarakhand [21]; • West Bengal [85, 93, 124]

33. *Rhene sanghrakshiti* Gajbe, 2004*

- Chhattisgarh [43]; • Madhya Pradesh [44, 45]; • Maharashtra [28]

34. *Rhene* sp.

- Chhattisgarh [42]; • Gujarat [31, 52, 70]; • Karnataka [73, 125]; • Kerala [126, 127]; • Madhya Pradesh [75, 76, 77]; • Maharashtra [128]; • Uttar Pradesh [116, 129, 130]; • Uttarakhand [97, 114]

35. *Zeuxippus histrio* Thorell, 1891*

- Tamil Nadu [27, 13]

36. *Zygoballus* sp.

- Chhattisgarh [68]; • Jammu & Kashmir [131, 132, 133]; • Kerala [127]; • West Bengal [100]

Subtribe 2: *Marpissina* Simon, 1901**1. *Maevia* sp.**

- West Bengal [134]

2. *Marpissa dayapurensis* Majumder, 2004*

- West Bengal [34, 35, 135]

3. *Marpissa edenae* Biswas & Biswas, 1992*

- West Bengal [35]

4. *Marpissa gangasagarensis* Majumder, 2005*

- West Bengal [35, 135]

5. *Marpissa kalapani* Tikader, 1977*

- Andman [40]

6. *Marpissa kalighatensis* Biswas & Biswas, 1992*

- Maharashtra [28]
- West Bengal [33, 35]

7. *Marpissa manipuriensis* Biswas & Biswas, 2004*

- Manipur [55, 56]

8. *Marpissa mizoramensis* Biswas & Biswas, 2007*

- Mizoram [136]

9. *Marpissa nutanae* Biswas & Biswas, 1984*

- West Bengal [33, 35, 137]

10. *Marpissa pauariensis* Biswas & Roy, 2008*

- Uttarakhand [138]

11. *Marpissa prathamae* Biswas & Biswas, 1984*

- West Bengal [33, 35, 137]

12. *Marpissa tigrina* Tikader, 1965*

- Gujarat [47, 89, 81, 139]; • Kerala [74]; • Maharashtra [32, 33, 35, 103, 104, 136]; • Mizoram [136]; • Punjab [32, 33, 35, 38, 136]; • West Bengal [32, 33, 35, 41]

13. *Marpissa* sp.

- Gujarat [118]; • Himachal Pradesh [140]; • Jammu & Kashmir [33, 71, 131, 132]; • Karnataka [73]; • Rajasthan [141]; • Tamil Nadu [78]; • Uttar Pradesh [79, 130]

14. *Platycryptus undatus* (De Geer, 1778)

- Karnataka [26]

Clade 2: *Saltafresia* Bodner & Maddison, 2012**Tribe 1: *Chrysillini* Simon, 1901****1. *Afraflacilla flavipes* (Caporiacco, 1935) (syn. *Icius flavipes* Caporiacco, 1935)**

- Jammu & Kashmir [25]

2. *Afraflacilla* sp.

- West Bengal [142]

3. *Chrysilla acerosa* Wang & Zhang, 2012 (syn. *Chrysilla assamensis* Ahmed et al., 2014)

- Assam [143, 144]; • Karnataka [102]

4. *Chrysilla lauta* Thorell, 1987

- Gujarat [31, 145, 146, 147]; • Karnataka [148]; • Kerala [82]

5. *Chrysilla volupe* (Karsch, 1879) (syn. *Phintella volupe* (Karsch, 1879))

• Goa [24]; • Gujarat [149, 150]; • Karnataka [102, 105, 149]; • Kerala [91, 149]; • Maharashtra [149]; • Tamil Nadu [13, 144, 149, 151, 152]; • Telangana [149]; • Uttarakhand [149]; • West Bengal [149]

6. *Chrysilla* sp.

• Assam [153]

8. *Cosmophasis* cf. *bitaeniata* (Keyserling 1882)

• Andaman & Nicobar [154]

7. *Cosmophasis miniaceomicans* (Simon, 1888)* (syn. *Cyllobelus miniaceomicans* Simon, 1888)

• Andaman & Nicobar [155]; • Maharashtra [103, 104]

8. *Cosmophasis umbratica* Simon, 1903

• Assam [122]; • Maharashtra [28]; • Rajasthan [64]; • Uttar Pradesh [156]

9. *Cosmophasis* sp.

• Gujarat [157]; • Uttarakhand [96]

10. *Epocilla aurantiaca* (Simon, 1885) (syn. *Opistoncus aurantiacus* Simon, 1885))

• Assam [93, 98]; • Gujarat [31, 107, 146, 158]; • Haryana [89]; • Karnataka [17, 123]; • Kerala [82, 93, 91, 98, 110]; • Maharashtra [159]; • Tamil Nadu [14, 160]; • Uttarakhand [21]; • West Bengal [93, 161]

11. *Epocilla calcarata* (Karsch, 1880)

• Haryana [89]; • Kerala [91]

12. *Epocilla praetextata* Thorell, 1887 (syn. *Epocilla aurantiaca* (Simon, 1885)), misidentified [98]

• Manipur [56, 162]; • West Bengal [98]

13. *Epocilla sirohi* Caleb et al., 2017*

• Rajasthan [163]

14. *Epocilla xyliina* Simon, 1906*

• Himalayan plateaus [164]

15. *Epocilla* sp.

• Gujarat [31, 81]; • Odisha [165]

16. *Heliophanoides epigynalis* Prószyński, 1992*

• West Bengal [10]

17. *Heliophanoides spermathecalis* Prószyński, 1992*

• West Bengal [10]

18. *Heliophanus curvidens* (O. P.-Cambridge. 1872)

• Jammu & Kashmir [10]; • Uttarakhand [97]

19. *Icius vikrambatrai* Prajapati et al., 2018*

• Goa [24]; • Kerala [166]

20. *Icius alboterminus* (Caleb, 2014)* (syn. *Phintella alboterminus* Caleb, 2014)

• Gujarat [146, 167]; • Tamil Nadu [13, 168, 169]

21. *Icius kumariae* Caleb, 2017*

- Karnataka [170]; • Tamil Nadu [169, 170]

22. *Jajpurattus incertus* Prószyński, 1992*

- Odisha [10]; • West Bengal [10]

23. *Menemerus albocinctus* Keyserling, 1890*

- Andaman & Nicobar [23, 171]

24. *Menemerus bivittatus* (Dufour, 1831) (syn. *Attus muscivorus* Vinson, 1863; *Marpissa balteata* Koch, 1846; *Marpissa dissimilis* Koch, 1846; *Marpissa melanognathus* (Lucas, 1838); *Menemerus balteatus* Koch, 1846)

- Assam [59, 60, 61, 101, 122]; • Goa [24, 172]; • Gujarat [31, 80, 145, 146, 147, 158]; • Haryana [89]; • Karnataka [26, 109, 125, 148, 160]; • Kerala [62, 91, 110, 126, 173]; • Madhya Pradesh [77, 111]; • Maharashtra [28, 103, 104, 128, 159]; • Odisha [94, 174]; • Rajasthan [175, 176]; • Tamil Nadu [23, 65, 105, 152, 177]; • Tripura [95]; • Uttarakhand [21]; • West Bengal [124, 178, 179]

25. *Menemerus brachygnathus* (Thorell, 1887)

- Gujarat [146]; • West Bengal [180]

26. *Menemerus brevibulbis* (Thorell, 1887)

- Assam [93]; • Manipur [56]; • West Bengal [93, 98, 161]

27. *Menemerus fulvus* (L. Koch, 1878)

- Gujarat [88, 145, 146, 147]; • Odisha [165]

28. *Menemerus nigli* Wesolowska & Freudenschuss, 2012

- West Bengal [181]

29. *Menemerus semilimbatus* (Hahn, 1829)

- Karnataka [26]

30. *Menemerus* sp.

- Bihar [182]; • Goa [24]; • Karnataka [123, 148]; • Kerala [183]; • Tamil Nadu [78]; • Uttarakhand [21, 184]; • West Bengal [185]

31. *Nandicius frigidus* (O.P.-Cambridge, 1885) (syn. *Menemerus frigidus* O.P.-Cambridge, 1885; *Phlegra icioides* Simon, 1889; *Icius frigidus* (O.P.-Cambridge, 1885); *Icius icioides* (Simon, 1889); *Pseudicius frigidus* (O.P.-Cambridge, 1885))

- Jammu & Kashmir [10, 25, 186]; • Uttarakhand [120]

32. *Nandicius mussooriensis* (Prószyński, 1992)* (syn. *Phintella mussooriensis* Prószyński, 1992)

- Uttarakhand [187]

33. *Nandicius pseudoicioides* (Caporiacco, 1935)* (syn. *Icius pseudoicioides* Caporiacco, 1935; *Pseudicius pseudoicioides* (Caporiacco, 1935))

- Jammu & Kashmir [25, 186]

34. *Nandicius vallisflorum* Caleb et al., 2018*

- Uttarakhand [188]

35. *Nepalicius nepalicus* (Andreeva, Hęciak & Prószyński, 1984) (syn. *Pseudicius nepalicus*

Prószyński, 1992)

• Karnataka [148]; • Tamil Nadu [10]

36. *Okinawicius daitaricus* (Prószyński, 1992)* (syn. *Pseudicius daitaricus* Prószyński, 1992)

• Odisha [10]

37. *Okinawicius modestus* (Simon, 1885)* (syn. *Pseudicius modestus* Simon, 1885)

• Tamil Nadu [13, 14, 160]

38. *Orientattus aurantius* (Kanesharatnam & Benjamin, 2018) (syn. *Schenkelia aurantia* Kanesharatnam & Benjamin, 2018)

• Karnataka [102, 152]; • Arunachal Pradesh [189]; • Uttarakhand [152, 189]

39. *Phintella accentifera* (Simon, 1901)

• Tamil Nadu [13, 14]

40. *Phintella assamica* Prószyński, 1992*

• Assam [10]

41. *Phintella bifurcata* Prószyński, 1992*

• Odisha [10, 165]; • Uttar Pradesh [116]; • West Bengal [10]

42. *Phintella bifurcilinea* (Bösenberg & Strand, 1906) |

• Gujarat [88]

43. *Phintella coonooriensis* Prószyński, 1992*

• Tamil Nadu [13, 187]

44. *Phintella debilis* (Thorell, 1891)

• Odisha [10]; • Gujarat [88]; • West Bengal [10]

45. *Phintella indica* (Simon, 1901)*

• Maharashtra [28]; • Tamil Nadu [10, 190]

46. *Phintella macrops* (Simon, 1901)* (syn. *Chrysilla macrops* Simon, 1901)

• Maharashtra [28, 128]; • Sikkim [23, 190]

47. *Phintella nilgirica* Prószyński, 1992*

• Tamil Nadu [13, 187]

48. *Phintella reinhardti* (Thorell, 1891)* (syn. *Chrysilla reinhardtii* Thorell, 1891)

• Andaman & Nicobar [23, 27]

49. *Phintella sukmana* Prószyński, 1992*

• West Bengal [10]

50. *Phintella vittata* (C.L. Koch, 1846) (syn. *Phintella ranjita* (Tikader, 1967); *Salticus ranjitus* Tikader, 1967)

• Andaman & Nicobar [98, 124, 178]; • Andhra Pradesh [191]; • Arunachal Pradesh [58, 124, 178, 192]; • Assam [93, 101, 106, 122, 153, 178]; • Goa [24, 105, 172]; • Gujarat [31, 47, 52, 80, 146, 147, 158]; • Karnataka [108, 123, 125, 148]; • Kerala [62, 63, 91, 126, 178, 193]; • Madhya Pradesh [44, 77, 111]; • Maharashtra [32, 35, 58, 51, 28, 103, 104, 128, 178]; • Manipur [55, 56, 178]; • Mizoram [136]; • Odisha [174, 193]; • Punjab [32, 33, 35, 58, 178]; • Rajasthan [64, 176, 194, 195];

• Sikkim [32, 33, 35, 55, 178, 196]; • Tamil Nadu [65, 105, 151, 191]; • Tripura [57, 95]; • Uttar Pradesh [66, 197]; • Uttarakhand [21, 114]; • West Bengal [10, 32, 33, 35, 41, 44, 57, 58, 93, 98, 124, 161, 178, 179]

51. *Phintella* sp.

• Gujarat [31, 118]; • Karnataka [198]; • Kerala [199]; • Maharashtra [159]; • Uttar Pradesh [129, 130]; • Uttarakhand [97]; • West Bengal [179]

52. *Phintelloides jesudasi* (Caleb & Mathai, 2014)* (syn. *Chrysilla jesudasi* Caleb & Mathai, 2014)

• Tamil Nadu [13, 105, 151]

53. *Phintelloides manipur* Caleb, 2020*

• Manipur [200]

54. *Phintelloides singhi* (Monga et al., 1988)* (syn. *Marpissa singhi* Monga et al., 1988)

• Haryana [201]; • Maharashtra [28, 103, 104]

55. *Phintelloides undulatus* (Caleb & Karthikeyani, 2015)* (syn. *Cosmophasis undulata* Caleb & Karthikeyani, 2015)

• Maharashtra [191, 200]

56. *Phintelloides versicolor* (C. L. Koch, 1846) (syn. *Chrysilla versicolor* (C.L. Koch, 1846); *Phintella versicolor* (C.L. Koch, 1846))

• Assam [200]; • Gujarat [88]; • Manipur [200]; • Tripura [95]; • Uttarakhand [21, 202]

57. *Pilia escheri* Reimoser, 1934*

• Tamil Nadu [13, 203]

58. *Pilia saltabunda* Simon, 1902*

• Tamil Nadu [13, 204]

59. *Pseudicius andamanius* (Tikader, 1977)* (syn. *Salticus andamanius* Tikader, 1977)

• Andaman & Nicobar [40, 205]; • Gujarat [139]; • Meghalaya [205]

60. *Pseudicius* sp.

• Uttarakhand [97]

61. *Rudakius ludhianaensis* (Tikader, 1974)* (syn. *Pseudicius ludhianaensis* (Tikader, 1974); *Marpissa ludhianaensis* Sadana & Kaur, 1974; *Marpissa ludhianaensis* Tikader, 1974; *Phlegra citri* Sadana, 1980; *Marpissa endenae* Biswas & Biswas, 1992)

• Delhi [206]; • Gujarat [207]; • Haryana [89]; • Maharashtra [208]; • Punjab [38, 208, 209]; • Tamil Nadu [105, 152, 207]; • Tripura [57]; • West Bengal [33]

62. *Siler semiglaucus* (Simon, 1901)

• Assam [101, 153]; • Gujarat [146]; • Karnataka [102, 123]; • Kerala [91, 93, 98, 110, 124, 126, 178]; • Maharashtra [28]; • Odisha [94]; • West Bengal [85, 93, 98, 124, 161, 178, 179]

63. *Siler* sp.

• Gujarat [146]; • Kerala [183]; • Tripura [95]; • Uttar Pradesh [112, 113]; • Uttarakhand [97]

Tribe 3: Hasariini Simon, 1903

1. *Cheliceroides brevipalpis* Roy et al., 2016*

- West Bengal [98]

2. *Curubis erratica* Simon, 1902

- Tamil Nadu [14, 169, 210]

3. *Curubis sipeki* Dobroruka, 2004*

- Maharashtra [36, 211]; • Rajasthan [211]

4. *Curubis tetrica* Simon, 1902

- Karnataka [102]; • Kerala [63, 212, 213]

5. *Curubis* sp.

- Karnataka [17]

6. *Habrocestoides bengalensis* Proszynski, 1992*

- Odisha [10]; • West Bengal [10]

7. *Habrocestoides darjeelingus* Logunov, 1999*

- West Bengal [214]

8. *Habrocestoides indicus* Proszynski, 1992*

- West Bengal [214]

9. *Habrocestoides micans* Logunov, 1999*

- West Bengal [214]

10. *Habrocestoides nitidus* Logunov, 1999*

- West Bengal [214]

11. *Habrocestoides* sp.

- Odisha [165]

12. *Hasarius adansonii* (Audouin, 1826)

- Assam [59, 60, 61, 101, 106, 122]; • Bihar [182]; • Goa [24, 172]; • Gujarat [31, 80, 81, 146, 158]; • Jammu & Kashmir [25]; • Karnataka [17, 109, 123, 125, 198]; • Kerala [62, 90, 91, 183, 199]; • Madhya Pradesh [77, 111]; • Maharashtra [28, 103, 104, 128, 159, 160]; • Mizoram [29]; • Odisha [174, 192]; • Rajasthan [64, 195, 215]; • Tamil Nadu [65, 105, 152, 160]; • Uttar Pradesh [19, 20, 49, 156, 216]; • Uttarakhand [21]; • West Bengal [98]

13. *Hasarius kjellerupi* Thorell, 1891

- Andaman & Nicobar [27]

14. *Hasarius workmani* Thorell, 1892

- Puducherry [217]

15. *Hasarius* sp.

- Bihar [218, 219]; • Karnataka [123]; • Kerala [220]

16. *Imperceptus minutus* Proszynski, 1992*

- West Bengal [10]

17. *Madhyattus jabalpurensis* Proszynski, 1992*

- Madhya Pradesh [10]

18. *Madhyattus* sp.

• Karnataka [102]

4. CONCLUSION

The diversity of 4 tribes (Ballini, Dendryphantini, Chrysillini and Hasariini) of subfamily Salticinae in Indian states and union territories is reported. The tribes Dendryphantini (9 genera, 47 species), Chrysillini (19 genera, 56 species) and Hasariini (6 genera, 14 species) are represented almost throughout India except few states and territories. Out of 126 species of these spiders reported in India, 79 species are endemic. Extensive survey for these spiders is required in states like Bihar, Chattisgarh, Haryana, Jharkhand, Madhya Pradesh, Punjab, Telangana, and Uttar Pradesh that are poorly represented by these spiders.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

HUMAN AND ANIMAL RIGHTS

No Animals/Humans were used for studies that are base of this research.

CONSENT FOR PUBLICATION

Not applicable.

AVAILABILITY OF DATA AND MATERIALS

The author confirms that the data supporting the findings of this research are available within the article.

FUNDING

None

ACKNOWLEDGEMENT

We thank to Dr. Shelley Acharya, Scientist E, Zoological Survey of India, M-Block, Kolkata, India and Dr. J.T.D. Caleb, Department of Zoology, Madras Christian College, Tambaram, Chennai, Tamil Nadu, India for providing valuable literatures.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of the present paper.

REFERENCES

1. WSC. World Spider Catalog. Version 21.5. Natural History Museum Bern, online at <http://wsc.nmbe.ch> accessed on 15 September, 2020.
2. Caleb JTD, Sankaran PM. Araneae of India, version 2020. <https://indianspiders.in/>
3. Singh R, Singh G. Diversity of mygalomorph spiders (Araneae: Opisthothelae) in India. *International Journal of Biological Innovations*. 2020; 2(2): 178-201.
4. Prószyński J. Pragmatic classification of the World's Salticidae (Araneae). *Ecologica Montenegrina*. 2017; 12: 1-133.
5. Maddison WP. A phylogenetic classification of jumping spiders (Araneae: Salticidae). *Journal of Arachnology*. 2015; 43: 231-292.

6. Maddison WP, Li D, Bodner M, Zhang J, Xu X, Liu Q, Liu F. The deep phylogeny of jumping spiders (Araneae Salticidae). *ZooKeys* 2014; 440: 57-87.
7. Maddison WP, Evans SC, Hamilton CA, Bond JE, Lemmon AR, Lemmon EM. A genome-wide phylogeny of jumping spiders (Araneae: Salticidae) *ZooKeys*. 2017; 695: 89-101.
8. Singh R, Singh G, Singh BB. Diversity of Asemoneinae Eupoinae Hisponinae Lyssomaninae Onomastinae and Spartaeinae (Arachnida: Araneae: Salticidae) in India: a checklist and bibliography. *Research Journal of Life Sciences, Bioinformatics, Pharmaceuticals & Chemical Science*. 2020; 6(5): 29-46.
9. Singh R, Singh G, Singh BB. Diversity of Amycoidea and Astioida (Arachnida: Araneae: Salticidae: Salticinae) in India: A checklist and Bibliography. *Journal of Entomology & Zoology Studies*. 2020; 8(5): 1478-1488.
10. Proszynski J. Salticidae (Araneae) of India in the collection of the Hungarian National Natural History Museum in Budapest. *Annales Zoologici Warszawa*. 1992; 44: 165-277.
11. Simon E. Descriptions d'arachnides nouveaux de la famille des Attidae. *Annales de la Société Entomologique de Belgique*. 1900; 44: 381-407.
12. Benjamin SP. Taxonomic revision and phylogenetic hypothesis for the jumping spider subfamily Ballinae (Araneae: Salticidae). *Zoological Journal of the Linnean Society*. 2004; 142: 1-82.
13. Karthikeyani R, Caleb JTD, Gajbe UA, Muthuchelian K. Checklist of spiders (Arachnida: Araneae) of the State of Tamil Nadu India. *Munis Entomology Zoology*. 2017; 12(1): 180-193.
14. Caleb JTD, Karthikeyani R. JoTT Checklist of the spiders of Tamil Nadu (v1.0), 10 February, 2020.
15. Paul J, Prajapati DA, Joseph MM, Sebastian PA. Description of a new species of *Colaxes* 11 (Araneae: Salticidae: Ballinae) from the tropical montane cloud forests of Western Ghats India. *Arthropoda Selecta*. 2020; 29(2): 244-250.
16. Malamel JJ, Prajapati DA, Sudhikumar AV, Sebastian PA. Two new species of the tribe Ballini Banks, 1892 from India (Araneae: Salticidae). *Arthropoda Selecta*. 2019; 28(3): 424-434.
17. Mubeen M, Basavarajappa S. Density abundance and per cent occurrence of spider species (Arachnida: Araneae) in and around Mysore city, Karnataka, India - a case study. *IOSR Journal of Pharmacy and Biological Sciences*. 2018; 13(3): 31-40.
18. Sudhin PP, Nafin KS, Benjamin SP, Sudhikumar AV. Two new species of the genus *Marengo* Peckham et Peckham, 1892 (Araneae: Salticidae) from Western Ghats of India. *Arthropoda Selecta*. 2019; 28(3): 435-444.
19. Sharma A, Singh R. Biodiversity and guild structure of spiders in northeastern Uttar Pradesh. *Research Journal of Life Sciences, Bioinformatics, Pharmaceuticals & Chemical Sciences*. 2018; 4(4): 525-541.

20. Sharma A, Singh R. Species diversity and guild structure of spiders from Siddharthnagar Uttar Pradesh India. *Journal of Life Sciences, Bioinformatics, Pharmaceuticals & Chemical Sciences*. 2018; 4(4): 383-390.
21. Gupta N, Siliwal M. A checklist of spiders (Arachnida: Araneae) of Wildlife Institute of India, campus Dehradun, Uttarakhand, India. *Indian Journal of Arachnology*. 2012; 1(2): 73-91.
22. Sherriffs WR. A contribution to the study of South Indian Arachnology, IV. *Annals and Magazine of Natural History*. 1929; 10 (2): 233-249.
23. Sherriffs WR. South Indian Arachnology. Part V. *Annals and Magazine of Natural History*. 1931; 10: 537-546.
24. Pandit R, Dharwadkar M. Preliminary checklist of spider fauna (Araneae: Arachnida) of Chandranath Hill, Goa, India. *Journal of Threatened Taxa*. 2020; 12(11): 16597-16606.
25. Caporiacco L di. Aracnidi dell'Himalaia e del Karakoram raccolti dalla Missione italiana al Karakoram (1929-VII). *Memorie della Società Entomologica Italiana Genova*. 1935; 13: 161-263.
26. Tabasum NR, Nagaraj B, Shantakumari S, Sreenivasa V, Sai Sandeep Y. Assessment of spider diversity and composition along the Tungabhadra Irrigation Channel at Ballari, Karnataka. *International Journal on Biological Sciences*. 2018; 9(1): 36-44.
27. Thorell T. Spindlar från Nikobarerna och andra delar af södra Asien. *Kongliga Svenska Vetenskaps-Akademiens Handlingar*. 1891; 24(2): 1-149.
28. Rithe K. Spider diversity from relocated area of Melghat Tiger Reserve. *Indian Journal of Arachnology*. 2012; 1(2): 92-105.
29. Chowdhury S, Boopathi Bhattacharjee TB, Dey JK, Bhattacharjee J. Diversity of predatory spider and their species composition in rice ecosystem in Kolasib district of Mizoram. *Innovative Farming*. 2017; 2(1): 12-18.
30. Bhatt N. A Preliminary Systematic study of Spiders of Major Wetlands of Anand-Kheda districts Gujarat India. *International Research Journal of Biological Sciences*. 2014; 3(7): 71-73.
31. Yadav A, Solanki R, Siliwal M, Kumar D. Spiders of Gujarat: a preliminary checklist. *Journal of Threatened Taxa*. 2017; 9(9): 10697-10716.
32. Tikader BK, Biswas B. Spider fauna of Calcutta and vicinity: Part-I. *Records of the Zoological Survey of India, Occasional Paper*. 1981; 30: 1-149.
33. Biswas B, Biswas K. Araneae: Spiders. *State Fauna Series 3: Fauna of West Bengal, Zoological Survey of India, Kolkata*. 1992; 3: 357-500.
34. Majumder SC. Taxonomic studies of some spiders from mangrove and semi-mangrove areas of Sundarban. *Memoirs of the Zoological Survey of India*. 2004; 20(2): 1-42.

35. Majumder SC. Studies on some spiders from eastern coastal region of India. *Memoirs of the Zoological Survey of India*. 2005; 20(3): 1-57.
36. Meshram A. Spiders (Arachnida: Araneae) from Toranmal Sanctuary, Maharashtra India. *E-International Scientific Research Journal*. 2011; (4): 326-334.
37. Biswas B. Araneae-Spiders (Families: Araneidae, Gnaphosidae and Salticidae). In: *Zoological Survey of India (Eds.), Fauna of Orissa, State Fauna Series Part-I, Zoological Survey of India, Kolkata, 1987, 257-272.*
38. Kumari K. Taxonomy of spiders (Arachnida: Araneae) from northern India. M. Phil. thesis, Department of Zoology, Punjabi University, Patiala, 1983.
39. Umarani S, Umamaheshwari S. Diversity of spider fauna at different sites in Palani Hills, Dindigul district, Tamilnadu, South India. *International Journal of Advanced Biological Research*. 2013; 3(4): 535-539.
40. Tikader BK. Studies on spider fauna of Andaman and Nicobar islands, Indian Ocean. *Records of the Zoological Survey of India*. 1977; 72: 153-212.
41. Talukdar S, Majumder SC. Diversity of spider fauna of Bortibeel, North 24 Parganas, West Bengal, their possible utilities as significant biological pestcontrol in the paddy field-ecosystem. *Records of the Zoological Survey of India*. 2008; 108(2): 39-45.
42. Kujur R, Ekka A. Exploring the spider fauna of Gomarda Wildlife Sanctuary, Chhattisgarh, India. *International Research Journal of Biological Sciences*. 2016; 5(6): 31-36.
43. Ekka A, Kujur R. Spider diversity of Ram Jharna, Raigarh district, Chhattisgarh, India. *Research Journal of Pharmacy & Technology*. 2015; 8(7): 813-819.
44. Gajbe PU. Spiders of Jabalpur, Madhya Pradesh (Arachnida: Araneae). *Records of the Zoological Survey of India, Occasional Paper*. 2004; No. 227: 1-154.
45. Patil SR. Spiders of Jabalpur District (Arachnida: Araneae): Updated Checklist 2011. *Indian Journal of Arachnology*. 2012; 1(1): 143-149.
46. Wankhade VW, Manwar NA, Rupwate AA, Raut NM. Diversity and abundance of spider fauna at different habitats of University of Pune, M.S., India. *Global Advanced Research Journal of Environmental Science and Toxicology*. 2012; 1(8): 203 -210.
47. Siliwal M. Taxonomic studies of spiders with special emphasis on their role in biological control of insect pests. Ph.D. thesis, M.S. University of Baroda, Vadodara, Gujarat, India, 2000, 83.
48. Biswas B. Description of six new species of spiders of the families Clubionidae, Gnaphosidae and Salticidae from India. *Bulletin of the Zoological Survey of India*. 1984; 6: 119-127.
49. Anjali, Prakash S. Diversity of spiders (Araneae) from semi arid habitat of Agra (India). *Indian Journal of Arachnology*. 2012; 1(2): 66-72.

50. Tikader BK. Description of two new species of jumping-spiders of the genus *Phidippus* (family: Salticidae) from India. *Entomon.* 1977; 2: 97-99.
51. Chapke SP. Spider diversity of agroecosystem in Washim district (MS), India. *Indian Journal of Research.* 2012; 1(7): 73-76.
52. Siliwal M, Suresh B, Dhuru S, Pilo B. Spider diversity of riparian zone of river Vishwamitri Gujarat. *Journal of Current Science.* 2003; 3(2): 429 -434.
53. Thakur JN, Singh JP, Verma OP, Diwakar MC. Spider fauna in the rice ecosystem of Jammu. *Journal of Biological Control.* 1995; 9(2): 125-126.
54. Tikader BK. Studies on some jumping spiders of the genus *Phidippus* from India (family Salticidae). *Proceedings of the Indian Academy of Science.* 1974; 79(B): 120-126.
55. Biswas BK, Biswas K. Araneae: Spiders. In: *Fauna of Manipur, State Fauna Series. Zoological Survey of India Kolkata.* 2004; 10(2): 25-46.
56. Kananbala A, Bhubaneshwari M, Siliwal M. A checklist of spiders (Arachnida: Araneae) of Manipur India with some first records and a new species *Conothele khunthokhanbi* (Family: Ctenizidae). *Journal of Entomology and Zoology Studies.* 2018; 6(5): 2209-2214.
57. Biswas B, Majumder SC. *Fauna of Tripura (Arachnida: Araneae). State Fauna Series. Zoological Survey of India, Kolkata.* 2000; 7: 113-122.
58. Biswas B, Biswas K. Araneae: Spiders. In: *Fauna of Arunachal Pradesh, State Fauna Series. Zoological Survey of India, Kolkata.* 2006; 13(2): 491-518.
59. Singh S, Borkotoki A, Sarmah CK. Species distribution of spiders in barpeta district of Assam: a diversity measure. *International Scientific Research Journal.* 2012; 4(1): 47-57.
60. Singh S, Sarmah CK, Borkotoki A. Non-parametric estimate of spider species richness in Barpeta district, Assam, India. *Indian Journal of Arachnology.* 2013; 2(2): 22-33.
61. Singh S, Borkotoki A. Species diversity measure of webless spiders in four different habitats of Barpeta District, Assam, India. *Indian Journal of Applied Research.* 2014; 4(12): 556-558.
62. Malamel JJ, Samson PD. A pioneering study on the spider (Arachnida: Araneae) fauna of Kumarakom Bird Sanctuary. *International Journal of Science, Environment and Technology.* 2014; 3(3): 872-880.
63. Abhilash R, Kumar AS. A survey of spider diversity on the bank of river Pampa at Poovathoor Pathanamthitta, District Kerala. *Trends in Biosciences.* 2018; 11(7): 1025-1028.
64. Lawania KK, Trigunayat MM. A Comparative Study of the spider (Araneae) fauna in Keoladeo National Park (KNP), Nahargarh Wildlife Sanctuary (NWS) and Sur-sarovar Bird Sanctuary (SBS) India. *International Journal on Agricultural Sciences.* 2015; 6(1): 141-146.

65. Dharmaraj J, Gunasekaran C, Rajkumar V. Diversity and plethora of spider fauna at different habitats of the Nilgiris, Tamilnadu south India. *International Journal of Recent Scientific Research*. 2018; 9(3A): 24634-24637.
66. Lawania KK, Mathur P. Diversity and distribution of spider fauna in and around the Taj Mahal and Taj Protected Forest Agra (UP) India. *International Journal of Basic and Applied Biology*. 2014; 2(2): 111-114.
67. Lawania KK, Mathur P. Diversity and distribution of spiders in and around Vrindavan, Mathura (UP) India. *International Journal of Basic and Applied Biology*. 2014; 2(2): 115-119.
68. Mishra AK, Shrivastava SK. Spiders associated with rice crop in Raipur. *Agricultural Science Digest*. 2002; 22(4): 261-263.
69. Patel BH, Vyas R. Spider of Hingolghadh Nature Education Sanctuary, Gujarat, India. *Zoos' Print Journal*. 2001; 16(9): 589 -590.
70. Parasharya BM, Pathan VADiversity of spider fauna in Lucerne (*Medicago sativa* L.). *Journal of Biological Control*. 2013; 27(4): 253 -259.
71. Khan AA. Biodiversity of spider fauna (Arachnida: Araneae) in horticultural ecosystem of Kashmir. *Indian Journal of Ecology*. 2009; 36(1): 59-64.
72. Khan AA. Spider fauna (Arachnida: Araneae) in horticultural ecosystem of Kashmir. In: Gupta VK, Verma AK (Eds.), *Animal Diversity Natural History and Conservation*, Vol. 1, Daya Publishing House, Delhi, 2013, 313-338.
73. Nautiyal S, Khan YDI, Kaechele H, Bhaskar K. Diversity and distribution of spiders in Gogi Yadgir District: a semi-arid landscape in southern India. *International Journal of Ecology and Environmental Sciences*. 2017; 43(3): 195-204.
74. Patel BH. Fauna of Protected Areas - A Preliminary list of Spiders with the descriptions of three new species from Parambikulam Wildlife sanctuary, Kerala. *Zoos' Print Journal*. 2003; 18(10): 1207-1212.
75. Gajbe P. A checklist of spiders (Arachnida: Araneae) of Jabalpur Madhya Pradesh India. *Records of Zoological Survey of India*. 2003; 101 (3-4): 43-47.
76. Gajbe P. Checklist of spiders (Arachnida: Araneae) of Madhya Pradesh and Chhattisgarh. *Zoo's Print Journal*. 2003; 18(10): 1223-1226.
77. Sharma P, Sharma VK. Diversity of spiders around Sirpur Lake, Indore (M.P.) India. *International Journal of Zoology and Research*. 2015; 5(2): 1-8.
78. Kapoor V. Effects of rainforest fragmentation and shade-coffee plantations on spider communities in the Western Ghats, India. *Journal of Insect Conservation*. 2008; 12: 53-68.
79. Tandon PL, Lal B. Predatory spiders associated with insect pests of mango in India. *Bulletin of Entomology*. 1983; 24: 144-147.

80. Solanki R, Kumar D. Spiders (Araneae) from five major agroecosystems of Jambughoda village, Panchmahal district, Gujarat, India. *International Journal of Science and Research*. 2015; 4(9): 958-961.
81. Solanki R, Siliwal M, Kumar D. A preliminary checklist of spiders (Araneae: Arachnida) in Jambughoda Wildlife Sanctuary, Panchmahal District, Gujarat, India. *Journal of Threatened Taxa*. 2020; 12(11): 16576-16596.
82. Joseph MM, Paul J, Sankaran PM, Sebastian PA. Preliminary results on the spider fauna (Arachnida: Araneae) of the high altitude shola ecosystem in the Western Ghats. *Proceedings of the National Conference on Ecology Sustainable Development and Wildlife Conservation*, 2017, 41-49.
83. Sen S, Saha S, Raychaudhuri D. Spiders of Ranthambore National Park, Rajasthan. *Insect Environment*. 2009; 16(4): 172 -173.
84. Saha S, Dhali DC, Raychaudhuri D. Spider fauna (Araneae: Arachnida) of Rajasthan with special reference to Ranthambore National Park, Rajasthan, India. *Indian Journal of Arachnology*. 2015; 4(1): 30-40.
85. Dhali DC, Sen S, Saha S, Raychaudhuri D. Jumping spiders (Araneae: Salticidae) of four reserve forests of Dooars, West Bengal. *Bionotes*. 2010; 12(1): 24 -25.
86. Peckham GW, Peckham EG. Spiders of the *Homalattus* group of the family Attidae. *Occasional Papers of the Natural History Society of Wisconsin*. 1895; 2: 159-183.
87. Sadana GL. A new species of the spider of the genus *Zygoballus* Peckhams 1885 (Salticidae) from India. *Entomon*. 1991; 16: 73-75.
88. Thumar RH. Biodiversity and taxonomic study of predacious spiders of some orchard plants in and around Navsari District, Gujarat. Ph. D thesis, Veer Narmad South Gujarat University, Surat, Gujarat. 2019, 261.
89. Malik V, Goyal V. Biodiversity of spiders in different habitats of Western Haryana India. *Journal of Entomology and Zoology Studies*. 2017; 5(4): 822-825.
90. Dhali DC, Sunil Jose K, Sureshan PM. Arachnida: Araneae (Spiders). Fauna of Malabar Wildlife Sanctuary, Kozhikode, Kerala Conservation Area Series. *Zoological Survey of India*. 2019; 62: 155-189.
91. Rajeevan S, Kunnath SM, Varghese T, Kandambeth PP. Spider diversity (Arachnida: Araneae) in different ecosystems of the Western Ghats, Wayanad region, India. *South Asian Journal of Life Science*. 2019; 7(2): 29-39.
92. Tikader BK. Studies on some jumping spiders from India (family: Salticidae). *Proceedings of the Indian Academy of Science*. 1973; 78(B): 68-72.
93. Saha S, Roy TK, Raychaudhuri D. Survey on spider faunal diversity of darjeeling tea plantations. *Munis Entomology & Zoology Journal*. 2016; 11(2): 622-635.

94. Panda S, Mishra S, Priyadarshini D, Parida P. Spiders of Nandankanan. Forest Department Government of Odisha, 2011, 64.
95. Dey A, Debnath S, Debbarma B, Chaudhuri PS. A preliminary study on spider diversity from a house hold garden, artificial mixed plantation in West Tripura India. Journal of Research in Biology. 2013; 3: 1009-1017.
96. Quasin S, Uniyal VP. Preliminary investigation of spider diversity in Kedarnath Wildlife sanctuary, Uttarakhand, India. Indian Forester. 2010; 136(10): 1340-1345.
97. Uniyal VP, Sivakumar K, Quasin S. Diversity of spiders in Nanda Devi Biosphere Reserve. Wildlife Institute of India, Dehradun. DST Project Completion Report, 2011, 199.
98. Roy TK, Saha S, Raychaudhuri D. A treatise on the jumping spiders (Araneae: Salticidae) of tea ecosystem of Dooars, West Bengal, India. World Scientific News. 2016; 53(1): 1-66.
99. Tikader BK. Description of two new species of jumping-spider of the genus *Rhene* (family: Salticidae) from India. Proceedings of the Indian Academy of Science. 1977; 85(B): 274-277.
100. Agrawal VC, Ghose RK. Fauna of Conservation Areas No. 8: Fauna of Sunderbans Tiger Reserve. Zoological Survey of India, 1995, 1-46.
101. Das S, Bhattacharjee R, Saikia PK. Comprehensive checklist of diurnal spider diversity in Guwahati metropolitan area Kamrup Assam. Tropical Zoology. 2015; 5: 121-131.
102. Abhijith APC. <https://www.mysorenature.org/mysorenature/Spiders-of-Mysore-Area>, as on 15.10.2019.
103. More S, Sawant V. Spider Fauna of Radhanagari Wildlife Sanctuary, Chandoli National Park and Koyna Wildlife Sanctuary. Indian Journal of Arachnology. 2013; 2(1): 81-92.
104. More S. Diversity of spider fauna from Bamnoli region of Koyna Wildlife Sanctuary. International Journal of Science and Research. 2015; 4(6): 1690-1693.
105. Caleb JTD. Spider (Arachnida: Araneae) fauna of the scrub jungle in the Madras Christian College campus, Chennai India. Journal of Threatened Taxa. 2020; 12(7): 15711-15766.
106. Gupta R, Devi OS, Islam M. (Eds.). Common spiders from select protected areas of upper Assam. Assam State Biodiversity Board, Rehabari, Guwahati, 2015; 186.
107. Parmar BM, Acharya AVRLN. The spider fauna of Pariej wetland Gujarat India. International Journal of Science and Research. 2015; 4(10): 1028-1033.
108. Vaibhav PU, Vidyavati Maharashtra, Tanuja KD, Milind FN, Karuna G, Veeranagoudar DK, Pulikeshi MB. Spider diversity of Karnatak University Campus, Dharwad. International Journal of Advanced Scientific Research and Management. 2017; 2(1): 12-26.
109. Fernandes S, Ganesh S. International study on the diversity of spiders (Order: Araneae) of Lalbagh Botanical Garden and Tavarekere Park, Bangalore South. Journal of Environment Agriculture and Biotechnology. 2020; 5(2): 275-281.

110. Jose AC, Sudhin PP, Prasad PM, Sreejith KA, Spider diversity in Kavvayi river basin Kerala, Southern India. *Current World Environment*. 2018; 13(1): 100-112.
111. Keswani S. Diversity population and microhabitat used by spiders in citrus agroecosystem. *Indian Journal of Arachnology*. 2014; 3(2): 90-101.
112. Kumar A, Kanaujia A, Kumar A, Kumar V, Mishra H. Araneofauna of Nawabganj bird sanctuary, Unnao, Uttar Pradesh, India. *Journal of Entomology and Zoology Studies*. 2017; 5(4): 1952-1955.
113. Kumar A, Kanaujia A, Kumar A, Kumar V, Mishra H. Diversity of spiders in Kukrail Reserve Forest, Lucknow, Uttar Pradesh, India. *Journal of Environmental Science and Technology*. 2017; 4(5): 101-104.
114. Pooja A, Anilkumar, Quasin S, Lekshmi S, Uniyal VP. Spider fauna of Navdanya Biodiversity Farm, Uttarakhand, India. *Indian Forester*. 2019; 145(4): 392-397.
115. Sathiamma B, Jayapal SP, Pillai GB. Observations on spiders predacious on the coconut leaf eating caterpillar *Opisina arenosella* Wlk. (= *Nephantis serinopa* Meyrick) in Kerala: Biology of *Rhene indicus* Tikader (Salticidae) and *Cheiracanthium* sp. (Clubionidae). *Entomon*. 1986; 12 (2): 121-126.
116. Uniyal VP, Hore U. Effect of management practices on spider diversity in Terai Conservation Area (TCA). Final Project Report, Wild Life Institute of India, 2009; 222.
117. Bastawade DB, Borkar M. Arachnida (orders Scorpiones, Uropygi, Amblypygi, Araneae and Phalangida). In: Fauna of Goa, State Fauna Series. Zoological Survey of India, Kolkata. 2008; 16: 211-242.
118. Siliwal M, Suresh B, Pilo B. Fauna of protected areas-3. Spiders of Purna Wildlife Sanctuary Dangs, Gujarat. *Zoos' Print Journal*. 2003; 18(11): 1259-1263.
119. Prószyński J. Redescriptions of 16 species of Oriental Salticidae (Araneae) described by F. Karsch, E. Keyserling and C.L. Koch with remarks on some related species. *Arthropoda Selecta*. 2009; 18: 153-168.
120. Simon E. Arachnides de l'Himalaya recueillis par MM Oldham et Wood-Mason et faisant partie des collections de l'Indian Museum. Première partie. *Journal of the Asiatic Society of Bengal*. 1889; 58: 334-344.
121. Żabka M. Systematic and zoogeographic study on the family Salticidae (Araneae) from Viet-Nam. *Annales Zoologici Warszawa*. 1985; 39: 197-485.
122. Chetia P, Kalita DK. Diversity and distribution of spiders from Gibbon Wildlife Sanctuary, Assam, India. *Indian Journal of Arachnology*. 2012; 1(1): 130-142.
123. Bhat PS, Srikumar KK, Raviprasad TN. Seasonal diversity and status of spiders (Arachnida: Araneae) in cashew ecosystem. *World Applied Sciences Journal*. 2013; 22(6):763-770.

124. Sen S, Dhali DC, Saha S, Raychaudhuri D. Spiders (Araneae: Arachnida) of Reserve Forests of Dooars: Gorumara National Park, Chapramari Wildlife Sanctuary and Mahananda Wildlife Sanctuary. *World Scientific News*. 2015; 20: 1-339.
125. Nalini Bai G, Ravindranatha BP. Spider diversity in IISC Bangalore, India. *Indian Journal of Arachnology*. 2012; 1(2): 50-58.
126. Adarsh CK, Nameer PO. Spiders of Kerala Agricultural University Campus, Thrissur, Kerala, India. *Journal of Threatened Taxa*. 2015; 7(15): 8288-8295.
127. Asalatha PK, Dhali DC, Prasadana PK, Sureshan PM. Study on spider fauna (Araneae: Arachnida) of Pookode Lake, Wayanad, Kerala. In: Cheruvat D, Nilayangode P, Oommen OV (Eds.), *Mainstreaming Biodiversity for Sustainable Development*, Kerala State Biodiversity Board, Thiruvananthapuram, 2017, 207-215.
128. Nerlekar AN, Warudkar AM, Gowande GG, Salve SS, Raut A, Patankar SR, Nalavade SB. A review of the faunal diversity of the Fergusson College campus, Pune, India. *Zoo's Print*. 2016; 31(10): 4-25.
129. Hore U, Uniyal VP. Diversity and composition of spider assemblages in five vegetation types of the Terai Conservation Area India. *The Journal of Arachnology*, American Arachnological Society. 2008; 36(2): 251-258.
130. Hore U, Uniyal VP. Effect of prescribed fire on spider assemblage in Terai grasslands India. *Turkish Journal of Arachnology*. 2008; 1(1): 15-36.
131. Khan AA. Spider fauna (Arachnida: Araneae) in temperate fruit orchards of Kashmir. *Journal of Biological Control*. 2011; 25(2): 103-113.
132. Khan AA. Spider fauna on temperate rice in Kashmir. *Oryza*. 2011; 48(2):147-153.
133. Khan AA, Rather AQ. Diversity and foraging behaviour of spiders (Arachnida: Araneae) in the temperate maize ecosystem of Kashmir. *Journal of Biological Control*. 2012; 26(2): 179-189.
134. Oppenheimer JR, Tikader BK. The ground activity of spiders (Araneae) and harvestmen (Phalangidae) in West Bengal, India. 1976; 73: 121-141.
135. Majumder SC. Pictorial handbook on spiders of Sunderbans, West Bengal. *Zoological Survey of India*, 2007, 138.
136. Biswas B, Biswas K. Araneae: Spiders. Fauna of Mizoram, State Fauna Series. *Zoological Survey of India*, Kolkata. 2007; 14: 455-475.
137. Biswas B, Biswas K. Description of two new species of jumping spiders of the genus *Marpissa* (Family: Salticidae) from India. *Bulletin of the Zoological Survey of India*. 1984; 6: 129-132.
138. Biswas B, Roy R. Description of six new species of spiders of the genera *Lathys* (Family: Dictynidae) *Marpissa* (Family: Salticidae), *Misumenoides* (Family: Thomisidae), *Agroeca*

- (Family: Clubionidae), *Gnaphosa* (Family: Gnaphosidae) and *Flanona* (Family: Lycosidae) from India. Records of the Zoological Survey of India. 2008; 108: 43-57.
139. Patel BH, Pillai GK. Studies on the spider fauna of groundnut fields in Gujarat India. Biological Control. 1988; 2(2): 83-88.
140. Uniyal VP. Records of spiders from Indian trans-Himalayan region. Indian Forester. 2006; 132(12a): 177-181.
141. Sivaperuman C, Rathore NS. A preliminary report on spiders in Desert National Park, Rajasthan, India. Zoos' Print Journal. 2004; 19(5): 1485-1486.
142. Ahmed J, Laha S, Pearce RJ. First record of the genus *Afraflacilla* Berland Millot, 1941 in India (Araneae: Salticidae: Chrysillini). Peckhamia 2019; 190.1: 1-3.
143. Ahmed M, Anam J, Saikia MK, Manthen SV, Saikia PK. Records of new genus *Chrysilla* (group spider: suborder: Araneae: family: Salticidae) in India at agroecosystem at Sonitpur, Assam. Journal on New Biological Reports. 2014; 3(1): 38-43.
144. Caleb JTD. New data on the jumping spiders (Araneae: Salticidae) from India. Arthropoda Selecta. 2016; 25(3): 271-277.
145. Parmar BM, Patel KB, Joshi JD, Chaudhari NR. Faunastic study of spider diversity from islands and costal areas of gulf of Kutch India. Life Sciences Leaflets 2015; 67: 12-23.
146. Parmar BM, Patel KB. Jumping spiders (Araneae: Salticidae) of Satlasana Taluka. International Journal of Advanced Engineering Research and Science. 2018; 5(3): 159-162.
147. Parmar BM, Patel KB. Preliminary study of spiders (Order: Araneae) from Taranga Hills. International Journal of Science and Research 2017; 6(11): 23-25.
148. Prashanthakumara SM, Venkateshwarlu M. Preliminary study of spiders (Araneae: Arachnida) in Gudavi Bird Sanctuary, Shivamogga, Karnataka. International Journal of Recent Scientific Research. 2017; 8(8): 19277-19281.
149. Caleb JTD, Sanap RV, Patel KG, Sudhin PP, Nafin KS, Sudhikumar AV. First description of the female of *Chrysilla volupe* (Karsch 1879) (Araneae: Salticidae: Chrysillini) from India with notes on the species' distribution and life history. Arthropoda Selecta. 2018; 27(2): 143-153.
150. Thumar RH, Dholakia AH. First record of *Chrysilla volupe* Karsch 1879 (Araneae: Salticidae) in agroecosystem of Navsari at Gujarat, India. Research Hub-International Multidisciplinary Research Journal. 2018; 5(2 10): 1-4.
151. Caleb JTD, Mathai MT. Description of some interesting jumping spiders (Araneae: Salticidae) from South India. Journal of Entomology and Zoology Studies. 2014; 2(5): 63-71.
152. Caleb JTD. A new jumping spider genus from South and Southeast Asia (Araneae: Salticidae: Plexippini: *Orientattus*). Peckhamia. 2020; 200.1: 1-5.

153. Basumatary P, Brahma D. Checklist of spiders from Chakrashila Wildlife Sanctuary Assam. International Journal of Zoology Studies. 2017; 2(5): 22-26.
154. John SJ, Myrmecophily and kleptoparasitism of the weaver ant (*Oecophylla smaragdina*) by *Cosmophasis* cf. *bitaeniata* (Araneae: Salticidae: Chrysillini) in the Andaman Islands. Peckhamia. 2020; 219.1: 1-9.
155. Simon E. Etudes sur le arachnides de l'Asie méridionale faisant partie des collections de l'Indian Museum (Calcutta). II. Arachnides recueillis aux îles Andaman par M.R.D. Oldham. Journal of the Asiatic Society of Bengal, Part II (Natural science). 1888; 56: 282-287.
156. Lawania KK, Mathur P. Baseline studies on the spider fauna (Araneae) of Braj region (Braj-Bhoomi) India. International Journal of Basic and Applied Biology. 2014; 2(1): 137-141.
157. Yadav A. Diversity and ecology of spiders in Champaner-Pavagadh Archaeological Park, a world heritage site in Gujarat. Ph. D. thesis, The M.S. University of Baroda, Vadodara, Maharashtra, India, 2019.
158. Prajapati DA, Patel KR, Munjpara SB, Chettiar SS, Jhala DD. Spiders (Arachnida: Araneae) of Gujarat University Campus, Ahmedabad, India with additional description of *Eilica tikaderi* (Platnick 1976). Journal of Threatened Taxa. 2016; 8(11): 9327-9333.
159. Lanka LP, Kamble SS, Bodkhe AK. An Addition to spider fauna from the vicinity of Radhanagari Wildlife Sanctuary of Kolhapur District. International Journal of Scientific Engineering and Research. 2017; 5(7): 280-283.
160. Simon E. Matériaux pour servir à la faune arachnologiques de l'Asie méridionale. I, Arachnides recueillis à Wagra-Karoor près Gundacul district de Bellary par M.M. Chaper. II. Arachnides recueillis à Ramnad district de Madura par M. l'abbé Fabre. Bulletin de la Société Zoologique de France. 1885; 10: 1-39.
161. Raychaudhuri D, Saha S, Roy TK. Spiders: A proficient candidate in practising IPM for Darjeeling Tea. World Scientific News. 2016; 38: 1-62.
162. Kananbala A, Bhubaneshwari M, Sandhyarani O, Siliwal M. First record of the jumping spider *Epocilla praetextata* Thorell, 1887 (Araneae: Salticidae) from India. Journal of Threatened Taxa. 2014; 6(12): 6582-6584.
163. Caleb JTD, Chatterjee S, Tyagi K, Kundu S, Kumar V. Two new jumping spiders of the genera *Epocilla* Thorell, 1887 and *Mogrus* Simon, 1882 from India (Araneae: Salticidae). Arthropoda Selecta. 2017; 26(4): 329-334.
164. Simon E. Arachnides (2e partie) In: Voyage de M. Maurice Maindron dans l'Inde méridionale. 8e Mémoire. Annales de la Société Entomologique de France. 1906; 75: 279-314.
165. Choudhury SR, Siliwal M, Das SK. Spiders of Odisha: a preliminary checklist. Journal of Threatened Taxa. 2019; 11(9): 14144 -14157.

166. Prajapati DA, Malamel JJ, Sudhikumar AV, Sebastian PA. A new species of the jumping spider genus *Icius* Simon, 1876 from India (Aranei: Salticidae: Chrysillini). *Arthropoda Selecta*. 2018; 27(4): 330-334.
167. Prajapati DA, Kamboj RD. Additional morphological notes on the male of *Icius alboterminus* (Caleb, 2014) (Aranei: Salticidae) with new distribution records from India. *Journal of Threatened Taxa*. 2020; 12(4): 15475-15480.
168. Caleb JTD. A new species of *Phintella* Strand (Araneae: Salticidae) from India. *Munis Entomology and Zoology*. 2014; 9(2): 605-608.
169. Caleb JTD. Spiders (Arachnida: Araneae) from the vicinity of Araabath Lake Chennai India. *Journal of Threatened Taxa*. 2020; 12(1): 15186 -15193.
170. Caleb JTD. Jumping spiders of the genus *Icius* Simon, 1876 (Araneae: Salticidae) from India with a description of a new species. *Arthropoda Selecta*. 2017; 26(4): 323-327.
171. Keyserling E. Die Arachniden Australiens nach der Natur beschrieben und abgebildet. Zweiter Theil [Lieferung 37]. Bauer Raspe Nürnberg. 1890; 233-274
172. Pandit R, Pai I. Spiders of Taleigao Plateau, Goa, India. *Journal of Environmental Science and Public Health*. 2017; 1(4) 240 -252.
173. Sebastian PA, Murugesan S, Mathew MJ, Sudhikumar AV, Sunish E. Spiders in Mangalavanam an ecosensitive mangrove forest in Cochin, Kerala, India (Araneae). *European Arachnology-Acta Zoologica Bulgarica*. 2005; Suppl. No.1: 315-318.
174. De K, Palita SK. A checklist of spiders from six sacred groves in Southern Odisha India. *Serket*. 2018; 16(1) 30 -40.
175. Lawania KK, Mathur P. Biodiversity and habit preference of spider fauna in eastern region of Rajasthan and its catchment area. *International Journal of Scientific Development and Research*, 2017; 2(6): 475-484.
176. Lawania KK, Mathur P. Seasonal abundance and population indices of spider fauna in summer seasons of the years 2013 to 2016 from different habitats of eastern region of Rajasthan India. *International Journal for Research Trends and Innovation*. 2017; 2(2): 420-427.
177. Simon E. Matériaux pour servir à la faune arachnologiques de l'Asie méridionale.III, Arachnides recueillis en 1884 dans la presqu'île de Malacca par M.J. Morgan.IV. Arachnides recueillis à Collegal district de Coimbatore par M.A. Theobald G.R. *Bulletin de la Société Zoologique de France*. 1885; 10: 436-462.
178. Dhali DC, Saha S, Raychaudhuri D. Litter and ground dwelling spiders (Araneae: Arachnida) of reserve forests of Dooars, West Bengal (Monograph). *World Scientific News*. 2017; 63: 1-242.

179. Ghosh N, Biswas R, Mitra A. Species diversity abundance and habitat association of spiders with relation to their guild composition in different habitats of North Bengal Wild Animals Park (Bengal Safari). *International Journal of Life Sciences*. 2018; 6(4): 911-918.
180. Jastrzebski P. Salticidae from the Himalayas. Genus *Menemerus* Simon, 1868 (Araneae: Salticidae). *Entomologica Basiliensis*. 1997; 20: 33-44.
181. Chatterjee S, Caleb JTD, Tyagi K, Kundu S, Kumar V. First report of *Menemerus nigli* (Araneae: Salticidae) from India. *Halteres*. 2017; 8: 109-111.
182. Priyadarshini N, Kumari R, Pathak RN, Pandey AK. Biodiversity and community structure of spiders in Saran part of Indo-Gangetic Plain, India. *Asian Journal of Conservation Biology*. 2015; 4(2): 121-129.
183. Mathew EV, Sudhikumar A, Sebastian PA. Vertical stratification of spiders in Kuttanad rice agroecosystem Kerala. *Journal of Biological Control*. 2014; 28(2): 62 -67.
184. Siddhu J, Lohani HP, Pathak G, Kaushal BR. Spider diversity in rice and mix vegetable agro bhabar region of Nainital district, Uttarakhand. *Bulletin of Environment, Pharmacology and Life Sciences*. 2020; 9(2): 101-105.
185. Saha S, Das I, Raychaudhuri D. Spider faunal diversity of Barasat and Basirhat 24 Parganas, West Bengal, India. *World News of Natural Sciences*. 2017; 15: 49-85.
186. Andreeva EM, Hęciak S, Prószyński J. Remarks on *Icius* and *Pseudicius* (Araneae Salticidae) mainly from central Asia. *Annales Zoologici Warszawa*. 1984; 37: 349-375.
187. Prószyński J. Salticidae (Araneae) of the Old World and Pacific Islands in several US collections. *Annales Zoologici Warszawa*. 1992; 44: 87-163.
188. Caleb JTD, Sajan SK, Kumar V. New jumping spiders from the alpine meadows of the Valley of Flowers, western Himalayas, India (Araneae Salticidae). *ZooKeys*. 2018; 783: 113-124.
189. Caleb JTD, Acharya S. First record of the genus *Schenkeli* Lessert 1927 (Araneae: Salticidae) from India. *Acta Arachnologica*. 2019; 68(2): 73-75.
190. Simon E. Descriptions d'arachnides nouveaux de la famille des Attidae (Suite 1). *Annales de la Société Entomologique de Belgique*. 1901; 45: 141-161.
191. Caleb JTD, Karthikeyani R. A new jumping spider of the genus *Cosmophasis* Simon 1901 (Araneae: Salticidae) from Maharashtra, India. *Acta Arachnologica*. 2015; 64(2): 97-99.
192. Chetry A, Moran J. Diversity of Namsai District, Arunachal Pradesh, India. *International Journal of Basic and Applied Research*. 2019; 9(7): 343-351.
193. Sebastian PA, Sudhikumar AV, Mathew MJ, Sunish E. Diversity of spiders (Araneae) in the Western Ghats - an overview. In: Rajan PD, Devy S, Madhyastha A, Subramanian KA, Narayanan S (Eds.), *Invertebrate Diversity and Conservation in the Western Ghats*. ATREE Bangalore. 2012; 235-247.

194. Saini KC, Chauhan R, Singh NP. Analysis of spider density across Shekhawati Aravalian region of Rajasthan India. *Indian Journal of Arachnology*. 2012; 1(2): 30-39.
195. Kaur M, Das SK, Anoop KR, Siliwal M. Preliminary checklist of spiders of Keoladeo National Park Bharatpur, Rajasthan with first record of *Ptocasius strupifer* Simon 1901 (Araneae: Salticidae) from India. *Munis Entomology and Zoology*. 2014; 9(1): 501-509.
196. Tikader BK. Studies on some Salticidae spider from Sikkim, Himalaya, India. *Proceedings of the Indian Academy of Science*. 1967; 66(B): 117-122.
197. Lawania KK, Mathur P. On the diversity of spiders in and around Sur-Sarovar Bird Sanctuary, Agra (UP) India. *International Journal of Basic and Applied Biology*. 2014; 2(3): 189-194.
198. Rao S, Srikanth SK, Ashwini V, Rekha KN, Shenoy KB. Spider diversity on Mangalore University Campus. *Journal of Entomology and Zoology Studies*. 2018; 6(2): 3186-3194.
199. Sebastian PA, Mathew MJ, Beevi SP, Joseph J, Biju CR. The spider fauna of the irrigated rice ecosystem in central Kerala, India across different elevational ranges. *The Journal of Arachnology*. 2005; 33(2): 247-255.
200. Caleb JTD, Acharya S. Jumping spiders of the genus *Phintelloides* from India with the description of a new species (Araneae: Salticidae: Chrysillini). *Revue Suisse de Zoologie*. 2020; 127(1): 95-100.
201. Monga K, Singh JP, Sadana GL. A new species of *Marpissa* Koch (Araneae: Salticidae) from India. *Journal of the Bombay Natural History Society*. 1988; 85: 592-593.
202. Caleb JTD, Kumar V. Arachnida: Araneae. In: *Faunal Diversity of Indian Himalaya*. Zoological Survey of India, 2018, 177-188.
203. Reimoser E. Araneae aus Süd-Indien. *Revue Suisse de Zoologie*. 1934; 41: 465-511.
204. Simon E. Description d'araignées nouveaux de la famille des Salticidae (Attidae). *Annales de la Société Entomologique de Belgique*. 1902; 46: 24-56, 363-406.
205. Biswas B, Majumder SC. Araneae: spider. In: *Fauna of Meghalaya, State Fauna Serie*, Zoological Survey of India. 1995; 4(2): 93-128.
206. Malik S, Das SK, Siliwal M. Spider (Arachnida: Araneae) fauna of Delhi with first report of cobweb spider *Argyrodes bonadea* (Karsch 1881) from India. *Indian Journal of Arachnology*. 2015; 4(2): 31-36.
207. Caleb JTD, Prajapati DA, Ali PA. Redescription of *Rudakius ludhianaensis* (Tikader 1974) (Aranei: Salticidae) with notes on its synonymy and distribution. *Arthropoda Selecta*. 2019; 28(3): 417-423.
208. Tikader BK. Studies on some jumping spiders of the genus *Marpissa* from India (family- Salticidae). *Proceedings of the Indian Academy of Science*. 1974; 79(B): 204-215.
209. Sadana GL, Kaur M. A new species of spider of the genus *Marpissa* C.L. Koch (Salticidae) from India. *Bulletin of the British Arachnological Society*. 1974; 3(2): 49-50.

210. Caleb JTD. A discovery and redescription of *Curubis erratica* Simon 1902 (Araneae: Salticidae) from India. *Arthropoda Selecta*. 2016; 25(2): 207-211.
211. Dobroruka LJ. One new species and one new record of jumping spiders (Araneae: Salticidae) from India. *Acta Arachnologica Sinica*. 2004; 13: 14-17.
212. Sankaran PM, Malamel JJ, Joseph MM, Sebastian PA. New species of *Habrocestum* Simon, 1876 and a redescription of *Curubis tetrica* Simon, 1902 (Araneae: Salticidae: Salticinae: Hasariini) from India. *Journal of Natural History*. 2019; 53(1-2): 1-15.
213. Samson PD, Sebastian PA. New record of the jumping spider *Curubis tetrica* Simon 1902 (Araneae: Salticidae) from India. *International Journal of Science Environment and Technology*. 2014; 3(2): 695-697.
214. Logunov DV. Redefinition of the genus *Habrocestoides* Prószyński, 1992 with establishment of a new genus *Chinattus* gen. n. (Araneae: Salticidae). *Bulletin of the British Arachnological Society*. 1999; 11: 139-149.
215. Kumari V, Saini KC, Singh NP. Diversity and distribution of spider fauna in arid and semi-arid region of Rajasthan. *Journal of Biopesticides*. 2017; 10(1):17-24.
216. Singh BB, Singh R. Incidence and biodiversity of riceland spiders (Arthropoda: Arachnida) in northeastern Uttar Pradesh, India. *Indo-American Journal of Life Sciences Biotechnology*. 2014; 2(1): 64-89.
217. Leardi in Airaghi Z. Aracnidi di Mahé e Kandy. *Atti della Societa Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano*. 1901; 40: 345-373.
218. Goswami TN, Kumari K, Anil Kole B. Quantitative estimation of spider fauna in rice ecosystem of Zone IIIA in Bihar. *Environment Ecology*. 2015; 33(2): 783-785.
219. Yadav M, Goswami TN, Anil Ray SN. Species composition of spider-fauna in paddy ecosystem throughout the cropping period at Sabour, Bihar, India. *Ecology Environment Conservation*. 2016; 22(2): 719-722.
220. Sudhikumar AV, Mathew MJ, Sunish E, Murugesan S, Sebastian PA. Preliminary studies on the spider fauna in Mannavan shoal forest Kerala, India (Araneae). *European Arachnology-Acta Zoologica Bulgarica*. 2005; Suppl. No.1: 319-327.