

INTRODUCTION

Very little work has been done on spiders from Sundarban. Pioneering work on Indian spiders by Tikader (1980 & 1982) described only one species from Sundarban. Mondal & Nandi (1989) reported the occurrence of 7 genera under 4 families without pointing to species level from Sundarban areas. Majumder & Tikader (1991) described one species and reported 3 species from Sundarban mangrove areas. Biswas & Biswas (1992) reported 17 species in 15 genera under 7 families from this area. Biswas (1995) reported one species from Hugly Matla estuarine system. The present work was initiated to make a systematic and up-to-date information from Sundarban. This paper deals with 108 species in 36 genera under 13 families. Among these 3 species in 2 genera under 2 families are described here as new to science and 70 species in 23 genera under 7 families are recorded for the first time from Sundarban areas. Diagnosis and keys are provided for each species and genera. Distribution of different species are traced in different areas of Sundarban— through map pointing. Types of all new species were deposited in National collection of Zoological Survey of India. List of spiders known from Sundarban are provided.

SYSTEMATIC LIST

Family I. ARANEIDAE Latreille

Genus 1. *Argiope* Audouin

1. *Argiope aemula* (Walckenaer)
2. *A. kalimpongensis* Sinha
3. *A. arcuata* Simon
4. *A. anasuja* Thorell

5. *A. pulchella* Thorell
6. *A. shillongensis* Sinha

Genus 2. *Gasteracantha* Sundevall

7. *G. hasseltii* Koch

Genus 3. *Neoscona* Simon

8. *N. mukerjei* Tikader
9. *N. theis* (Walckenaer)
10. *N. shillongensis* Tikader & Bal
11. *N. nautica* (Koch)
12. *N. pavida* (Simon)
13. *N. rumpfi* (Thorell)
14. *N. molemensis* Tikader & Bal
15. *N. elliptica* Tikader & Bal
16. *N. excelsus* (Simon)
17. *N. lugubris* (Walckenaer)

Genus 4. *Larinia* Simon

18. *L. phtisica* (L. Koch)

Genus 5. *Leucauge* White

19. *L. decorata* (Blackwall)
20. *L. tessellata* (Thorell)

Genus 6. *Araneus* Clerck

21. *A. mitifica* (Simon)
22. *A. bituberculata* (Walckenaer)
23. *A. anantnagensis* Tikader & Bal
24. *A. nympa* Simon

Genus 7. *Cyrtophora* Simon

25. *C. cicatrosa* (Stoliczka)
26. *C. bidenta* Tikader

Genus 8. *Poltys* Koch27. *P. nagpurensis* TikaderGenus 9. *Zygeilla* Cambridge28. *Z. melanocrania* (Thorell)Genus 10. *Singa* Koch29. *S. chota* Tikader

Family II. LYCOSIDAE Sundevall

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Family III. OXYOPIDAE

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- Family IV. SALTICIDAE Blackwall
- Genus 20. *Marpissa* Koch
78. *M. calcuttaensis* Tikader
 79. *M. dayapurensis* sp. nov.
 80. *M. bengalensis* Tikader
 81. *M. decorata* Tikader
 82. *M. mondali* Tikader
 83. *M. lakhmikantapursansis* sp. nov.
 84. *M. andamanensis* Tikader
 85. *M. dhakuriensis* Tikader
- Genus 21. *Phidippus*
86. *P. bengalensis* Tikader
 87. *P. pateli* Tikader
 88. *P. indicus* Tikader
- Genus 22. *Myrmarachne* MacLeay
89. *M. orientalis* Tikader
- Genus 23. *Plexippus* Koch
90. *P. paykullii* (Audouin)
- Family V. CLUBIONIDAE Bagner
- Genus 24. *Clubiona* Latreille
91. *C. filicata* Cambridge
- Genus 25. *Cheiracanthium* Koch
92. *C. trivialis* Thorell
 93. *C. melanostoma* Thorell
 94. *C. himalayensis* Gravely
 95. *C. mysorensis* Majumder & Tikader
- Genus 26. *Castianeira* Keyserling
96. *C. tinae* Patel & Patel
- Family VI. HERSILIDAE Thorell
- Genus 27. *Hersilia* Audouin
97. *H. savignyi* Lucas
- Family VII. ULOBORIDAE Thorell
- Genus 28. *Uloborus* Latreille
98. *U. danolius* Tikader
- Family VIII. ERESIDAE Simon
- Genus 29. *Stegodyphus* Simon
99. *S. sarasinorum* Karsch
- Family IX. GNAPHOSIDAE Popock
- Genus 30. *Scopodes* Chamberlin
100. *S. kuljitae* Tikader
- Genus 31. *Poecilichora* Wastring
101. *P. barmani* Tikader
- Family X. THOMISIDAE Sundevall
- Genus 32. *Camaricus* Thorell
102. *C. formosus* Thorell
- Family XI. HETEROPODIDAE Thorell
- Genus 33. *Spariolenus* Simon
103. *S. petricola* Gravely
 104. *S. tigris* Simon
- Genus 34. *Heteropoda* Latreille
105. *H. sikkimensis* Gravely
 106. *H. venatoria* (Linnaeus)
- Family XII. TETRAGNATHIDAE Mange
- Genus 35. *Tetragnatha* Latreille
107. *T. andamanensis* Tikader
- Family XIII. THERIDIIDAE
- Genus 36. *Theridion* Walck
108. *T. indica* Tikader

SYSTEMATIC ACCOUNT

1. Family ARANEIDAE Latreille

**Key to the genera of the family ARANEIDAE
Latreille from Sundarban**

1. Median eyes closer to each other than the laterals. Tibia I of male is straight and unmodified *Argiope*
— Median eyes not closer to each other than laterals. Tibia of one I of male is not straight 2
2. Spinnerets situated on an elevated circular space surrounded by a thick flange in the form of a ring *Gasteracantha*
— Spinnerets not situated on an elevated circular space surrounded by a thick flange in the form of a ring 3
3. Thoracic groove longitudinal, epigyne with unwrinkled scape and provided with one or two pairs of lateral lobes *Neoscona*
— Thoracic groove not longitudinal, epigyne without unwrinkled scape and without lateral lobe 4
4. Abdomen pointed over the carapace with a little mid-dorsal projection *Larinia*
— Abdomen not pointed over the carapace and without little mid-dorsal projection 5
5. Femora IV with a double fringe of hair on the prolateral surface of the basal half
..... *Leucauge*
— Femora IV without double fringe of hair on the prolateral surface of the basal half 6
6. Thoracic groove transverse, epigyne with distinct scape *Araneus*
— Thoracic groove longitudinal, epigyne without distinct scape 7
7. Abdomen anteriorly very high and provided with atleast one pair of shoulder hump
..... *Cyrtophora*
— Abdomen anteriorly not very high and without one pair of shoulder hump 8

8. Ocular quadrate on a distinct projection from the cephalic region *Poltys*
— Ocular quadrate not on a distinct projection from the cephalic region 9
9. Dorsum of the abdomen provided with distinct folium and the thoracic region with few hair *Zygeilla*
— Dorsum of the abdomen without distinct folium, cephalic region with more hair
..... *Singa*

Genus 1. *Argiope* Audouin

1826. *Argiope* Audouin, in Savigny, descriptions de l' Egypt, 1(4) : 121.
1982. *Argiope* : Tikader, Fauna of India, Spiders : Araneae, 2(1) : 111.

Type species : *Argiope lobata* (Thorell).

Distribution : Tropical and temperate countries of the world.

**Key to the species of the genus *Argiope*
Audouin from Sundarban**

1. Abdomen broadly oval and conspicuously truncated anteriorly dorsum provided with black transverse stripes and forming a network on the posterior half *aemula*
— Abdomen not oval and not truncated anteriorly; dorsum not provided with black transverse stripes and network on posterior half 2
2. Ventral side of the abdomen provided with a pair of longitudinal yellow stripes from the epigastric furrow to the posterior end of the abdomen *kalimpongensis*
— Ventral side of the abdomen not provided with a pair of longitudinal yellow stripes from the epigastric furrow to the posterior end of abdomen 3
3. Three pairs of lateral lobes present on the abdomen *arcuata*
— Three pair of lateral lobes not present on the abdomen 4

4. Anterior edge of the epigyne provided with a broad and conspicuous lip, median epigynal septum abruptly wider posteriorly .. *anasuja*
 — Anterior edge of the epigyne not provided with very thin and inconspicuous lip, median epigynal septum not abruptly wider posteriorly 5
5. Labium as long as wide; maxillae roundish in shape *pulchella*
 — Labium wider than long; maxillae not roundish in shape *shillongensis*

1. *Argiope aemula* (Walckenaer)

1841. *Epeira aemula* Walckenaer, *Hist. Nat. Ins. Apt.*, 2 : 118
 1982. *Argiope aemula* : Tikader, *Fauna of India*, Spiders; Araneae, 2(1) : 119.

Material examined : 1 ♀, Jogeshgunge, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder, Reg. no. 697; 3 ♀, Lux bagan, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 698; 1 ♀, Kulpi proper, P.S. Kulpi, 20.xi.1994, Coll. S.C. Majumder, Reg. no. 699; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder, Reg. no. 700.

Distribution : India, Sundarban area (Kulpi, Gosaba, Mandirbazar, Dist. South 24 Parganas) (new record), Darjeeling, West Bengal, Gujarat; Tamil Nadu; Maharashtra; Andaman Nicobar Island.

Elsewhere : Myanmar, Sri Lanka, Austro-Malaysia.

2. *Argiope kalimpongensis* Sinha

1851. *Argiope kalimpongensis* Sinha, *Rec. Indian Mus.*, 49 : 77.
 1982. *Argiope kalimpongensis* Tikader, *Fauna of India*, Spiders, Araneae, 2(1) : 125.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 701; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder, Reg. no. 702; 1 ♀, Kulpi Bazar, P.S. Kulpi, 20.xi.1994, Coll. S.C. Majumder, Reg. no. 703.

Diagnosis : Cephalothorax reddish brown, longer than wide, cephalic region slightly elevated.

Anterior row of eyes procurved, chelicerae small and weak.

Abdomen not oval, dorsum not provided with black transverse stripes and network on the posterior half.

Distribution : India : Sundarban area (Kulpi, Mandirbazar, Patharpratima, Dist. South 24 Parganas) (new record), Kalimpong, Darjeeling, West Bengal; Assam & Sikkim.

3. *Argiope arcuata* Simon

1884. *Argiope arcuata* Simon, *Annali Mus. civ. Genova*, 20 : 343.
 1982. *Argiope arcuata* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 115.

Material examined : 1 ♀, Kulpi proper, P.S. Kulpi, 20.xi.1994, Coll. S.C. Majumder, Reg. no. 704; 1 ♀, Bamankhali, P.S. Sagar, 26.xi.1994, Coll. S.C. Majumder, Reg. no. 705.

Distribution : India : Sundarban area (Kulpi, Sagar island, Dist. South 24 Parganas) (new record), West Bengal; Karnataka; Maharashtra; Bihar; Madhya Pradesh.

Elsewhere : Myanmar and Arabia.

4. *Argiope anasuja* Thorell

1887. *Argiope anasuja*, Thorell, *Annali Mus. civ. Genova*, 25 : 162.
 1982. *Argiope anasuja* : Tikader, *Fauna of India*, Spider : Araneae, 2(1) : 127.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 706; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder, Reg. no. 707; 1 ♀, Rajatduli, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 708; 2 ♀, Kalitola, P.S. Hingalgunj, 21.ii.1995, Coll. S.C. Majumder, Reg. no. 709; 1 ♀, Bamankhali, P.S. Sagar, 26.xi.1994, Coll. S.C. Majumder, Reg. no. 710.

Diagnosis : Cephalothorax greyish brown, narrowing in front, longer than wide. Anterior row of eyes procurved, posterior row strongly procurved. Chelicera small and weak. Abdomen

pentagonal, epigyne provided with a broad and conspicuous lips; median epigynal septum abruptly wider posteriorly.

Distribution : India : Sundarban area (Patharpratima, Sagar, Gosaba, Mandirbazar, Dist. South 24 Parganas; Hingalgunj, Dist. North 24 Parganas) (new record), Kolkata, West Bengal; Tamil Nadu; Karnataka; Maharashtra; Orissa.

Elsewhere : Sri Lanka and Pakistan.

5. *Argiope pulchella* Thorell

1881. *Argiope pulchella* Thorell, *Annali Mus. civ. Genova*, 20 : 346.

1982. *Argiope pulchella* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 129.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. D.B. Renamagor, Reg. no. 711; 1 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. N.P. Debnath, Reg. no. 712; 1 ♀, Jeliakhali, P.S. Sandeshkhali, 17.i.1994, Coll. S.C. Majumder, Reg. no. 713; 1 ♀, Kulpi proper, P.S. Kulpi, 20.xi.1994, Coll. N.C. Banerjee, Reg. no. 714; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder, Reg. no. 715; 1 ♀, Daspara, P.S. Kakdwip, 27.xi.1994, Coll. N.C. Banerjee, Reg. no. 716; 1 ♀, Namkhana proper, P.S. Namkhana, 24.xi.1994, Coll. S.C. Majumder, Reg. no. 717.

Distribution : India : Sundarban area (Namkhana, Patharpratima, Gosaba, Kulpi, Mandirbazar, Kakdwip, Dist. South 24 Parganas) (new record), Palta, 24 Parganas, Darjeeling, West Bengal; Madhya Pradesh; Orissa; Assam; Maharashtra; Tamil Nadu.

Elsewhere : Myanmar, Malay Peninsula.

6. *Argiope shillongensis* Sinha

1951. *Argiope shillongensis* Sinha, *Rec. Indian Mus.*, 49 : 75.

1992. *Argiope shillongensis* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, State Fauna Series No. 3 : 455.

Material examined : 1 ♀, Kashinagar, P.S. Patharpratima, 17.iv.1993, Coll. K.N. Reddy, Reg. no. 718; 2 ♀, Bamankhali, P.S. Sagar, 26.xi.1994, Coll. S.C. Majumder and party, Reg. no. 719;

1 ♀, Daspara, P.S. Kakdwip, 27.xi.1994, Coll. S.C. Majumder, Reg. no. 720; 1 ♀, Kulpi proper, P.S. Kulpi, 20.xi.1994, Coll. S.C. Majumder, Reg. no. 721; 1 ♀, Jogeshgunge, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder and party, Reg. no. 722.

Diagnosis : Cephalothorax light brownish yellow, slightly longer than wide. Anterior and posterior row of eyes procurved. Labium longer than wider, maxillae not roundish. Chelicerae small. Abdomen longer than wide, overlapping on the cephalothorax.

Distribution : India : Sundarban area (Kakdwip, Kulpi, Patharpratima, Sagar, Dist. South 24 Parganas, Hingalgunj, North 24 Parganas) (new record), West Bengal; Shillong, Meghalaya.

Genus 2. *Gasteracantha* Sundevall

1833. *Gasteracantha* Sundevall, *Conspectus Arachnidum* : 14.

1981. *Gasteracantha*, Tikader and Biswas, *Rec. zool. Surv. India, Occ. Pap.* No. 30(1) : 33.

Type species : *Gasteracantha cancriformis* (Linnaeus).

Distribution : Tropical countries of the world.

7. *Gasteracantha hasseltii* Koch

1938. *Gasteracantha hasseltii* C. L. Koch, *Die Arachniden*, 4 : 29.

1992. *Gasteracantha hasseltii*, Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, State Fauna Series no. 3 : 470.

Material examined : 1 ♀, Haroa Rly. Stn., P.S. Haroa, 14.x.1993, Coll. S.C. Majumder and party, Reg. no. 723.

Diagnosis : Cephalothorax slightly longer than wide, provided with median groove. Ocular quadrate wider than long. Labium as long as wide; legs short & strong. Abdomen octangular much wider than long.

Distribution : India : Sundarban area (Haroa, Dist. North 24 Parganas) (new record), Kalimpong, Darjeeling, West Bengal; Andaman & Nicobar Islands; Sikkim; Myanmar.

Genus 3, *Neoscona* Simon

1864. *Neoscona* Simon, *Hist. nat. des. Aragin*, 1 : 261.

1982. *Neoscona* : Tikader, *Fauna of India*, Spiders : Araneae 2(1) : 238.

Type species : *Neoscona anabesca* (Walck.)

Distribution : *Neoscona* distributed all over the world but many species of this genus have been erroneously placed under the genus *Araneus* Clerck.

Key to the Species of the genus *Neoscona* Simon from Sundarban

1. Cephalic region with 'V' shaped conspicuous dark brown patches *mukerjei*
— Cephalic region with no 'V' shaped patches (2)
2. Sternum dark brown in colour, provided with longitudinal white band *theis*
— Sternum not dark brown in colour, and not provided with longitudinal white band (3)
3. Maxillae broad as long as wide, lateral lobe of epigyme conspicuous *shillongensis*
— Maxillae not broad as long as wide, first pair of lateral lobe of epigyne inconspicuous (4)
4. Abdomen triangular in shape, epigynal scape short, broad and triangular *nautica*
— Abdomen nearly oval, epigynal scape long and narrow (5)
5. Carapace provided with 'V' shaped brown mark; epigynal scape bent at right angle to the base *pavida*
— Carapace not provided with 'V' shaped brown mark; epigynal scape not bent at right angle to the base (6)
6. Lateral lobes of epigyne very distinct and horn like visible from the ventral side *rumpfi*
— Lateral lobe of epigyne not distinct and horn like (7)
7. Abdomen rather tapering at both anterior and posterior ends; femora, patella and tibia

of the legs 1, 11 & 111 provided with longitudinal lines on ventral & lateral sides *molemensis*

- Abdomen roundish both anterior and posterior ends; femora, patella & tibia of the legs 1, 11 & 111 not provided with longitudinal lines on ventral & lateral sides (8)
- 8. Epigynal scape rather thick with distinct rim; genital openings are placed underneath the scape *elliptica* (3)
— Epigynal scape not thick and with no distinct rim; genital openings not placed underneath the scape (9)
- 9. Four pairs of sigilla on the dorsum; caudal hump with a large black spot *excelsus*
— Five pairs of Sigilla on the dorsum; caudal hump without black spot *lugubris*

8. *Neoscona mukerjei* Tikader

1980. *Neoscona mukerjei* Tikader, *Proc. Indian Acad. Sci.*, 89(3) : 248.

1992. *Neoscona mukerjei* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae & Spiders, *State Fauna Series No. 3* : 467.

Material examined : 2 ♀, Marichjhapi, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 724; 4 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 725; 3 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder; 2 ♀, Chhotomollakhali, P.S. Gosaba, 13.iv.1993, Coll. N.P. Debnath, Reg. no. 726; 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder; 1 ♀, Dashmaili, P.S. Namkhana, 24.xi.1994, Coll. N.C. Banerjee, Reg. no. 727; 1 ♀, Haroa Rly. Stn., P.S. Haroa, 14.x.1993, Coll. S.C. Majumder & Party, Reg. no. 728; 1 ♀, Barunhat, P.S. Hasnabad, 13.x.1993, Coll. S.C. Majumder & Party, Reg. no. 729.

Distribution : India : Sundarban area (Namkhana, Patharpratima, Gosaba, Dist. South 24 Parganas; Hasnabad, Sandeshkhali, North 24 Parganas), Bardwan, Koochbihar, Midnapur, Nadia, West Bengal; Maharashtra.

9. *Neoscona theis* (Walckenaer)

1841. *Epeira theis* Walckenaer, *Hist. nat. Ins. Apt.*, 2 : 53.
 1992. *Neoscona theis* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. 3 : 468.

Material examined : 1 ♀, Sagar island, P.S. Sagar, 26.xi.1994, Coll. S.C. Majumder & Party, Reg. no. 730.

Diagnosis : Cephalothorax yellowish brown, cephalic region with no 'V' shaped patches. Sternum dark brown in colour provided with longitudinal white band. Both the anterior and posterior row slightly recurved. Chelicera strong. Abdomen sub-oval, longer than wide.

Distribution : India : Sundarban areas (Sagar island, Kakdwip, Namkhana, Dist. South 24 Parganas), North 24 Parganas, Hooghli, Nadia, Bankura, Maldah, West Bengal; Gujarat; Maharashtra; Orissa.

Elsewhere : South New Guinea.

10. *Neoscona shillongensis* Tikader & Bal

1981. *Neoscona shillongensis* Tikader & Bal, *Rec. zool. Surv. India, Occ. Pap.* No. 24 : 34.
 1995. *Neoscona shillongensis* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae, Spiders, *State Fauna Series* No. 4 : 99.

Material examined : 1 ♀, Kumirmari, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 731; 1 ♀, Barunhat, P.S. Hasnabad, 13.x.1993, Coll. S.C. Majumder & Party, Reg. no. 732.

Distribution : India : Sundarban area (Hasnabad, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), Meghalaya.

11. *Neoscona nautica* (L. Koch)

1875. *Epeira nautica* L. Koch, *Aegypt. Abyssin. Arachn. Jickoli*, : 17.
 1995. *Neoscona nautica* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae : Spiders, *State Fauna Series* No. 4 : 99.

Material examined : 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder, Reg. no. 733; 2 ♀, Daspara, P.S. Kakdwip,

27.xi.1994, Coll. N.C. Banerjee, Reg. no. 734; 2 ♀, Sibtola, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 735; 1 ♀, Peujelia, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder; 1 ♀, Hasnabad Rly. Stn., P.S. Hasnabad, 15.x.1993, Coll. S.C. Majumder & Party, Reg. no. 736.

Distribution : India : Sundarban area (Hasnabad, Hingalgunj, Dist. North 24 Parganas; Mandirbazar, Kakdwip, Dist. South 24 Parganas); Darjeeling, West Bengal; Assam; Gujarat; Maharashtra.

Elsewhere : Myanmar, Pakistan, North America.

12. *Neoscona pavida* (Simon)

1906. *Araneus pavida* Simon, *Annals. Soc. ent. Fr.*, 75 : 309.
 1992. *Neoscona pavida* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. 3 : 468.

Material examined : 1 ♀, Ghoshpara, P.S. Sandeshkhali, 25.ii.1995, Coll. S.C. Majumder, Reg. no. 737; 1 ♀, Dhamakhali, P.S. Sandeshkhali, 25.ii.1995, Coll. S.C. Majumder; 1 ♀, Katakali, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 738.

Distribution : India : Sundarban area (Hingalgunj, Sandeshkhali, Dist. North 24 Parganas), Darjeeling, West Bengal.

Elsewhere : Pakistan.

13. *Neoscona rumpfi* (Thorell)

1887. *Araneus rumpfi* Thorell, *Annel. Mus. civ. Genova*, 13 : 269.
 1992. *Neoscona rumpfi* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. 3 : 468.

Material examined : 1 ♀, Barunhat, P.S. Hasnabad, 13.x.1993, Coll. S.C. Majumder, Reg. no. 739; 1 ♀, Kumirmari, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 740; 1 ♀, Ramganga, P.S. Patharpratima, 23.xi.1995, Coll. S.C. Majumder, Reg. no. 741; 1 ♀, Katakali, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 742.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas, Hasnabad, Hingalgunj, Dist. North 24 Parganas) (new record), Maldah, West Bengal; Andhra Pradesh; Karnataka; Maharashtra; Orissa.

14. *Neoscona molemensis* Tikader & Bal

1981. *Neoscona molemensis* Tikader & Bal, *Rec. zool. Surv. India, Occ. Pap.* No. 24 : 22.
1982. *Neoscona molemensis* : Tikader, *Fauna of India, Spiders, Araneae*, 2(1) : 257.

Material examined : 1 ♀, Kumirmari, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder & Party, Reg. no. 743.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record); Goa.

15. *Neoscona elliptica* Tikader & Bal

1981. *Neoscona elliptica* Tikader & Bal, *Rac. zool. Surv. India, occ. pap.*, 24 : 24.
1995. *Neoscona elliptica* : Biswas & Majumder, *Fauna of Meghalaya, Part II, Araneae : Spiders, State Fauna Series* No. 4 : 98.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 744; 1 ♀, Kumirmari, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 745.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas) (new record), West Bengal; Maharashtra; Meghalaya.

16. *Neoscona excelsus* (Simon)

1889. *Glyptogona excelsus* Simon, *J. Asiat. Soc. Bengal*, 58 : 337.
1992. *Neoscona excelsus* : Biswas & Biswas, *Fauna of West Bengal, Part III, Araneae : Spiders, State Fauna Series* No. 3 : 466.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S. C. Majumder, Reg. no. 746.

Distribution : India Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), Darjeeling, West Bengal; Bihar; Gujarat; Maharashtra.

Elsewhere : Pakistan.

17. *Neoscona lugubris* (Walckenaer)

1841. *Epeira lugubris* Walckenaer, *Hist. Nat. Ins. Apt.*, 2 : 34.
1982. *Neoscona lugubris* : Tikader, *Fauna of India, Spiders : Araneae*, 2(1) : 255.

Material examined : 1 ♀, Ghoshpara, P.S. Sandeshkhali, 25.ii.1995, Coll. S.C. Majumder, Reg. no. 747; 2 ♀, Hasnabad Rly. Stn., P.S. Hasnabad, 15.x.1994, Coll. N.P. Debnath, Reg. no. 748.

Distribution : India : Sundarban area (Sandeshkhali, Hasnabad, Dist. North 24 Parganas) (new record), West Bengal; Maharashtra; Gujarat.

Elsewhere : Austro-Malaysia, South New Guinea, Japan, China.

Genus 4. *Larinia* Simon

1874. *Larinia* Simon, *Ar. Fr.*, 1 : 155.
1982. *Larinia* : Tikader, *Fauna of India, Spiders : Araneae*, 2(1) : 242.

Type species : *Larinia lineata* (Lucas).

Distribution : Tropical and sub-tropical countries of the world.

18. *Larinia phtisica* (L. Koch)

1871. *Epeira phtisica* L. Koch, *Die Arachnidon Australians*, 1(1) : 193.
1992. *Larinia phtisica* : Biswas & Biswas, *Fauna of West Bengal, Part III, Araneae : Spiders, State Fauna Series* No. 3 : 463.

Material examined : 1 ♀, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. S.C. Majumder, Reg. no. 749; 1 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder & Party, Reg. no. 750.

Diagnosis : Cephalothorax nearly one and half times longer than wide, narrow in front. Ocular quadrate forming a trapizium much wider in front than behind. Labium as long as wide; Chelicera strong inner margin provided with four teeth. Abdomen elongated, longer than wide, pointed anteriorly over carapace. Dorsum provided with greyish lines and a double rows of black spots.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), Kolkata, Burdwan, Naida, West Bengal; Gujarat.

Elsewhere : Australia, New Guinea.

Genus 5. *Leucauge* White

1841. *Leucauge* White, *Ann. Mag. nat. Hist.*, 7(1) : 473.
1982. *Leucauge* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 71.

Type species : *Leucauge hortorum* (Hentzs).

Distribution : Tropical and sub-tropical countries of the world.

Key to the species of the genus *Leucauge* White from Sundarban

1. Both paired tubercles and median caudal tubercle highly prominent.....*decorata*
- Both paired tubercles and median caudal tubercle small and less prominent *tessellata*

19. *Leucauge decorata* (Blackwall)

1864. *Tetragnatha decorata* Blackwall, *Ann. Mag. nat. Hist.*, 14(3) : 44.
1995. *Leucauge decorata* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae: Spiders, *State Fauna Series* No. 4 : 100.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 751; 6 ♀, Satjelia, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 752; 6 ♀, Luxbagan, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder; 3 ♀, Kumirmari, P.S. Gosaba, 20.iii.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas) (new record), Nadia, Maldah, Midnapur, Murshidabad, Purulia, West Dinajpur, North 24 Parganas, West Bengal; Meghalaya; Assam; Bihar; Gujarat; Karnataka; Kerala; Orissa; Pondicheri; Sikkim.

Elsewhere : Myanmar, Pakistan, Sri Lanka.

20. *Leucauge tessellata* (Thorell)

1887. *Callinethis tessellata* Thorell, *Anneli. Mus. civ. Genova*, 25 : 135.
1995. *Leucauge tessellata* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae : Spiders, *State Fauna Series* No. 4 : 100.

Material examined : 5 ♀, Luxbagan, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 753; 8 ♀, Madhabkati, P.S. Hingalgunj, 22.ii.1995, Coll. S.C. Majumder, Reg. no. 754; 3 ♀, Kalitola, P.S. Hingalgunj, 21.ii.1995, Coll. S.C. Majumder; 1 ♀, Kalinagar, P.S. Sandeshkhali, 25.ii.1995, Reg. no. 755.

Distribution : India : Sundarban area (Hingalgunj, Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), Darjeeling, West Bengal; Assam; Maharashtra; Gujarat; Karnataka; Kerala; Sikkim.

Elsewhere : Myanmar, Bhutan.

Genus 6. *Araneus* Clerck

1757. *Araneus* Clerck, *Argn. Suec.*, : 15.
1982. *Araneus* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 219.

Type species : *Araneus angulatus* Clerck.

Distribution : Cosmopolitan.

Key to the species of the genus *Araneus* Clerck from Sundarban

1. Maxillae squire in shape; labium longer than wide*mitifica*
- Maxillae not squire in shape labium wider than long (2)
2. Epigyne without basal lamellae, epigynal scape short and unwrinkled *bituberculata*
- Epigyne provided with a pair of basal lamellae, epigynal scape long and wrinkled (3)
3. Abdomen globular in shape, wider than long; dorsum provided with 6 pairs of sigillae
..... *anantmagensis*
- Abdomen oval in shape, longer than wide; dorsum provided with four pairs of sigillae *nympha*

21. *Araneus mitifica* (Simon)

1886. *Epeira mitifica* Simon, *Act. Soc. linn. Bordeaux*, **40** : 150.

1992. *Araneus mitifica* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 452.

Material examined : 1 ♀, Katakali, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 756.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas) (new record), Jalpaiguri, Nadia, West Bengal; Maharashtra; Karnataka.

Elsewhere : Pakistan, Myanmar.

22. *Araneus bituberculata* (Walckenaer)

1802. *Aranea bituberculata* Walckenaer, *Faun. Paris*, **2** : 191.

1992. *Araneus bituberculata* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 451.

Material examined : 1 ♀, Namkhana proper, P.S. Namkhana, 24.xi.1994, Coll. N.C. Banerjee, Reg. no. 757.

Distribution : India : Sundarban area (Namkhana, Dist. South 24 Parganas) (new record), Kolkata, West Bengal; Himachal Pradesh.

23. *Araneus anantnagensis* Tikader & Bal

1981. *Araneus anantnagensis* Tikader & Bal, *Rec. zool. Surv. India, Occ. Pap.* No. **24** : 46.

Material examined : 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 758.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), Maharashtra.

24. *Araneus nympha* Simon

1889. *Araneus nympha* Simon, *J. Asiat. Soc. Beng.*, **58** : 339.

1982. *Araneus nympha* : Tikader, *Fauna of India*, Spiders : Araneae, **2**(1) : 235.

Material examined : 2 ♀, Namkhana proper, P.S. Namkhana, 24.xi.1994, Coll. S.C. Majumder,

Reg. no. 759; 2 ♂, Marichjhapi, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 760; 2 ♀, Sibtola, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 761.

Distribution : India : Sundarban area (Namkhana, Gosaba, Dist. South 24 Parganas; Hingalgunj, Dist. North 24 Parganas) (new record), Himalaya; Uttar Pradesh.

Elsewhere : Pakistan.

Genus 7. *Cyrtophora* Simon

1864. *Cyrtophora* Simon, *Hist. Nat. des. Araign.*, **1** : 261.

1982. *Cyrtophora* : Tikader, *Fauna of India*, Spiders : Araneae, **2**(1) : 171.

Type species : *Cyrtophora citricola* (Forsk.)

Distribution : Tropical and sub-tropical countries of the world.

Key to the species of the genus *Cyrtophora* Simon from Sundarban

- Abdomen enlarged, epigyne provided with median septum and broad rim *cicatrosa*
- Abdomen suboval, epigyne not provided with median septum and without broad rim
..... *bidentata*

25. *Cyrtophora cicatrosa* (Stoliczka)

1869. *Epeira (Nephila) cicatrosa* Stoliczka, *J. Asiat. Soc. Beng.*, **33** : 242.

1992. *Cyrtophora cicatrosa* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 460.

Material examined : 4 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 762; 2 ♀, Kachukhali, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder; 1 ♀, Kulpi proper, P.S. Kulpi, 20.ii.1994, Coll. S.C. Majumder, Reg. no. 763; 5 ♀, Dayapur, P.S. Gosaba, 20.iii.1994, Coll. S.C. Majumder, Reg. no. 764; 1 ♀, Hemnagar, P.S. Hingalgunj, 14.i.1994, Coll. N.P. Debnath; 2 ♀, Jogeshgunge, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder, Reg. no. 765

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas; Patharpratima, Gosaba, Kulpi, Dist. South 24 Parganas) (new record), Kolkata, Koochbihar, Hooghly, Jalpaiguri, Maldah, Midnapur, Murshidabad, Nadia, West Bengal; Maharashtra; Gujarat; Tamil Nadu; Uttar Pradesh; Andaman & Nicobar Island; Punjab.

Elsewhere : Myanmar, Pakistan, Malaysia, New Guinea, Australia.

26. *Cyrtophora bidenta* Tikader

1970. *Cyrtophora bidenta* Tikader, *Rec. zool. Surv. India*, 63(1-4) : 32.

1982. *Cyrtophora bidenta* Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 174.

Material examined : 4 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 766; 1 ♀, Haroa Rly Stn, P.S. Haroa, 14.x.1993, Coll. S.C. Majumder; Reg no. 767; ♀, Jeliakhali, P.S. Sandeshkhali, 17.i.1994, Coll. S.C. Majumder, Reg no. 768; 1 ♀, Kalpi proper, P.S. Kulpi, 20.xi.1994, Coll. S.C. Majumder, Reg. no. 769; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. S.C. Majumder; Reg no. 770; 3 ♀, Kakmari, P.S. Gosaba, 19.iii.1994, Coll. D.B. Ranamajor, 1 ♀, Ramganga, P.S. Patharpratima, 23.xi.1994, Coll. N.C. Banerjee.

Distribution : India : Sundarban area (Patharpratima, Gosaba, Kulpi, Mandirbazar, Dist. South 24 Parganas; Sandeshkhali; Haroa, Hingalgunj, Dist. North 24 Parganas) (new record), West Bengal, Sikkim.

Genus 8. *Polys* Koch

1843. *Polys* C.L. Koch, *Die Anachniden*, 10 : 97.

1992. *Polys* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 166.

Type species : *Polys illepidus* C.L. Koch.

Distribution : Asia, Australia and Africa.

27. *Polys nagpurensis* Tikader

1982. *Polys nagpurensis* Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 169.

Material examined : 1 ♀, Jogeshgunga, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder, Reg. no. 771.

Diagnosis : Cephalothcrax longer than wide, cephalic region prominent with elevation. Ocular quadrate wider than long. Labium wider than long, Maxillae broad. Chelicerae moderately strong. Legs moderately long and strong.

Abdomen : Large high up anteriorly having many small & large irregular tubercles.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas) (new record), West Bengal; Maharashtra.

Genus 9. *Zygeilla* Cambridge

1902. *Zygeilla* F.O.P. Cambridge, *Ann. Mag. nat. Hist*, 9(7) : 15.

1982. *Zygeilla* : Tikader, *Fauna of India*, Spiders : Araneae, 2(1) : 2.

Type species : *Zygeilla artica* (Koch).

Distribution : Cosmopolitan.

28. *Zygeilla melanocrania* (Thorell)

1887. *Epeira melanocrania* Thorell, *Annali Mus. in Genova*, 25 : 209.

1992. *Zygeilla melanocrania* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series No. 3* : 465.

Material examined : 1 ♀, Daspara, P.S. Kakdwip, 27.xi.1994, Coll. S.C. Majumder, Reg. no. 772.

Diagnosis : Cephalothcrax longer than wide narrowing in front. Ocular quadrate slightly longer than wide. Anterior median eyes larger than posterior medians. Labium slightly wider than long, maxillae broad. Abdomen oval longer than wide. Ventral side with white pigment.

Distribution : India : Sundarban area (Kakdwip, Dist. South 24 Parganas), Burdwan, North 24 Parganas, West Bengal; Orissa.

Elsewhere : Myanmar, Pakistan.

Genus 10. *Singa* Koch1836. *Singa* Koch, *Ar.*, 3 : 42.*Type species* : *Singa hamata* Koch.*Distribution* : Cosmopolitan except Australia.29. *Singa chota* Tikader1970. *Singa chota* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 35.1992. *Singa chota* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. 3 : 464.*Material examined* : 1 ♀, Roydighi, P.S. Mathurapur, 19.xi.1994, Coll. S.C. Majumder, Reg. no. 773.*Diagnosis* : Cephalothorax larger than wide, cephalic region narrow and high. Eyes partly white, posterior row straight, anterior row recurved. Posterior median eyes close to each other. Sternum heart shaped. Abdomen elliptical in shape. Dorsum provided with a longitudinal brown cracked line.*Distribution* : India : Sundarban area (Mathurapur, Dist. South 24 Parganas) (new record) North 24 Parganas, West Bengal; Sikkim.

2. Family LYCOSIDAE Sundevall

Key to the genera of the family LYCOSIDAE Sundevall from Sundarban

1. Carapace glabrous or nearly so; tarsus I provided with a dorso-basal bristle which is much longer than the trichobothria *Arctosa*
— Carapace not glabrous; tarsus I not provided with dorso-basal bristle 2
2. Posterior spinnerets distinctly longer than the anterior; sternum generally provided with mid longitudinal dark marking *Hippasa*
— Posterior spinnerets not distinctly longer than the anterior; sternum not provided with mid longitudinal dark markings 3

3. Labium always longer than wide; metatarsi IV never longer than tibia plus patella together *Lycosa*
— Labium wider than long; metatarsi IV usually longer than tibia plus patella together 4
4. Legs relatively long and thin as compared to the body size; tibia I provided with three pairs of ventral spines *Pardosa*
— Legs relatively short and stout as compared to the body size; tibia IV provided dorsally with proximal spines 5
5. Carapace hirsute or hairy; tarsus I without a dorso-basal thin long bristle *Trochosa*
— Carapace not hirsute or hairy; tarsus I provided with dorso-basal thin long bristle 6
6. Anterior and posterior spinnerets are in equal in length *Flanona*
— Anterior spinnerets longer than the posterior spinnerets *Ocyale*

Genus 11 *Arctosa* Koch1847. *Arctosa* Koch, *Die Arachnidon*, 14(3) : 94.1972. *Arctosa* : Kaston, *How to know the Spider*, : 198.*Type species* : *Arctosa cinerea* (Fabricius).*Distribution* : India, America, New England, Europe.Key to the species of the genus *Arctosa* Koch from Sundarban

1. Patches at the bases of second and third row of eyes contiguous and the legs are provided with conspicuous brownish green patches ..
..... *Mulani*
— Patches at the bases of second and third row of eyes not contiguous and the legs are not provided with conspicuous green patches 2
2. Ventral side of the femora of all legs provided with greenish brown broad transverse band *indicus*
— Ventral side of the femora of all legs not provided with greenish brown broad transverse band 3

3. Abdomen pointed behind; mid-dorsally provided with a longitudinal lense shaped pale marking..... *himalayensis*
 — Abdomen not pointed behind; mid-ventrally not provided with longitudinal lense shaped grey marking *khudiensis*

30. *Arctosa mulani* (Dyal)

1935. *Pardosa mulani* Dyal, *Bull. Dept. Zool. Punjab Univ.*, : 146.
 1995. *Arctosa mulani* : Biswas & Majumder, *Fauna of Meghalaya*, part II, Araneae : Spiders, *State Fauna Series No. 4* : 107.

Material examined : 1 ♀, Amtoli, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 774; 1 ♀, Rajatduli, P.S. Gosaba, 20.i.1994, Coll. S.C. Majumder; 1 ♀, 1 ♂, Garangati, P.S. Kulpi, 21.xi.1994; Coll. S.C. Majumder, Reg. no. 775; 1 ♀, Roydighi, P.S. Mathurapur, 19.xi.1994, Coll. S.C. Majumder, Reg. no. 776; 1 ♀, 1 ♂, Hingalgunj Bazar, P.S. Hingalgunj, 13.i.1994, Coll. S.C. Majumder, Reg. no. 777.

Distribution : India : Sundarban area (Kulpi, Mathurapur, Gosaba, Dist. South 24 Parganas) (new record), West Bengal, Meghalaya; Maharashtra.

Elsewhere : Pakistan.

31. *Arctosa indicus* Tikader & Malhotra

1980. *Arctosa indicus* Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, 1(2) : 371.
 1992. *Arctosa indicus* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 438.

Material examined : 1 ♀, Minakhan Bazar, P.S. Minakhan, 23.iii.1994, Coll. S.C. Majumder, Reg. no. 778; 2 ♀, 1 ♂, Garangati, P.S. Kulpi, 21.xi.1994, Coll. S.C. Majumder, Reg. no. 779; 1 ♀, 1 ♂, Hingalgunj proper, P.S. Hingalgunj, 13.i.1994; Coll. S.C. Majumder, Reg. no. 780.

Distribution : India : Sundarban area (Kulpi, Dist. South 24 Parganas; Minakhan, Hingalgunj, Dist. North 24 Parganas) (new record), Kolkata, West Bengal; Maharashtra.

32. *Arctosa himalayensis* Tikader & Malhotra

1980. *Arctosa himalayensis* Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, 1(2) : 369.
 1992. *Arctosa himalayensis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 438.

Material examined : 1 ♀, 1 ♂, Minakhan Bazar, Minakhan, 23.iii.1994, Coll. S. C. Majumder, Reg no. 781.

Distribution : India : Sundarban area (Minakhan, Dist. North 24 Parganas) (new record), Kolkata, West Bengal; Uttar Pradesh.

33. *Arctosa khudiensis* (Sinha)

1951. *Lycosa khudiensis* Sinha, *Rec. Indian Mus.*, 48(2) : 22.
 1995. *Arctosa khudiensis* : Biswas & Majumder, *Fauna of Meghalaya*, part II, Araneae : Spiders, *State Fauna Series No. 4* : 107.

Material examined : 2 ♀, Sripatinagar, P.S. Patharpratima, 15.iv.1993, Coll. K. N. Reddy, Reg. no. 782.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), West Bengal; Meghalaya; Bihar;

Elsewhere : Pakistan.

Genus 12. *Hippasa* Simon Koch

1885. *Hippasa* Simon, *Bull. Soc. Zcci. Rr.*, 10 : 31.
 1951. *Hippasa* : Sinha, *Rec. Indian Mus.*, 48(2) : 11.

Type species : *Hippasa agelenoides* (Simon)

Distribution : Madagascar; Africa; Arabia; Malayasia; India.

Key to the species of the genus *Hippasa* Simon from Sundarban

1. Chitinous plate covering the pit of the vulve and bifurcated posteriorly, producing a pair of large elevated triangular plate *greenalliae*
 — Chitinous plate not covering the pit of the vulve, not producing a pair of elevated triangular plate 2

2. Plate of vulve produced into a tongue like process very much drawn out posteriorly ...
..... *holmerae*
- Plate of vulve not produced into a tongue like process 3
3. Ventral side of the abdomen provided with three longitudinal dark bands extending from the epigastric fold to the base of the spinnerets
..... *partita*
- Ventral side of the abdomen not provided with three longitudinal dark bands extending from the epigastric fold to the base of the spinnerets *olivacea*

34. *Hippasa greenalliae* (Blackwall)

1867. *Lycosa greenalliae* Blackwall, *Ann. Mag. Nat. Hist.*, **19**(3) : 387.
1992. *Hippasa greenalliae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 439.

Material examined : 1 ♀, Dakshin Kan Kan, P.S. Patharpratima, 18.iv.1993, Coll. K.N. Reddy, Reg. no. 783.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), North 24 Parganas, Darjeeling, West Bengal; Orissa; Kerala; Tamil Nadu; Karnataka; Maharashtra; Sikkim.

Elsewhere : Sri Lanka.

35. *Hippasa holmerae* Thorell

1895. *Hippasa holmerae* Thorell, *Spiders of Myanmar*, : 218.
1992. *Hippasa holmerae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 439.

Material examined : 1 ♀, Sripatinagar (K-plot), P.S. Patharpratima, 15.iv.1993, Coll. K. N. Reddy, Reg. no. 784.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), Kolkata, Darjeeling, West Bengal, Uttar Pradesh; Monipur.

Elsewhere : Myanmar, Singapur, West China.

36. *Hippasa partita* (Cambridge)

1876. *Trochosa partita* Cambridge, *Proc. Zool. Soc.*, : 541-630.
1992. *Hippasa partita* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 439.

Material examined : 1 ♀, Sripatinagar (K-plot), P.S. Patharpratima, 15.iv.1993, Coll. K. N. Reddy, Reg. no. 705.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), North 24 Pargana, West Bengal, Gujarat; Rajasthan.

Elsewhere : Egypt, Arabia, Pakistan.

37. *Hippasa olivacea* (Thorell)

1887. *Dipontia olivacea* Thorell, *Ann. Mus. civ. Sten. nat. Genova*, **5**(2) : 297.
1980. *Hippasa olivacea* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 283.

Material examined : 1 ♀, Amtoli, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 786.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 parganas) (new record), West Bengal.

Elsewhere : Myanmar.

Genus 13. *Lycosa* Latreille

1804. *Lycosa* Latreille, *Nov. Dist. d'Hist. Nat.*, **24** : 135.
1970. *Lycosa* : Tikader, *Rec. zool. Surv. India*, **64**(1-4) : 63.

Type species : *Lycosa tarantula* Rossi.

Distribution : All over the world.

Key to the species of the genus *Lycosa* Latreille from Sundarban

- Ventral side of the abdomen provided with a broad dark brown patches extending from the epigastric fold to the base of the spinnerets *chaperi*
- Ventral side of the abdomen pale and without such types of patches (2)
- Carapace redish brown in colour; femora of all legs provided with light patches .. *kempi*

- Carapace not redish brown in colour, femora at all legs not provided with any patches ... (3)
3. Maxillae much broader at the distal end; coxa dorsally provided with brown irregular patches *choudhuryi*
- Maxillae not much broader at the distal end; coxa dorsally not provided with brown irregular patches (4)
4. Cephalothorax not provided with a mid longitudinal and sub-marginal pale bands ..
..... *poonaensis*
- Cephalothorax not provided with a mid longitudinal and sub marginal pale bands ..
..... (5)
5. Ventral side of the abdomen provided with two inclined rows of small red spots near the epigastric furrow. *masteri*
- Ventral side of the abdomen not provided with two inclined rows of small red spots near the epigastric furrow (6)
6. Abdomen broadest behind, dorsally ornamented with a conspicuous V shaped marking *mackenziei*
- Abdomen pointed behind with no conspicuous V shaped marking (7)
7. Sternum provided mid-longitudinally with a conspicuous broad black band
..... *mahabaleswarensis*
- Sternum mid-longitudinally with no conspicuous broad black band (8)
8. Anterior row of eyes straight; ocular quadrate wider than long *himalayensis*
- Anterior row of eyes procurved; ocular quadrate longer than wide (9)
9. Lense shaped greenish brown patches present longitudinally at the antero median side of the dorsum *pictula*
- No lense shaped greenish brown patches present on the antero median side of the dorsum *tista*

38. *Lycosa chaperi* Simon

1885. *Lycosa chaperi* Simon, *Bull. Soc. Zool. Fr.*, **10** : 8.
1980. *Lycosa chaperi* : Tikader and Malhotra, *Fauna of India, Spiders : Araneae*, **1(2)** : 387.

Material examined : 2 ♀, Kumirmari, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder, Reg. no. 787; 2 ♂, Dakshin Radhanagar, P.S. Gosaba, 22.xi.1994, Coll. S.C. Majumder; 1 ♂, Dulduli, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder, Reg. no. 788; 1 ♂, Rajatduli, P.S. Gosaba, 20.i.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas; Hingalgunj, Dist. North 24 Parganas) (new record), West Bengal; Andhra Pradesh; Punjab.

39. *Lycosa kempi* Gravely

1924. *Lycosa kempi* Gravely, *Rec. Indian Mus.*, **26** : 602.
1995. *Lycosa kempi* : Biswas & Majumder, *Fauna of Meghalaya, Part II, Araneae : Spiders, State Fauna Series No. 4* : 112.

Material examined : 1 ♀, Kachukhali, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder, Reg. no. 789; 1 ♀, Chhotoseara, P.S. Sandeshkahali, 24.ii.1995, Coll. S.C. Majumder, Reg. no. 790.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas; Sandeshkhali, Dist. North 24 Parganas) (new record), Darjeeling, West Bengal; Meghalaya; Assam; Sikkim.

Elsewhere : Bhutan, Pakistan.

40. *Lycosa choudhuryi* Tikader & Malhotra

1980. *Lycosa choudhuryi* Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1(2)** : 390.

Material examined : 2 ♀, Kumirmari, P.S. Gosaba, 21.i.1994, Coll. S.C. Majumder, Reg. no. 791.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas), Sagar island, West Bengal.

41. *Lycosa poonaensis* Tikader & Malhotra

1980. *Lycosa poonaensis* Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1(2)** : 392.

Material examined : 1 ♀, Katakali, P.S. Hingalgunj, 26.ii.1995, Coll. S.C. Majumder, Reg. no. 792; 1 ♀, Sarderpara, P.S. Hingalgunj, 21.ii.1995, Coll. S.C. Majumder, Reg. no. 793.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas) (new record), West Bengal; Maharashtra.

42. *Lycosa masteri* Pocock

1901. *Lycosa masteri* Pocock, *J. Bombay nat. Hist. Soc.*, 13(3) : 484-485.

1980. *Lycosa masteri* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, 1(2) : 394.

Material examined : 1 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 794; 2 ♀, Kachukhali, P.S. Sandeshkhali, 22.iii.1994, Coll. S.C. Majumder, Reg. no. 795.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas; Sandeshkhali, Dist. North 24 Parganas) (new record), West Bengal; Maharashtra.

43. *Lycosa mackenziei* Gravely

1924. *Lycosa mackenziei* Gravely, *Rec. Indian Mus.*, 26 : 606.

1992. *Lycosa mackenziei* : Biswas & Biswas, *Fauna of West Bengal, Part III, Araneae : Spiders, State Fauna Series No. 3* : 442.

Material examined : 2 ♀, Rajatduli, P.S. Gosaba, 20.i.1994, Coll. S.C. Majumder, Reg. no. 796.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), Kolkata, West Bengal; Bihar; Karnataka; Punjab.

Elsewhere : Pakistan.

44. *Lycosa mahabaleshwariensis* Tikader & Malhotra

1980. *Lycosa mahabaleshwariensis* Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, 1(2) : 429.

Material examined : 1 ♂, Chhotomollakhali, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 797.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Maharashtra.

45. *Lycosa hamalayensis* Gravely

1924. *Lycosa himalayensis* Gravely, *Rec. Indian Mus.*, 26 : 603.

1995. *Lycosa himalayensis* : Biswas & Majumder, *Fauna of Meghalaya, Part II, Araneae : Spiders, State Fauna Series No. 4* : 112.

Material examined : 1 ♀, Rajatduli, P.S. Gosaba, 20.i.1994, Coll. S.C. Majumder, Reg. no. 798.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), Bankura, Darjeeling, West Bengal; Meghalaya; Assam.

46. *Lycosa pictula* Pocock

1901. *Lycosa pictula* Pocock, *J. Bombay nat. Hist. Soc.*, 13(3) : 486.

1980. *Lycosa pictula* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, 1(2) : 424.

Material examined : 2 ♀, Rajatduli, P.S. Gosaba, 20.i.1994, Coll. S.C. Majumder, Reg. no. 799.

Diagnosis : Cephalothorax chocolate brown, longer than wide. Anterior row of eyes procurved, ocular quadrate longer than wide. Abdomen provided with greenish brown lense-shaped patches on the median side of the dorsum.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Maharashtra.

47. *Lycosa tista* Tikader

1970. *Lycosa tista* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 67.

1980. *Lycosa tista* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, 1(2) : 384.

Material examined : 2 ♀, Sukhaduani, P.S. Sandeshkhali, 17.i.1994, Coll. S.C. Majumder, Reg. no. 800.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas) (new record), West Bengal; Sikkim.

Genus 14. *Pardosa* Koch1848. *Pardosa* Koch, *Die. Arachnide*, 14 : 100.1980. *Pardosa* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, 1(2) : 315.*Type species* : *Pardosa striatipes* Koch.*Distribution* : Asia; Europe; America.**Key to the species of the genus *Pardosa*
Koch from Sundarban**

1. Dorsal side of the abdomen decorated with minute light spots *annandalei*
— Dorsal side of the abdomen not decorated with minute light spots (2)
2. Leg IV is the longest of all legs .. *atropalpis*
— Legs IV is not the longest of all legs (3)
3. Anterior row of eyes slightly procurved
..... *birmanica*
— Anterior row of eyes slightly recurved .. (4)
4. Femora of all legs provided with greenish brown transverse patches *burasantiensis*
— Femora of all legs not provided with greenish brown transverse patches (5)
5. Metatarsi IV slightly longer than tibia plus patella together *chambaensis*
— Metatarsi IV not slightly longer than tibia plus patella together (6)
6. Abdomen ventrally provided with two lateral irregular brown patches on the side of the abdomen *heterophthalmus*
— Abdomen ventrally not provided with two lateral irregular brown patches on the side of the abdomen (7)
7. Anterior mid-dorsal side of the abdomen provided with longitudinal lense shaped markings *kupupa*
— Anterior mid-dorsal side of the abdomen not provided with longitudinal lense shaped markings (8)
8. Labium as long as wide, chelicerae not strong, inner margin with three teeth *leucopalpis*
— Labium wider than long, chelicerae moderately strong inner margin not provided with three teeth (9)
9. Sternum provided with conspicuous dark brown V shaped marking *minutus*
— Sternum not provided with V shaped marking (10)
10. Carapace provided with a broad longitudinal brown patches extended from the bases of the posterior eye to the base of the cephalothorax *oakleyi*
— Carapace without a broad longitudinal brown patches extended from the base of the posterior eye to the base of the cephalothorax (11)
11. Ventral side of the abdomen uniformly pale coloured and without any black spots
..... *rhenockensis*
— Ventral side of the abdomen not uniformly coloured and with some black spots (12)
12. Posterior half of the dorsum provided with pale chevron pattern *songosa*
— Posterior half of the dorsum not provided with pale chevron pattern (13)
13. Abdomen ventrally provided with sub-lateral longitudinal irregular greenish brown patches *shyamae*
— Abdomen ventrally not provided with sub-lateral longitudinal irregular greenish brown patches (14)
14. Legs not so strong, provided dorsally with irregular greenish brown patches *sumatrana*
— Legs moderately strong provided dorsally with longitudinal brown band (15)
15. Abdomen nearly same wide both in front and behind; mid-dorsally provided with lense shaped pale marking *alii*
— Abdomen not in same wide both in front and behind; mid-dorsally not provided with lense shaped pale marking (16)

16. Carapace provided with 'V' shaped marking just behind the third row of eyes ..
..... *mysorensis*

— Carapace not provided with V shaped marking just behind the third row of eyes ..
..... (17)

17. Tibia and metatarsi of I & II provided with three pieces of ventral spines *sutherlandi*

— Tibia and metatarsi of I & II not provided with three pairs of ventral spines
..... *amkhasensis*

48. *Pardosa annandalei* (Gravely)

1924. *Lycosa annandalei* Gravely, *Rec. Indian Mus.*, 26 : 606.

1995. *Pardosa annandalei* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae : Spiders, *State Fauna Series No. 4* : 110.

Material examined : 1 ♀, Duldul, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder; 2 ♂, Sarderpara, P.S. Hingalgunj, 21.ii.1995, Coll. S.C. Majumder, Reg. no. 801; 3 ♀, Hemnagar, P.S. Hingalgunj, 18.i.1994, Coll. S.C. Majumder, Reg. no. 802; 1 ♀, Luxbagan, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 803; 2 ♀, Madhabkati, P.S. Hingalgunj, 22.ii.1995, Coll. S.C. Majumder; 1 ♀, 1 ♂, Ramganga, P.S. Patharpratima, 23.xi.1995, Coll. S.C. Majumder, Reg. no. 804; 1 ♀, Minakhan Bazar, P.S. Minakhan, 23.iii.1994, Coll. S.C. Majumder, Reg. no. 805.

Distribution : India : Sundarban area (Hingalgunj, Minakhan, Dist. North 24 Parganas; Gosaba, Patharpratima, Dist. South 24 Parganas), Kolkata, Birbhum, Darjeeling, Jalpaiguri, Hooghli, West Bengal; Kerala; Maharashtra; Manipur; Madhya Pradesh; Bihar; Assam; Gujarat; Andhra Pradesh; Karnataka; Tamil Nadu.

Elsewhere : Myanmar, Pakistan and Bangladesh.

49. *Pardosa atropalpis* Gravely

1924. *Pardosa atropalpis* Gravely, *Rec. Indian Mus.*, 26 : 610.

1992. *Pardosa atropalpis* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series No. 3* : 444.

Material examined : 4 ♂, Dakshin Radhanagar, P.S. Gosaba, 22.ii.1994, Coll. S.C. Majumder, Reg. no. 806.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), Bardhaman, Hooghly, West Bengal; Bihar; Orissa; Karnataka; Andhra Pradesh; Tamil Nadu.

50. *Pardosa birmanica* Simon

1884. *Pardosa birmanica* Simon, *Ann. Mus. civ. store nat. Genove*, 20 : 333.

1995. *Pardosa birmanica* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae : Spiders, *State Fauna Series No. 4* : 110.

Material examined : 2 ♀, Monipur, P.S. Hingalgunj, 14.i.1994, Coll. S.C. Majumder, Reg. no. 807; 2 ♀, Jingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 808; 1 ♀, 1 ♂, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 809; 1 ♀, Hasnabad Rly. Stn., P.S. Hasnabad, 15.x.1993, Coll. S.C. Majumder, Reg. no. 810; 1 ♀, Bayermari, P.S. Sandeshkhali, 20.i.1994, Coll. S.C. Majumder, Reg. no. 811; 1 ♀, Sahapur, P.S. Hingalgunj, 14.i.1994, Coll. S.C. Majumder; 1 ♀, Bhanderkhali, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder; 2 ♀, Bagnan, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Hasnabad, Hingalgunj, Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas), Bardhaman, Birbhum, Darjeeling, West Bengal; Gujarat; Rajasthan; Maharashtra; Punjab; Himachal Pradesh; Madhya Pradesh; Meghalaya; Tamil Nadu; Andhra Pradesh; Bihar; Orissa.

Elsewhere : Myanmar, Java, Pakistan.

51. *Pardosa burasantiensis* Tikader & Malhotra

1980. *Pardosa burasantiensis* Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, 1(2) : 338.

1992. *Pardosa burasantiensis* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series No. 3* : 444.

Material examined : 1 ♀, 1 ♂, Sahapur, Hingalgunj, 13.i.1994, Coll. S.C. Majumder, Reg. no. 812; 2 ♀, Bhanderkhali, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder; 1 ♀, Hemnagar, P.S. Hingalgunj, 14.i.1994, Coll. S.C. Majumder, Reg. no. 813.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas) (new record), Singur, West Bengal.

52. *Pardosa chambaensis* Tikader & Malhotra

1976. *Pardosa chambaensis* Tikader & Malhotra, *Proc. Indian Acad. Sci.*, **83**(3) : 128.

1980. *Pardosa chambaensis* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 357.

Material examined : 1 ♀, Sahapur, P.S. Hingalgunj, 13.i.1994, Coll. S.C. Majumder, Reg. no. 814; 1 ♀, Lebukhali, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas), West Bengal; Himachal Pradesh.

53. *Pardosa heterophthalmus* (Simon)

1898. *Acroniops heterophthalmus* Simon, *Hist. nat. des. Araignees*, **2** : 362.

1995. *Pardosa heterophthalmus* : Biswas & Majumder, *Fauna of Meghalaya*, Part II, Araneae : Spiders, *State Fauna Series No. 4* : 110.

Material examined : 1 ♀, Dayapur, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 815; 2 ♀, Lebukhali, P.S. Hingalgunj, 15.i.1994, Coll. D.B. Ranamagor, Reg. no. 816; 1 ♀, Monipur, P.S. Hingalgunj, 14.i.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas; Gosaba, Dist. North 24 Parganas) (new record), Purulia, West Bengal; Tamil Nadu.

Elsewhere : Java.

54. *Pardosa kupupa* (Tikader)

1970. *Lycosa kupupa* Tikader, *Rec. zool. Surv. India*, **64**(1-4) : 66.

1980. *Pardosa kupupa* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 333.

Material examined : 1 ♀, 1 ♂, Bhanderkhali, P.S. Hingalgunj, 15.i.1994, Coll. S.C. Majumder, Reg. no. 817; 1 ♀, Bayermari, P.S. Sandeshkhali, 20.i.1994, Coll. S.C. Majumder, Reg. no. 818; 1 ♂, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 819; 1 ♀, Shripatinagar (K. Plot), P.S. Patharpratima, 15.iv.1993, Coll. K.N. Reddy, Reg. no. 820.

Distribution : India : Sundarban area (Hingalgunj, Sandeshkhali, Dist. North 24 Parganas; Gosaba, Patharpratima, Dist. South 24 Parganas) (new record), West Bengal; Sikkim.

55. *Pardosa leucopalpis* Gravely

1924. *Pardosa leucopalpis* Gravely, *Rec. Indian Mus.*, **26** : 610.

1992. *Pardosa leucopalpis* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series No. 3* : 445.

Material examined : 1 ♀, Vangatushkhali, P.S. Sandeshkhali, 19.i.1994, Coll. S.C. Majumder, Reg. no. 821; 1 ♀, Roydighi, P.S. Mathurapur, 19.xi.1994, Coll. S.C. Majumder, Reg. no. 822; 2 ♂, Deauthpur, P.S. Gosaba, 13.i.1994, Coll. S.C. Majumder, Reg. no. 823.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas; Gosaba, Mathurapur, Dist. South 24 Parganas) (new record), Kolkata, West Bengal; Andhra Pradesh; Tamil Nadu; Kerala; Orissa.

Elsewhere : Sri Lanka, Pakistan.

56. *Pardosa minutus* Tikader & Malhotra

1976. *Pardosa minutus* Tikader & Malhotra, *Proc. Indian Acad. Sci.*, **83**(3) : 126.

1980. *Pardosa minutus* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 319.

Material examined : 1 ♀, Roydighi, P.S. Mathurapur, 19.xi.1994, Coll. S.C. Majumder, Reg. no. 824.

Distribution : India : Sundarban area (Mathurapur, Dist. South 24 Parganas) (new record), West Bengal; Himachal Pradesh.

57. *Pardosa oakleyi* Gravely

1924. *Pardosa oakleyi* Gravely, *Rec. Indian Mus.*, **26** : 610.
 1992. *Pardosa oakleyi* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 445.

Material examined : 1♀, Sahapur, P.S. Hingalgunj, 13.i.1994, Coll. S.C. Majumder, Reg. no. 825; 1♀, Sukhaduani, P.S. Sandeshkhali, 17.i.1994, Coll. S.C. Majumder, Reg. no. 826; 2♂, Kachukhali, P.S. Gosaba, 20.iii.1994, Coll. S.C. Majumder, Reg. no. 827; 1♂, Marichjhapi, P.S. Gosaba, 9.iv.1993, Coll. S.C. Majumder; 1♀, Jingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Hingalgunj, Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), Bardhaman, West Bengal; Bihar; Karnataka; Tamil Nadu; Punjab.

Elsewhere : Pakistan.

58. *Pardosa rhenockensis* (Tikader)

1970. *Lycosa rhenockensis* Tikader, *Rec. zool. Surv. India*, **64**(1-4) : 68.
 1980. *Pardosa rhenockensis* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 342.

Material examined : 5♀, Vangatuskhali, P.S. Sandeshkhali, 19.i.1994, Coll. S.C. Majumder, Reg. no. 828; 1♀, Chingrikhali, P.S. Hingalgunj, 21.i.1994, Coll. S.C. Majumder, Reg. no. 829; 1♀, Kachukhali, P.S. Gosaba, 22.iii.1994, Coll. S.C. Majumder, Reg. no. 830.

Distribution : India : Sundarban area (Sandeshkhali, Hingalgunj, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Sikkim.

59. *Pardosa songosa* Tikader & Malhotra

1976. *Pardosa songosa* Tikader & Malhotra, *Proc. Indian Acad. Sci.*, **83**(3) : 128-130.
 1980. *Pardosa songosa* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, **1**(2) : 340.

Material examined : 2♀, 2♂, Kachukhali, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder,

Reg. no. 831; 1♀, Bayermari, P.S. Sandeshkhali, 21.i.1994, Coll. S.C. Majumder, Reg. no. 832; 2♀, Chhotomollakhali, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 833; 2♀, 1♂, Mithakhali, P.S. Sandeshkhali, 19.i.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Uttar Pradesh.

60. *Pardosa shyamae* (Tikader)

1970. *Lycosa shyamae* Tikader, *Rec. zool. Surv. India*, **64**(1-4) : 67.
 1992. *Pardosa shyamae* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 445.

Material examined : 5♀, Bayermari, P.S. Sandeshkhali, 21.i.1994, Coll. S.C. Majumder, Reg. no. 834; 2♀, Sukhaduani, P.S. Sandeshkhali, 17.i.1994, Coll. S.C. Majumder; 1♀, Minakhan Bazar, P.S. Minakhan, 22.iii.1994, Coll. S.C. Majumder, Reg. no. 835; 2♀, Monipur, P.S. Hingalgunj, 14.i.1994, Coll. S.C. Majumder, Reg. no. 836.

Distribution : India : Sundarban area (Sandeshkhali, Minakhan, Hingalgunj, Dist. North 24 Parganas) (new record), Darjeeling, West Bengal.

61. *Pardosa sumatrana* (Thorell)

1890. *Lycosa sumatrana* Thorell, *Ann. Mus. Stor. nat. Genova*, **30** : 136.
 1995. *Pardosa sumatrana* : Biswas & Majumder, *Fauna of Meghalaya*, Part III, Araneae : Spiders, *State Fauna Series* No. **4** : 110.

Material examined : 2♀, 1♂, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 837; 1♀, 1♂, Bayermari, P.S. Sandeshkhali, 20.i.1994, Coll. S.C. Majumder, Reg. no. 838; 1♀, Bhagabatpur, P.S. Patharpratima, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 839; 1♀, Kaikhali, P.S. Kultali, 19.iv.1993, Coll. S.C. Majumder, Reg. no. 840; 1♀, Marichjhapi, P.S. Gosaba, 9.iv.1993,

Coll. S.C. Majumder; 2♂, Jhingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 841; 1♂, Bayermari, P.S. Sandeshkhali, 20.i.1994, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Sandeshkhali, Hingalgunj, North 24 Parganas; Gosaba, Kultali, Patharpratima, Dist. South 24 Parganas) (new record), Birbhum, Darjeeling, Bardhaman, Hooghli, West Bengal; Meghalaya; Kerala; Karnataka; Tamil Nadu; Andhra Pradesh; Maharashtra; Bihar; Himachal Pradesh; Tripura; Rajasthan; Gujarat; Madhya Pradesh; Arunachal Pradesh; Andaman & Nicobar Island; Nepal.

Elsewhere : Sri Lanka, Sumatra.

62. *Pardosa alii* Tikader

1977. *Pardosa alii* Tikader, *J. Bombay nat. Hist. Soc.*, **74**(1) : 145.

1980. *Pardosa alii* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1**(2) : 362.

Material examined : 1♀, Amtoli, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 842; 1♀, Jeliakhali, P.S. Sandeshkhali, 19.i.1994, Coll. S.C. Majumder, Reg. no. 843.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Jammu and Kashmir.

63. *Pardosa mysorensis* (Tikader & Malhotra)

1971. *Lycosa mysorensis* Tikader & Malhotra, *Sci. & Cult.*, **37** : 531.

1980. *Pardosa mysorensis* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1**(2) : 332.

Material examined : 1♀, Amtali, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 844; 1♀, Jogeshgunj, P.S. Hingalgunj, 19.i.1994, Coll. S.C. Majumder, Reg. no. 845.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas; Hingalgunj, Dist. North 24 Parganas) (new record), West Bengal; Karnataka.

64. *Pardosa sutherlandi* (Gravely)

1924. *Lycosa sutherlandi* Gravely, *Rec. Indian Mus.*, **26** : 606.

1995. *Pardosa sutherlandi* : Biswas & Majumder, *Fauna of Meghalaya, Part II, Araneae : Spiders, State Fauna Series No. 4* : 110.

Material examined : 1♀, Amtali, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 846; 1♀, Sahapur, P.S. Hingalgunj, 13.i.1994, Coll. S.C. Majumder, Reg. no. 847.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), Darjeeling, West Bengal.

65. *Pardosa amkhasensis* Tikader & Malhotra

1976. *Pardosa amkhasensis* Tikader & Malhotra, *Proc. Indian Acad. Sci.*, **83**(3) : 124.

1980. *Pardosa amkhasensis* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1**(2) : 335.

Material examined : 1♀, Chhotomollakhali, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 848; 1♀, Dauthpur, P.S. Gosaba, 18.i.1994, Coll. S.C. Majumder, Reg. no. 849.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Madhya Pradesh.

Genus 15. *Trochosa* Koch

1847. *Trochosa* Koch, *Die Arachniden*, **14**(3) : 95.

1980. *Trochosa* : Tikader & Malhotra, *Fauna of India, Spiders : Araneae*, **1**(2) : 435.

Type species : *Trochosa rucicola* (De Geer).

Distribution : India : America; New England; Europe.

66. *Trochosa punctipes* (Gravely)

1924. *Lycosa punctipes*, Gravely, *Rec. Indian Mus.*, **26** : 603.

Material examined : 2♀, Kumirmari, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg. no. 850.

Diagnosis : Cephalothorax longer than wide, cephalic region high, provided with conspicuous fovea. Anterior row of eyes slightly recurved; ocular quadrate wider than long narrowing in front. Labium longer than wide. Abdomen longer than wide, dorsum provided with two longitudinal rows of dark brown patches.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), Murshdabad, West Bengal; Bihar; Tamil Nadu; Uttar Pradesh; Karnataka.

Genus 16. *Flanona* Simon

1898. *Flanona* Simon, *Hist. Nat. des. Araignees*, 2(2) : 349.

1980. *Flanona* : Tikader & Malhotra, *Fauna of India*, Spiders : Araneae, 1(2) : 366.

Type species : *Flanona puellula* Simon.

Distribution : India; Sri Lanka.

67. *Flanona puellula* Simon

1898. *Flanona puellula*, Simon, *Hist. Nat. des. Araignees.*, 2(2) : 349.

Material examined : 1 ♀, Kumirmari, P.S. Gosaba, 21.iii.1994, Coll. S.C. Majumder, Reg. no. 651.

Diagnosis : Cephalothorax longer than wide, fovea present at the middle. Anterior row of eyes straight, equal in size. Labium wider than long. Abdomen longer than wide, dorsum provided with greenish brown patches.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), West Bengal.

Elsewhere : Sri Lanka.

Genus 17. *Ocyale* Audouin

1825. *Ocyale* Audouin in Savigny's 'Description de' Egypte Arachnides, Paris, 1 : 150.

1980. *Ocyale* : Tikader & Malhotra, *Fauna of India*, Spider : Araneae, 1(2) : 363.

Type species : *Ocyale atalanta* Audouin.

Distribution : India; Europe; Egypt; Ethiopia; Sri Lanka; Myanmar; Congo; Guinea; Senegal.

68. *Ocyale atalanta* Audouin

1826. *Ocyale atalanta* Audouin, in Savigny's 'Description de' Egypte Arachnides; Paris, 1 : 150.

1995. *Ocyale atalanta* : Biswas & Majumder, *Fauna of Meghalaya* part II, Araneae : Spiders, *State Fauna Series* No. 4 : 113.

Material examined : 1 ♀, Dakshin Radhanagar, P.S. Gosaba, 22.iii.1994, Coll. S.C. Majumder, Reg. no. 852; 1 ♀, Kalinagar, P.S. Sandeshkhali, 25.ii.1995, Coll. S.C. Majumder, Reg. no. 853.

Diagnosis : Cephalothorax longer than wide with prominent fovea at middle. Anterior row slightly recurved. Ocular quadrate wider behind. Labium slightly longer than wide. Maxillae very much wider at the distal end. Abdomen oval, pointed behind, dorsum provided with irregular brown and yellow patches.

Distribution : India : Sundarban area (Sandeshkhali, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas) (new record), West Bengal; Meghalaya; Orissa; Bihar.

Elsewhere : Sri Lanka, Africa, Myanmar, Egypt, Ethiopia, Guinea, & Conge.

3. Family OXYOPIDAE Thorell

Key to the genera of the family OXYOPIDAE Thorell from Sundarban

1. Posterior row of eyes strongly procurved and equidistance from each other *Oxyopes*
— Posterior row of eyes not strongly procurved and not equidistance from each other 2
2. Cephalotherax not high, male palp with paracymbial process *Peucetia*

Genus 18. *Oxyopes* Latreille

1804. *Oxyopes* Latreille, *Hist. Nat. Arach. France*, 14(7) : 144.

1995. *Oxyopes* : Biswas & Majumder, *Fauna of Maghalaya*, Part II, Araneae : Spiders, *State Fauna Series* No. 4 : 121.

Type species : *Oxyopes heterophthalmus* Latreille.

Distribution : Cosmopolitan.

Key to the species of the genus *Oxyopes***Latreille from Surdarban**

1. Abdomen wider at the middle, narrowed both anterior and posterior end; dorsum without any patches at the middle*sakuntalae*
— Abdomen not wider at the middle and not narrowed on both the ends; dorsum provided with brownish patches at the middle..... (2)
2. Cephalothorax narrowed in front and provided with inconspicuous foves at the middle*shweta*
— Cephalothorax wider in front and provided with conspicuous fovea at the middle (3)
3. Lower side of the femora of all legs provided with two conspicuous black lines *sitae*
— Lower side of femora of all the legs not provided with two conspicuous black lines (4)
4. Cephalothorax longer than wide and without any fovea at the middle; inner and outer margin of the chelicerae provided with two teeth *reddyi*
— Cephalothorax longer than wide and provided with prominent fovea at the middle; inner and outer margin of the chelicerae not provided with two teeth (5)
5. Upper side of the femora of all the legs provided with a longitudinal black lines *ratnae*
— Upper side of the femora of all legs not provided with longitudinal black lines ... (6)
6. Dorsum of the abdomen provided with white longitudinal band; sternum globoid in shape, not longer than wide*sunandae*
— Dorsum of the abdomen not provided with white longitudinal band; sternum not globoid in shape, longer than wide (7)
7. Eyes enclosed in a black field, situated in an equal distance to each other*sikkimensis*
— Eyes not enclosed in a black field not situated in an equal distance to each other ... *pandae*

69. *Oxyopes sakuntalae* Tikader

1970. *Oxyopes sakuntalae* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 73.
1995. *Oxyopes sakuntalae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 435.

Material examined : 3 ♀, Kaikhali, P.S. Kultali, 19.iv.1993, Coll. S.C. Majumder, Reg. no. 854; 1 ♀, Jhingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 855; 2 ♀ Chhotomollakhali, P.S. Gosaba, 20.iv.1993, Coll. S.C. Majumder, Reg. no. 856.

Distribution : India : Sundarban area (Kultali, Gosaba, Dist. South 24 Parganas; Hingalgunj, Dist. North 24 Parganas) (new record), Darjeeling, West Bengal.

70. *Oxyopes shweta* Tikader

1970. *Oxyopes shweta* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 74.
1992. *Oxyopes shweta* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 434.

Material examined : 3 ♀, 1 ♂, Jhingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 857; 1 ♀, Dakhin Kashinagar, P.S. Patharpratima, 17.iv.1993, Coll. K.N. Reddy, Reg. no. 858; 1 ♂, Dayapur, P.S. Gosaba, 213.iv.1993, Coll. S.C. Majumder, Reg. no. 859.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas) (new record), Jalpaiguri, Hooghli, North 24 Parganas, West Bengal; Sikkim; Meghalaya.

71. *Oxyopes sitae* Tikader

1970. *Oxyopes sitae* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 75.
1992. *Oxyopes sitae* : Biswas & Majumder, *Fauna of Meghalaya*, part II, Spiders : Araneae, *State Fauna Series No. 4* : 123.

Material examined : 1 ♀, Rangabelia, P.S. Gosaba, 11.iv.1993, Coll. S.C. Majumder, Reg. no. 860; 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 861.

Diagnosis : Cephalothorax brownish green, wider in front, provided with sharp fovea. Femora of all legs provided with conspicuous black lines. Abdomen pale brown, narrowing behind.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas) (new record), Jalpaiguri, West Bengal; Meghalaya; Sikkim.

72. *Oxyopes reddyi* sp. nov.

General : Cephalothorax and legs reddish brown, abdomen brownish grey in colour. Total length 6.80 mm. Carapace 2.50 mm long and 2.30 mm wide; abdomen 4.50 mm long and 2.30 mm wide.

Cephalothorax : Wider than long, globoid in shape, carapace more or less convex slightly broader at the anterior end, covered with brownish hair, central fovea totally absent. Eyes pearly white encircled by black patches, ocular area without black patches. Anterior row of eyes recurved distributed in an equal distance. The posterior row of eyes procurved, distributed not in an equal distance from each other like the anterior row. Two small ocelli present in front of two anterior median eyes (Fig. 1). Sternum heart shaped pointed behind. Maxillae longer than wide, slightly curved forward, a shallow depression present anteriorly and provided with few scopulae (Fig. 2). Labium longer than wide, anteriorly pointed and blackish, provided with scopulae (Fig. 2). Chelicerae not so strong inner and outer margin provided with two teeth (Fig. 3). Legs not so strong covered with spiny hair, Legs formula is 4 : 3 : 1 : 2.

Abdomen : Longer than wide, covered with fine grey and brownish hair. Dorsum ornamented mid-dorsally with greyish brown patches and laterally with whitish patches (Fig. 1) Ventral side uniformly coloured. Epigyne as triangular plate with copulatory opening (Fig. 4). Internal genitalia with large spermatheca dividible into two parts (Fig. 5).

Holotype : Female in spirit, deposited at Zoological Survey of India, Kolkata. Regd. No. 5469/18.

Type locality : Holotype collected from Dakshin Kankan, P.S. Patharpratima, Dist. South 24 Parganas, West Bengal, India, 18.iv.1993, Coll : K.N. Reddy.

Remarks : This species resembles to *Oxyopes ratnae* Tikader in general appearance but it is separated as follows : 1. Cephalothorax wider than long and without any fovea where as in *Oxyopes ratnae* Tikader cephalothorax longer than wide and provided with distinct fovea. 2. The inner and outer margin provided with two teeth respectively where as in *Oxyopes ratnae* Tikader the outer margin provided with no teeth but the inner margin provided with only one large tooth. 3. Epigyne and internal genitalia are also structurally different.

73. *Oxyopes ratnae* Tikader

1970. *Oxyopes ratnae* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 70.

1992. *Oxyopes ratnae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 433.

Material examined : 1 ♀, ♂, Jingakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg. no. 862.

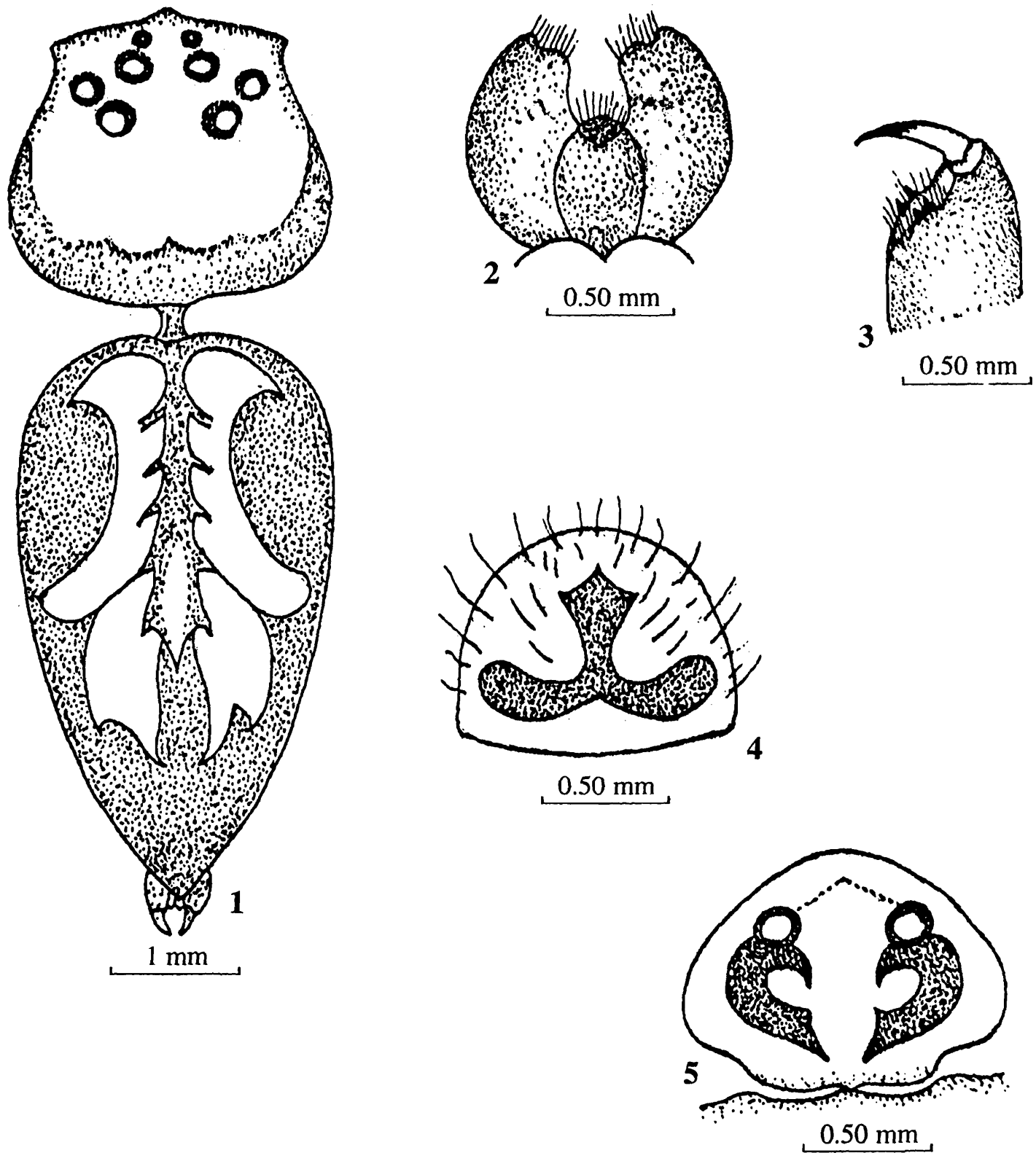
Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) Hooghly, Maldah, Midnapur, North and South 24 Parganas, West Bengal; Sikkim.

74. *Oxyopes sunandae* Tikader

1970. *Oxyopes sunandae* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 74.

1995. *Oxyopes sunandae* : Biswas & Majumder, *Fauna of Meghalaya*, part II, Araneae : Spiders, *State Fauna Series* No. 4 : 121.

Material examined : 4 ♀, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. S.C. Majumder, Reg. no. 863; 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. no. 864;



Figs. 1-5. : Illustration of *Oxyopes raddyi* sp. nov.

1. Dorsal view of female, legs omitted.
2. Chelicera showing arrangement of teeth.
3. Maxillae and labium ventral aspect.
4. Epigyne ventral aspect.
5. Internal genitalia, dorsal aspect.

1 ♀, Sagar Island, P.S. Sagar, 26.xi.1994, Coll. S.C. Majumder, Reg. no. 865;

Distribution : India : Sundarban area (Gosaba, Patharpratima, Sagar, Dist. South 24 Parganas) (new record), West Bengal; Sikkim; Meghalaya.

75. *Oxyopes sikkimensis* Tikader

1970. *Oxyopes sikkimensis* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 76.

1995. *Oxyopes sikkimensis* : Biswas & Majumder, *Fauna of Meghalaya*, part II, Araneae : Spiders, *State Fauna Series* No. 4 : 121.

Material examined : 3 ♀, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. S.C. Majumder, Reg. no. 866.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record), Jalpaiguri, West Bengal; Sikkim.

76. *Oxyopes pandae* Tikader

1969. *Oxyopes pandae* Tikader, *Oriental Insects*, 3(1) : 33.

Material examined : 3 ♂, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. S.C. Majumder, Reg. no. 867; 1 ♂, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas) (new record).

Genus 19. *Peucetia* Thorell

1869. *Peucetia* Thorell, *On European Spiders Uppsala*, 7 : 196.

1992. *Peucetia* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 435.

Type species : *Peucetia viridis* Blackwall.

Distribution : Cosmopolitan except Australia.

77. *Peucetia latikae* Tikader

1970. *Peucetia latikae* Tikader, *Rec. zool. Surv. India*, 64(1-4) : 80.

1992. *Peucetia latikae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 435.

Material examined : 1 ♀, Kachuberia, P.S. Sagar, 20.iii.1984, Coll. B.K. Biswas.

Diagnosis : Cephalothorax longer than wide, oval in shape, thoracic region provided with elongated fovea. Anterior row of eyes recurved; posterior row procurved. Maxillae, labium and chelicerae longer than wide. Sternum narrow and pointed posteriorly. Legs long and strong. Abdomen longer than wide, dorsum ornamented with number of grey markings.

Distribution : India : Sundarban area (Sagar, Dist. South 24 Parganas), Nadia, Hooghly, West Bengal.

4. Family SALTICIDAE Blackwall

Key to the genera of the family

SALTICIDAE Blackwall from Sundarban

1. Cephalothorax rectangular in shape not pointed behind; first leg not robust *Marpissa*
— Cephalothorax oval in shape pointed behind; first leg robust (2)
2. Chelicerae not robust, two times shorter as long as cephalothorax *Phidippus*
— Chelicerae robust nearly longer as long as cephalothorax (3)
3. Labium more longer than wide; sternum elongated pointed behind *Myrmarachne*
— Labium little longer than wide; sternum not much elongated, rounded behind *Plesippus*

Genus 20. *Marpissa* Koch

1846. *Marpissa* Koch, *Die Arachn.*, 13 : 56.

1981. *Marpissa* : Tikader & Biswas, *Rec. zool. Surv. India*, *Occ. Pap.* No. 30(1) : 93.

Type species : *Marpissa muscosa* Clerck.

Distribution : Cosmopolitan.

Key to the species of the genus *Marpissa***Koch from Sundarban**

1. Cephalothorax without fovea, anterior median eyes twice larger than the anterior laterals *calcuttaensis*
- Cephalothorax with fovea, anterior medians similar in structure to the anterior laterals ..
..... (2)
2. Maxillae and labium longer than wide, narrower anteriorly *dayapurensis*
- Labium and maxillae not longer than wide, wider anteriorly (3)
3. Dorsum of the abdomen provided with a mid-longitudinal whitish band *bengalensis*
- Dorsum of the abdomen not provided with a mid-longitudinal whitish band (4)
4. Tibia and metatarsi of I & II legs provided with three and two pairs of ventral spines ..
..... *decorata*
- Tibia and metatarsi of I & II legs not provided three and two pairs of ventral apines
..... (5)
5. Cephalothorax rectangular in shape, weakly narrowed posteriorly and wider anteriorly ..
..... *mondal*
- Cephalothorax not rectangular in shape, weakly narrowed anteriorly and wider posteriorly (6)
6. Chelicera long & narrow, inner and outer margin provided with three dissimilar teeth
..... *lakshmikantapurensis*
- Chelicerae robust, inner and outer margin not provided with three dissimilar teeth (7)
7. Sternum yellowish in colour, narrowed anteriorly *andamanensis*
- Sternum brownish in colour, wider anteriorly
..... *dhakuriensis*

78. *Marpissa calcuttaensis* Tikader

1974. *Marpissa calcuttaensis* Tikader, *Proc. Indian Acad. Sci.*, 79(5) : 210.
1992. *Marpissa calcuttaensis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 391.

Material examined : 1 ♀, 1 ♂, Harua Rly. Stn, P.S. Harua, 14.x.1993, Coll. S.C. Majumder, Reg. no. 868; 1 ♀, Jogeshgunge, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder, Reg. no. 869.

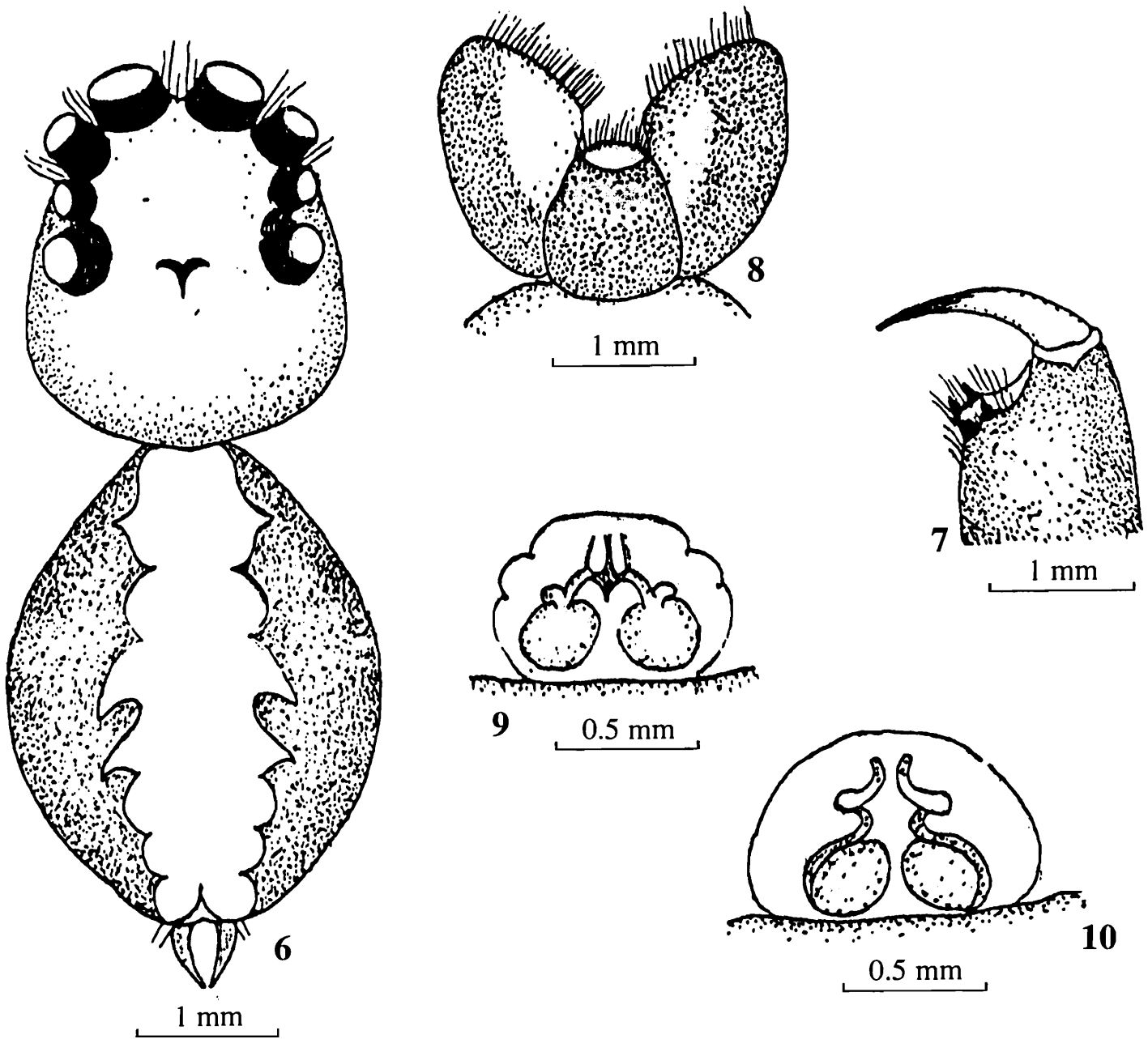
Distribution : India : Sundarban area (Harua, Hingalgunj, Dist. North 24 Parganas) (new record), Kolkata, Harua, West Bengal.

79. *Marpissa dayapurensis* sp. nov.

General : Cephalothorax and legs reddish brown, abdomen yellowish in colour. Total length 7.00 mm. Carapace 3.00 mm long and .50 mm wide, abdomen 4.00 mm long and 3.00 mm wide.

Cephalothorax : Longer than wide, oval in shape, clothed with fine pubescence. provided with distinct bifurcated fovea at the middle of the carapace. Eyes are nearly white, bases of which provided by black patches. Anterior row of eyes recurved, medians larger than the laterals. Second pair of eyes smaller than first and third pair. Posterior row of eyes are the same size to that anterior laterals (Fig. 6). Chelicerae longer than wide with curved fang yellowish in colour, inner and outer margin provided with two similar teeth (Fig. 7), Maxillae and labium longer than wide, scopulated anteriorly (Fig. 8). Labium whitish and narrowed anteriorly where as maxillae wider and whitish anterior. Sternum longer than wide, pointed posteriorly. Legs long and strong. Tibia and metatarsi provided with number of hair and spines. Legs formula (4 : 1 : 2 : 3. is).

Abdomen : Elongated, both ends are narrowed tapering at the middle, clothed with fine pubescence. Dorsum provided with mid-dorsal whitish longitudinal patches extends from the base of the spinnerets to the base of the cephalothorax.



Figs. 6-10. : Illustration of *Marpissa dayapurensis* sp. nov.

6. Dorsal view of female, legs omitted.
7. Chelicera showing arrangement of teeth.
8. Maxillae and labium ventral aspect.
9. Epigyne ventral aspect.
10. Internal genitalia, dorsal aspect.

Ventral side uniformly pale coloured. Epigyne as rounded plate with copulatory openings (Fig. 9). Internal genitalia provided with coiled and rounded spermathecae divisible into two parts (Fig. 10).

Holotype : Female in spirit, deposited at Zoological Survey of India, Kolkata. Reg. no. 5471/18.

Type locality : Holotype collected from Dayapur, P.S. Gosaba, Dist. South 24 Parganas, West Bengal, India. 13.iv.1993, Coll. S.C. Majumder.

Remarks : This species resembles to *Marpissa bengalensis* Tikader in general appearance but differs from that on the following particulars : 1. Maxillae and labium longer than wide and narrowed anteriorly where as in *M. bengalensis* maxillae and labium wider than long not narrowed anteriorly. 2. Cephalothorax oval in shape provided with prominent fovea at the middle where as in *M. bengalensis* cephalothorax globose in shape and provided with no fovea. 3. Epigyne and internal genitalia are also structurally different.

80. *Marpissa bengalensis* Tikader

1974. *Marpissa bengalensis* Tikader, *Proc. Indian Acad. Sci.*, 79(5) : 212.

1992. *Marpissa bengalensis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 391.

Material examined : 1 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 870; 1 ♀, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. D.B. Ranamagor; 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg no. 71; 1 ♀, Lakshmikantapur, P.S. Mandirbazar, 18.xi.1994, Coll. N.C. Banerjee, Reg no. 872; 1 ♀, Canning office compound, P.S. Canning, 22.vi.1993, Coll. D.B. Ranamagor, Reg no. 873; 1 ♀, Mithakhali, P.S. Canning, 22.vi.1993, Coll. D.B. Ranamagor; 1 ♀, Haroa Veri Anchal,

P.S. Haroa, 14.x.1993, Coll. S.C. Majumder, Reg no. 874; 3 ♀, Hasnabad Proper, P.S. Hasnabad, 15.x.1993, Coll. S.C. Majumder.

Distribution : India : Sundarban area (Gosaba, Mandirbazar, Patharpratima, Canning, Dist. South 24 Parganas, Haroa, Hasnabad, Dist. North 24 Parganas) (new record), Kolkata, West Bengal.

81. *Marpissa decorata* Tikader

1974. *Marpissa decorata* Tikader, *Proc. Indian Acad. Sci.*, 79(5) : 206.

1992. *Marpissa decorata* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 391.

Material examined : 1 ♀, Rangabelia, P.S. Gosaba, 11.iv.1993, Coll. S.C. Majumder, Reg. no. 875; 1 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg no. 76; 1 ♀, Dayapur, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder; 1 ♀, Jingsakhali, P.S. Hingalgunj, 9.iv.1993, Coll. S.C. Majumder, Reg no. 877.

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas, Hingalgunj, Dist. North 24 Parganas) (new record), Howrah, West Bengal.

82. *Marpissa mondali* Tikader

1974. *Marpissa mondali* Tikader, *Proc. Indian Acad. Sci.*, 79(5) : 213.

Material examined : 1 ♀, Dayapur, P.S. Gosaba, 13.iv.1993, Coll. S.C. Majumder, Reg. no. 878; 3 ♀, Rangabelia, P.S. Gosaba, 11.iv.1993, Coll. S.C. Majumder; 7 ♀, Rajatduli, P.S. Gosaba, 20.iii.1994, Coll. S.C. Majumder; 2 ♀, 2 ♂, Mithakhali, P.S. Canning, 22.vi.1993, Coll. D.B. Ranamagor, Reg no. 879; 3 ♀, 2 ♂, Hasnabad Proper, P.S. Hasnabad, 15.x.1993, Coll. S.C. Majumder, Reg no. 880.

Distribution : India : Sundarban area (Gosaba, Canning, Dist. South 24 Parganas, Hasnabad, Dist. North 24 Parganas) (new record), Kolkata, West Bengal.

83. *Marpissa lakshmikantapurensis* sp.nov.

General : Cephalothorax and legs yellowish brown, abdomen pale yellow in colour. Total length 6.00 mm. Carapace 2.50 mm long and 2.00 mm wide; abdomen 3.50 mm long and 2.60 mm wide.

Cephalothorax : Longer than wide, nearly oval in shape, weakly narrowed anteriorly and wider posteriorly, two white patches present just below the posterior eyes, covered with fine pubescence with no fovea. Eyes are pearly white, the anterior row recurved, median larger than the lateral and separated to each other. Second pair of eyes very minute, third pair slightly larger than the anterior lateral but smaller than the anterior median. All the eyes are encircled by black patches (Fig. 11). Chelicerae not so strong, longer than wide, inner and outer margin provided with three dissimilar teeth (Fig. 12). Maxilla longer than wide, inner side whitish and scopulated wider anteriorly but narrowed posteriorly; labium wider than long, whitish & scopulated anteriorly (Fig. 13). Sternum longer than wide. Legs not so strong enough. Legs formula is 2 : 3 : 4 : 1.

Abdomen longer than wide, oval in shape covered by hair. Internal genitalia with curved spermatheca narrowed anteriorly divisible into two parts (Fig. 15).

Holotype : Female in spirit, deposited at Zoological Survey of India, Kolkata, Reg no. 5470/18.

Type locality : Holotype collected from Lakshmikantapur, P.S. Mandirbazar, Dist. South 24 Parganas, West Bengal, India. 18.xi.1994, Coll. S. C. Majumder.

Remarks : This species resembles to *Marpissa mondali* Tikader in general appearance but differs from that on the following particulars : 1 Cephalothorax nearly oval in shape weakly narrowed anteriorly and wider posteriorly where as in *M. Mondali* cephalothorax rectangular in shape weakly narrowed posteriorly wider anteriorly. 2. Chelicerae not so strong, inner and

outer margin provided with three dissimilar teeth where as in *M. mondali* chelicerae strong enough. The inner and outer margin provided with one large tooth. 3. Epigyne and internal genitalia are also structurally different.

84. *Marpissa andamanensis* Tikader

1977. *Marpissa andamanensis* Tikader, *Rec. zool. Surv. India*, 72 : 199.

Material examined : 1♂, Kulpi proper, P.S. Kulpi, 20.xi.1994, Coll : S.C. Majumder, Reg no. 881.

Distribution : India : Sundarban area (Kulpi, Dist. South 24 Parganas), West Bengal.

85. *Marpissa dhakuriensis* Tikader

1974. *Marpissa dhakuriensis* Tikader, *Proc. Indian Acad. Sci.*, 79(5) : 207.

1992. *Marpissa dhakuriensis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 391.

Material examined : 1♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll : S.C. Majumder, Reg no. 882.

Distribution : India : Sundarban area (Patharpratima, Dist. South 24 Parganas) (new record), Kolkata, West Bengal.

Genus 21. *Phidippus* Koch

1846. *Phidippus* Koch, *Die. Arachn.*, 73 : 125.

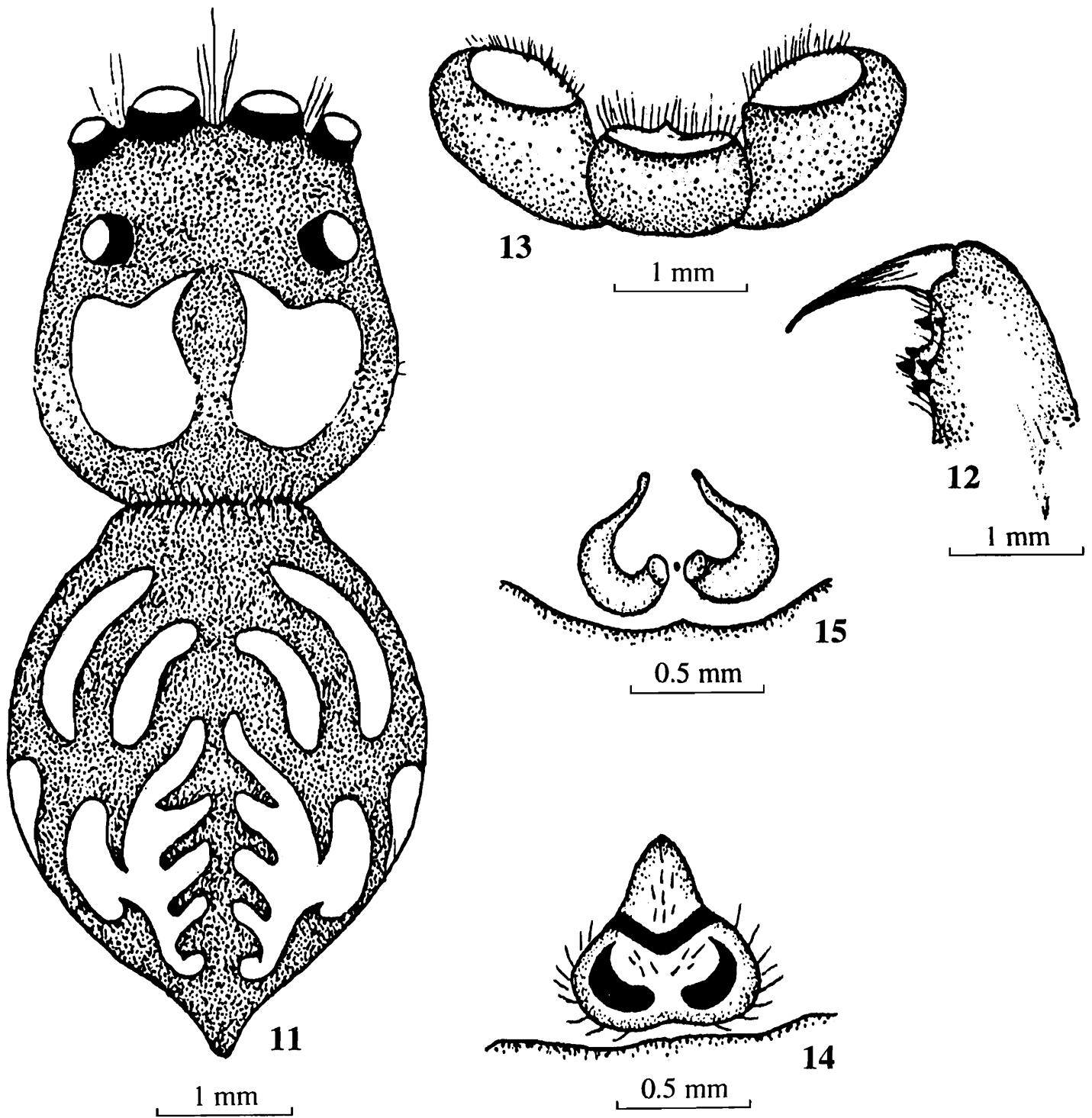
1980. *Phidippus* : Tikader & Biswas, *Rec. zool. surv. India*, *Occ. Pap. No.* 30(1) : 90.

Type species : *Phidippus variegatus* (Lucas).

Distribution : All tropical and sub-tropical countries of the world.

Key to the species of the genus *Phidippus* Koch from Sundarban

1. Cephalothorax slightly longer than wide, globose in shape, with no fovea
..... *bengalensis*
- Cephalothorax longer than wide, oval in shape, with distinct bifurcated fovea (2)



Figs. 11-15. : Illustration of *Marpissa lakshmikantapurensis* sp. nov.

- 11. Dorsal view of female, legs omitted.
- 12. Chelicera showing arrangement of teeth.
- 13. Maxillae and labium ventral aspect.
- 14. Epigyne ventral aspect.
- 15. Internal genitalia, dorsal aspect.

2. Chelicerae strong and broad, with curved fang, the outer margin provided with 2 small teeth and the inner margin with one large tooth *pateli*
 — Chelicerae not strong and broad, with slightly curved fang, the outer margin provided with two large teeth and the inner margin with two small teeth *indicus*

86. *Phidippus bengalensis* Tikader

1976. *Phidippus bengalensis* Tikader, *Entomon*, 2(1) : 97.
 1992. *Phidippus bengalensis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 395.

Material examined : 1 ♀, Daspara, P.S. Kakdwip, 27.xi.1994, Coll : S.C. Majumder, Reg no. 883.

Distribution : India : Sundarban area (Kakdwip, Dist. South 24 Parganas) (new record), Kolkata, Howrah, Midnapur, Nadia, West Bengal, Maharashtra; Karnataka; Punjab.

87. *Phidippus pateli* Tikader

1974. *Phidippus pateli* Tikader, *Proc. Indian Acad. Sci.*, 79(3) : 124.
 1992. *Phidippus pateli* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 396.

Material examined : 1 ♀, Rangabelia, P.S. Gosaba, 11.iv.1993, Coll : S.C. Majumder; 1 ♀, Gosaba, 26.iii.1984, Coll : B.K. Biswas.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas), Koochbihar, Maldah, Jalpaiguri, Midnapur, Murshidabad, Nadia, West Bengal; Gujarat; Maharashtra.

88. *Phidippus indicus* Tikader

1974. *Phidippus indicus* Tikader, *Proc. Indian Acad. Sci.*, 79(3) : 122.
 1992. *Phidippus indicus* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 396.

Material examined : 1 ♂, 3 ♀, Kulphi Bazar, P.S. Kulpi, 20.xi.1994; 1 ♀, Patharpratima, 16.v.1993, Coll : S.C. Majumder (Both).

Distribution : India : Sundarban area (Sagar Island, Kulpi, Patharpratima, Dist. South 24 Parganas), Hooghly, Howrah, Jalpaiguri, Maldah, Murshidabad, Nadia, West Dinajpur, West Bengal, Gujarat.

Genus 22. *Myrmarachne* Mac Leay

1839. *Myrmarachne* Mac Leay, *Ann. Mag. Nat. Hist.*, 2 : 10.
 1992. *Myrmarachne* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 393.

Type species : *Myrmarachne melanocephalus* Mac Leay.

Distribution : Oriental and sub-tropical regions of the world.

89. *Myrmarachne orientalis* Tikader

1973. *Myrmarachne orientalis* Tikader, *Proc. Indian Acad. Sci.*, 78(2) : 60.
 1992. *Myrmarachne orientalis* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 394.

Material examined : 1 ♀, Basanti, 21.ix.1995, Coll : S.C. Majumder.

Diagnosis : Cephalothorax longer than wide, with a nearly complete transverse construction. Anterior row of eyes recurved, posterior row of eyes straight. Chelicerae long, glander with 4 teeth on outer margin. Maxillae & labium longer than wide. Abdomen elongated distinctly constricted, pedical prominent and long.

Distribution : India : Sundarban area (Basanti, Dist. South 24 Parganas), Darjeeling, Howrah, Maldah, Midnapur, West Dinajpur, West Bengal.

Genus 23. *Plexippus* Koch

1846. *Plexippus* Koch, *Die Arachn.*, 13 : 107.
 1967. *Plexippus* : Tikader, *Proc. Indian Acad. Sci.*, 66(4) : 118.

Type species : *Plexippus paykullii* (Aud.).

Distribution : Cosmopolitan.

90. *Plexippus paykullii* (Audouin)

1825. *Attus paykullii* Audouin, *Descr, Egypte 2nd Ed.*, **22** : 172.
1992. *Plexippus paykullii* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series No. 3* : 397.

Material examined : 1 ♀, Namkhana Bazar, P.S. Namkhana, 24.xi.1994, Coll : S.C. Majumder; 1 ♀, 1 ♂, Kumirmari, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder.

Diagnosis : Cephalothorax longer than wide, cephalic region flat, covered with fine pubescence. Eyes pearly white, anterior row of eyes recurved, median very large, middle row of eyes very rudimentary, posterior row of eyes median size. Chelicerae longer than wide. Maxillae & labium longer than wide. Abdomen longer than wide narrowing posteriorly. Dorsum provided with a longitudinal light patch extending from base to the end of the abdomen.

Distribution : India : Sundarban area (Namkhana, Gosaba, Dist. South 24 Parganas), Kolkata, Bardhaman, Howrah, Jalpaiguri, Maldah, Midnapur, West Bengal.

Elsewhere : Africa, Europe, Sri Lanka, Myanmar and in all of the warmer regions of the world.

5. Family CLUBIONIDAE Wagner

Key to the genera of the family

CLUBIONIDAE Wagner from Sundarban

1. Cephalothorax with distinct fovea, anterior legs shorter than posterior legs; lateral eyes both anterior and posterior not close to each other *Clubiona*
— Cephalothorax with indistinct fovea, anterior leg longer than posterior legs; lateral eyes both anterior and posterior close to each other (2)
2. Apical segment of the hind spinnerets is distinct, very long and conical *Cheiracanthium*
— Apical segment of the hind spinnerets is indistinct, very short and subspherical *Castianeira*

Genus 24. *Clubiona* Latreille

1804. *Clubiona* Latreille, *Nouv. Dic. hist. nat.*, **24** : 154.
1991. *Clubiona* : Tikader & Majumder, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 19.

Type species : *Clubiona pallidulla* (Clerck).

Distribution : All tropical parts of the world.

91. *Clubiona filicata* Cambridge

1874. *Clubionafilicata* Cambridge, *Proc. Zool. Soc. London.* : 413.
1991. *Clubiona filicata* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 23.

Material examined : 1 ♀, Rangabelia, P.S. Gosaba, 17.iv.1993, Coll : S.C. Majumder, Reg no. 884.

Diagnosis : Cephalothorax longer than wide with prominent fovea at the middle of the carapace. Anterior row of eyes recurved, posterior medians widely separated. Ocular quadrate wider than long. Labium and maxillae longer than wide. Abdomen longer than wide, pointed behind. Dorsum provided with few deep brown dots.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas), West Bengal; Maharashtra; Rajasthan; Madhya Pradesh.

Genus 25. *Cheiracanthium* Koch

1839. *Cheiracanthium* Koch, C.L., *Die. Arach. Sochster Bond.* : 9.
1991. *Cheiracanthium* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 53.

Type species : *Cheiracanthium punctorium* Villers.

Distribution : All tropical parts of the world.

Key to the Species of the genus
Cheiracanthium Koch from Sundarban

1. Genital bulb or male palpus broad anteriorly, membranes of the palpal organ well developed *trivialis*
— Genital bulb or male palpus usually narrowed anteriorly, membranes of the palpal organ not well developed (2)

2. Retrolateral apophysis of the tibia of male palpal organ generally short and not slender slightly sinuous at its tip *melanostoma*

— Retrolateral apophysis of the tibia of male palpal organ generally long and slender, strongly sinuous at its base (3)

3. Tarsi comparatively longer and less scopulated; maxillary lobe angulated distinctly at its outer side *himalayensis*

— Tarsi comparatively shorter and more scopulated; maxillary lobe angulated distinctly at its inward side *mysorensis*

92. *Cheiracanthium trivialis* (Thorell)

1895. *Eutitha trivialis* Thorell, *Spider Fauna of Myanmar*, : 40.

1991. *Cheiracanthium trivialis* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 56.

Material examined : 1 ♀, Thilla, Sundarban, 6.ix.1983, Coll : A.K. Hazra.

Distribution : India : Sundarban area (Thilla, P.S. Gosaba, Dist. South 24 Parganas), Kolkata, Howrah, Nadia, West Bengal; Tamil Nadu; Madhya Pradesh; Maharashtra.

Elsewhere : Myanmar.

93. *Cheiracanthium melanostoma* Thorell

1895. *Cheiracanthium melanostoma* Thorell, *Spider Fauna of Myanmar*, : 44.

1991. *Cheiracanthium melanostoma* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 62.

Material examined : 1 ♀, Luxbagan, P.S. Gosaba, 19.iii.1994, Coll : S.C. Majumder, Reg no. 885.

Distribution : India : Sundarban area (Gosaba, Canning, Dist. South 24 Parganas), Darjeeling, Murshidabad, Midnapur, West Bengal; Orissa; Bihar; Rajasthan; Goa; Maharashtra; Gujarat; Mysore; Karnataka; Andaman & Nicobar Island.

Elsewhere : Myanmar, Bhutan.

94. *Cheiracanthium himalayensis* Gravely

1931. *Cheiracanthium himalayensis* Gravely, *Rec. Indian Mus.*, **33**(3) : 264.

1991. *Cheiracanthium himalayensis* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 65.

Material examined : 1 ♀, Khulna, P.S. Hingalgunj, 23.ii.1995, Coll : S.C. Majumder, Reg no. 885.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas), Darjeeling, West Bengal; Meghalaya; Gujarat; Maharashtra.

95. *Cheiracanthium mysorensis* Majumder & Tikader

1991. *Cheiracanthium mysorensis* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 79.

Material examined : 1 ♀, Bagna band, Sundarban, 12.ix.1983, Coll : A.K. Hazra.

Distribution : India : Sundarban area (Bagna band, P.S. Gosaba, Dist. South 24 Parganas), West Bengal; Gujarat; Karnataka; Mysore; Madhya Pradesh.

Genus 26. *Castianeira* Keyserling

1879. *Castianeira* Keyserling, *Verh. Zool. Bot. Ges. Win.*, **29** : 334.

1991. *Castianeira* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 130.

Type species : *Castianeira rubicunda* Keyserling.

Distribution : India; Africa; Malayasia; America; Canada.

96. *Castianeira tinae* Patel & Patel

1974. *Castianeira tinae* Patel & Patel, *Proc. Indian Acad. Sci.*, **78**(1) : 6.

1991. *Castianeira tinae* : Majumder & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 102* : 140.

Material examined : 2 ♀, Haroa Bazar, P.S. Haroa, 14.x.1993, Coll : S.C. Majumder, Reg no. 887.

Diagnosis : Cephalothorax longer than wide clothed with fine pubescence, provided with median fovea. Eyes in two rows. Anterior row slightly recurved. Ocular quadrate wider than long. Maxillae & labium wider than long. Chelicerae provided with 2 teeth on the inner & outer margin. Abdomen longer than wide, broader posteriorly.

Dorsum provided with dorsal scutum and three white coloured transparent bands.

Distribution : India : Sundarban area (Haroa, Dist. North 24 Parganas) (new record) West Bengal; Gujarat.

Family 6. HERSILIDAE Thorell

Genus 27. *Hersilia* Audouin

1826. *Hersilia* Audouin, *Deror. Egypta. Arachn.*, : 114.

1977. *Hersilia* : Tikader, *Rec. zool. Surv. India*, 72(4) : 184.

Type species : *Hersilia caudata* Audouin.

Diagnosis : Ocular quadrangle parallel sided; head flat, angular laterally; clypeus usually very high and prominent. Protersi of I & II legs are bi-segmented.

Distribution : Africa, Madagascar, Oriental region.

97. *Hersilia savignyi* Lucus

1806. *Hersilia savignyi* Lucus, *Mag. zool.*, 8 : 10.

1992. *Hersilia savignyi* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 381.

Material examined : 1 ♂, Barunhat, P.S. Hasnabad, 13.x.1993, Coll : S.C. Majumder, Reg no. 888. 1 ♂, Hasnabad Proper, P.S. Hasnabad. 15.x.1993, Coll : S.C. Majumder, Reg no. 889.

Diagnosis : Cephalothorax longer than wide nearly rounded anteriorly narrowing nearly pointed, colour varing from pale to nearly black on the upper side. Eyes white dissimilar, anterior row recurved, posterior row straight. Maxillae longer than wide; Labium wider than long. Legs very long. Abdomen broad apple shaped, pesteriorly narrowed. Dorsum decorated.

Distribution : India : Sundarban area (Hasnabad, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas), Kolkata, Hooghly, Jalpaiguri, Maldah, Midnapur, Murshidabad, Nadia, West Dinajpur, West Bengal; Assam; Maharashtra; Tamil Nadu; Uttar Pradesh.

Elsewhere : Myanmar, Sri Lanka.

Family 7. ULOBORIDAE Latrielle

Genus 28. *Uloborus* Latreille

1806. *Uloborus* Latreille, *Gen. Crust. Ins. etc.*, 1 : 109.

Type species : *Uloborus walckenaerius* Latreille.

Diagnosis : Anal tubercle promment in the femal, diminished in male, legs I pair much longer and stronger than the rest. Male tibia of I provided with six to seven dorsel spines almost in the form of teeth.

Distribution : Cosmopolitan except Australlia.

98. *Uloborus danolius* Tikader

1969. *Uloborus danolius* Tikader, *Proc. Indian Acad. Sci.*, 70 : 128.

1992. *Uloborus* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 379.

Material examined : 1 ♀, Gosaba, Dist. South 24 Parganas, 13.iv.1993, Coll : S.C. Majumder.

Diagnosis : Cephalothorax longer than wide, greenish brown. Anterior row of eyes recurved, legs I & IV longer than II & III. Abdomen darty white, longer than wide.

Distribution : India : Sundarban area (Gosaba, Dist. South 24 Parganas), Kolkata, Maldah, Midnapur, North 24 Parganas, West Bengal; Maharashtra.

Family 8. ERESIDAE Simon

Genus 29. *Stegodyphus* Simon

1873. *Stegodyphus* Simon, *Ann. Soc. Ent. Fr.*, 3(5) : 336.

1981. *Stegodyphus* : Tikader & Biswas, *Rec. zool. Surv. India, Occ. Pap.* No. 30(1) : 14.

Diagnosis : Cephalic region large, rounded high. Posterior lateral eyes remote from other eyes, anterior lateral eyes situated at the edge of clypeus. Legs strong and stout. Abdomen oval, anterior spinnerets thick.

Remarks : The spiders of this geus occur on bushes or branches of trees, they spin either large

sheet-like webs, accompanied by a tubular retreat or a large saccular nest in which many individual live.

Type species : *Stegodyphus lineatus* Latrille.

Distribution : India, Asia, Africa, Arabia.

99. *Stegodyphus sarasinorum* Karsch

1892. *Stegodyphus sarasinorum* Karsch, *Ent. Z. Berlin*, **36** : 275.

1992. *Stegodyphus sarasinorum* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. **3** : 378.

Material examined : 1 ♂, Sagar Island, P.S. Sagar, 1.i.1996, Coll : S.C. Majumder.

Diagnosis : This spider gregarious in its habit. It spins a labyrinthine tube which ends blindly one end and the other end expands into a broad sheet. This species does not sting the prey to death, but feeds on the captive alive, all members of the colony showing the same victim.

Distribution : India : Sundarban area (Kachuberia, P.S. Sagar, Dist. South 24 Parganas), Kolkata, Burdwan, Maldah, Midnapur, West Bengal; Orissa; Punjab; Maharashtra; Tamil Nadu.

Family 9. GNAPHOSIDAE Pocock

Key to the genera of the family GNAPHOSIDAE from Sundarban

1. Eyes of the posterior row larger and procurved, nearly equal size and equidistance from each other *Scopodes*
- Eyes of the posterior row smaller and recurved, unequal size and not in equidistance from each other *Poecilochora*

Genus 30. *Scopodes* Chamberlin

1922. *Scopodes* Chamberlin, *Proc. Biol. Soc. Wash.*, **35** : 156.

1992. *Scopodes* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. **3** : 431.

Type species : *Scopodes catharius* Chamberlin.

Distribution : India, North America.

100. *Scopodes kuljitae* Tikader

1882. *Scopodes kuljitae* Tikader, *Fauna of India*, Spiders : Araneae, **2(2)** : 367.

1992. *Scopodes kuljitae* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. **3** : 431.

Material examined : 1 ♀, Gangasagar, 1.i.1996, Coll : S.C. Majumder.

Diagnosis : Cephalothorax longer than wide, much narrower in front provided with distinct fovea. Anterior and posterior row procurved. Chelicerae longer than wide, outer and inner margin provided with one tooth. Abdomen longer than wide clothed with fine hair. Dorsum provided with a deep brown mid-dorsal 'V' shaped patch.

Distribution : India : Sundarban area (Sagar Island, Dist. South 24 Parganas), West Bengal; Maharashtra; Karnataka.

Genus 31. *Poecilochora* Westring

1874. *Poecilochora* Westring, *Göteborgs, K. Vetensk.-o. Vitterh. Samh. Handl.*, **14** : 45.

1982. *Poecilochora* : Tikader, *Fauna of India*, Spiders : Araneae **2(2)** : 451.

Type species : *Poecilochora variana* (Koch C. L.)

Distribution : Cosmopolitan except Australia.

101. *Poecilochora barmani* Tikader

1982. *Poecilochora barmani* Tikader, *Fauna of India*, Spiders : Araneae, **2(2)** : 451.

1992. *Poecilochora barmani* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. **3** : 451.

Material examined : 1 ♀, Sagar Island, Dist. South 24 Parganas 1.i.1996, Coll. S.C. Majumder.

Diagnosis : Cephalothorax longer than wide narrow in front provided with inconspicuous short fovea. Anterior and posterior row recurved. Chelicerae moderately strong, sternum oval in shape pointed behind. Abdomen longer than wide, elliptical in shape. Dorsum provided with whitish transverse band.

Distribution : India : Sundarban area (Sagar Island, Bakkhali, P.S. Kakdwip, Dist. South 24 Parganas), West Bengal, Meghalaya.

Family 10. THOMISIDAE Sundevall

Genus 32. *Camaricus* Thorell

1887. *Camaricus* Thorell, *Ann. Mus. Civ. Stor. nat. Gen.*, 5(2) : 261.

1980. *Camaricus* : Tikader, *Fauna of India*, Spiders : Araneae, 1(2) : 174.

Diagnosis : Cephalothorax wider in front, sides nearly parallel, clothed with fine pubescence. Both the rows of eyes recurved. Abdomen ovoid or globose.

Type species : *Camaricus maugei* (Walck.)

Distribution : Asia, Africa.

102. *Camaricus formosus* Thorell

1887. *Camaricus formosus* Thorell, *Ann. Mus. Civ. Gen.*, : 261.

1992. *Camaricus formosus* : Biswas & Biswas, *Fauna of West Bengal*, Part III, Araneae : Spiders, *State Fauna Series* No. 3 : 404.

Material examined : 2 ♀, Bhagabatpur, P.S. Patharpratima, 16.iv.1993, Coll. S.C. Majumder, Reg. No. 890; 8 ♀, Chhotomollakhali, P.S. Gosaba, 10.iv.1993, Coll. S.C. Majumder, Reg. No. 891.

Diagnosis : Cephalothorax longer than wide provided with deep brown patches at the centre but in male specimen no such patches are present. Posterior row of eyes situated adjacent to the lateral eyes. Legs are robust, clothed with hair and spines, ornamented with black patches. Tibia and metatarsi of I and II provided with three pairs of ventral spines. Chelicerae moderate, sternum shaped. Abdomen longer than wide, widest behind the middle, clothed with black hair

Distribution : India : Sundarban area (Gosaba, Patharpratima, Dist. South 24 Parganas), North 24 Parganas, Kolkata, Jalpaiguri, Nadia, West Bengal; Karnataka; Maharashtra; Andaman & Nicobar Island.

Family 11. HETEROPODIDAE Thorell

Key to the genera of the family HETEROPODIDAE from Sundarban

1. Maxillae provided with distinct median longitudinal crest *Spariolenus*
- Maxillae not provided with distinct median longitudinal crest *Heteropoda*

Genus 33. *Spariolenus* Simon

1880. *Spariolenus* Simon, *Act. Soc. Linn. Bord.*, 34 : 227.

1988. *Spariolenus* : Sethi & Tikader, *Rec. zool. Surv. India*, *Occ. Pap.* No. 93 : 6.

Type species : *Spariolenus tigris* Simon.

Distribution : India, Sri Lanka, Malacca.

Key to the species of the genus *Spariolenus* Simon from Sundarban

1. Carapace slightly wider than long, epigyne simple and less sclerotised *petricole*
- Carapace slightly longer than wide, epigyne complicated and highly sclerotised *tigris*

103. *Spariolenus petricola* Gravely

1931. *Spariolenus petricola* Gravely, *Rec. Indian Mus.*, 33(3) : 250.

1988. *Spariolenus petricola* : Sethi & Tikader, *Rec. zool. Surv. India*, *Occ. Pap.* No. 93 : 7.

Material examined : 2 ♀, Haroa Bazar, P.S. Haroa, 14.x.1993, Coll. S.C. Majumder, Reg. no. 892.

Distribution : India : Sundarban area (Haroa, Dist. North 24 Parganas) (new record), West Bengal; Goa; Orissa; Madhya Pradesh.

104. *Spariolenus tigris* Simon

1980. *Spariolenus tigris* Simon, *Act. Soc. Linn. Bord.*, 34 : 281.

1988. *Spariolenus tigris* : Sethi & Tikader, *Rec. zool. Surv. India*, *Occ. Pap.* No. 93 : 7.

Material examined : 3 ♀, Haroa Bazar, P.S. Haroa, 14.x.1993, Coll. S.C. Majumder, Reg. no. 893.

Distribution : India : Sundarban area (Haroa, Dist. North 24 Parganas) (new record), Kolkata, Baharampur, Sreerampur, West Bengal; Punjab; Bihar; Maharashtra.

Elsewhere : Pakistan.

Genus 34. *Heteropoda* Latreille

1804. *Heteropoda* Latreille, *N. Dic. hist. nat.*, **24** : 135.

1988. *Heteropoda* : Sethi & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 93* : 9.

Type species : *Heteropoda venatoria* (Linn.).

Distribution : India; Australlia; China; Japan; USA; Sri Lanka; Sumatra; Java.

Key to the species of the genus *Heteropoda* Latreille from Sundarban areas

1. Epigynum provided with a horizontal plate, lateral lobes are in contact throughout their length, spermathecae not convuluted
..... *sikkimensis*
- Epigynum provided with rounded plate, lateral lobes are not in contact throughout their length. Spemathecae convuluted
..... *venatoria*

105. *Heteropoda sikkimensis* Gravely

1931. *Heteropoda sikkimensis* gravely, *Rec. Indian Mus.*, **33**(3) : 255.

1988. *Heteropoda sikkimensis* : Sethi & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 93* : 27.

Material examined : 2♀, Barunhat, P.S. Hasnabad, 13.x.1993, Coll. S.C. Majumder, Reg no. 894; 3♀, Kashinagar, P.S. Patharpratima, 17.iv.1993, Coll. S.C. Majumder, Reg. no. 895.

Distribution : India : Sundarban area (Hasnabad, Dist. North 24 Parganas; Patharpratima, Dist. South 24 Parganas) (new record), Darjeeling, West Bengal, Sikkim; Meghalaya.

106. *Heteropoda venatoria* (Linnaeus)

1766. *Heteropoda venatoria* Linnaeus, *Syst. Nat.*, **12** : 1035.

1988. *Heteropoda venatoria* : Sethi & Tikader, *Rec. zool. Surv. India, Occ. Pap. No. 93* : 16.

Material examined : 3♀, Barunhat, P.S. Hasnabad, 13.x.1996, Coll. S.C. Majumder, Reg. no. 896.

Distribution : India : Sundarban area (Hasnabad, Dist. North 24 Parganas) (new record), Kolkata, Darjeeling, West Bengal; Tamil Nadu; Bihar.

Family 12. TETRAGNATHIDAE Menge

Genus 35. *Tetragnatha* Latreille

1804. *Tetragnatha* Latreille, *Neuv. Diet. d'Hist. Nat.*, **24** : 135.

1977. *Tetragnatha* : Tikader, *Rec. zool. Surv. India*, **72** : 175.

Diagnosis : Body sub-cylindrical and elongated. Cephalothorax longer than wide apically narrowed. Eyes in two rows, lateral eyes nearly contiguous. Chelicerae very long. Abdomen long and narrow.

Type species : *Tetragnatha extensa* Linn.

Distribution : Europe, America, Australlia, Asia.

107. *Tetragnatha andamanensis* Tikader

1977. *Tetragnatha andamanensis* Tikader, *Rec. zool. Surv. India*, **72** : 175.

1992. *Tetragnatha andamenensis* : Biswas & Biswas, *Fauna of West Bengal, part III, Araneae : Spiders, State Fauna Series No. 3* : 448.

Material examined : 2♂, Satjelia, P.S. Gosaba, 19.iii.1994, Coll. S.C. Majumder, Reg no. 897; 3♂, Jogeshgunge, P.S. Hingalgunj, 18.iii.1994, Coll. S.C. Majumder, Reg. no. 898.

Diagnosis : Cephalothorax longer than wide anteriorly narrowed provided with distinct median furrow. Eyes black anterior row recurved, lateral eyes closely placed. Chelicerae as long as cephalothorax provided with ten teeth both inner and outer margin. Labium and maxillae longer than wide. Abdomen more elongated, dorsum decorated with minute silver white dots.

Distribution : India : Sundarban area (Hingalgunj, Dist. North 24 Parganas; Gosaba, Dist. South 24 Parganas), Bankura, Birbhum Burdwan, Kochbihar, Jalpaiguri, Maldah, Midnapur, Murshidabad, Purulia, West Bengal, Andaman Island.

Family 13. THERIDIIDAE Sundevall

Genus 36. *Theridion* Walckenaer

1805. *Theridion* Walckenaer, *Table. Aranides*, : 72.

1977. *Theridion* : Tikader, *Rec. zool. Surv. India*, 72 : 168.

Diagnosis : Cephalothorax nearly oval, flat. Anterior eyes equal, lateral eyes contiguous. Chelicerae weak; sternum rounded. Abdomen oval, globular in female specimen.

Type species : *Theridion lunatum* Clerck.

Distribution : America, Africa, Asia, Australia and Europe.

108. *Theridion indica* Tikader

1977. *Theridion indica* Tikader, *Rec. zool. Surv. India*, 72 : 168.

1992. *Theridion indica* : Biswas & Biswas, *Fauna of West Bengal*, part III, Araneae : Spiders, *State Fauna Series* No. 3 : 437.

Material examined : 2 ♀, Basanti Bazar, P.S. Basanti. 21.ix.1995, Coll. S.C. Majumder, Reg no. 899; 1 ♀, Ghushighata, P.S. Bhangar. 23.ix.1995. Coll. S.C. Majumder, Reg no. 900.

Diagnosis : Cephalothorax slightly longer than wide. Anterior eyes equal lateral eyes contiguous. Legs stout and strong. Tarsi IV provided with distinct comb like setae. Abdomen globular in shape. Dorsum beautifully coloured with a mixture of chalk white and brownish green patches.

Distribution : India : Sundarban area (Bhangar, Basanti, Dist. South 24 Parganas) (new record), North 24 Parganas, West Bengal; Andaman & Nicobar Island.

SUMMARY

The present paper deals with 108 species in 36 genera under 13 families, viz. Araneidae, Clubionidae, Erisidae, Gnaphosidae, Hersilidae, Heteropodidae, Lycosidae, Oxyopidae, Salticidae, Tetragnathidae, Theridiidae, Thomisidae and Uloboridae. Among these 3 species in 2 genera namely *Oxyoes reddyi* sp. nov. Family : Oxyopidae, *Marpissa dayapurensis* sp. nov. and *M. lakshmikantapurensis* sp. nov. the Family; Salticidae have been recorded here as new to science and 70 species in 23 genera under 7 families are recorded here for the first time from the Sundarban areas.

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