



1. Name : Dr. Manu Thomas Mathai
2. Designation : Associate Professor & Head
3. Specialization : Biodiversity, Entomology, Animal Behaviour
4. Educational Qualification : M.Sc., M.Phil., Ph.D., FSACO, FIDS.
5. Awards/Distinctions :

Honors

1. A new spider is named as *Hyllus manu* collected from MCC campus.
2. Elected of Fellow, South Asian Council of Odonatology (FSACO)
3. Elected Fellow, Indian Dragonfly Society (FIDS)

Fellowship:

1. United Nations University Fellowship for Biodiversity, Ghent University, Belgium, 2000
2. Indian National Science Academy Visiting Fellowship, New Delhi, 1996

Awards

1. **Best Basketball Player Award**, Madras Christian College, 1986.
2. “**Outstanding Odonatologist of India**” Award for continuous research contribution in the field of Odonatology (study of dragonflies). 8th Indian Symposium of Odonatology and Tropical Biodiversity, Hislop College, Nagpur, 2014.
3. **Prof. Dr. B. Kaiuta Lifetime Achievement Award** from Indian Dragonfly Society for doing research in dragonflies for more than three decades. DehraDun, 21-23rd March, 2018

Scientific Contributions:

Spider

- **Species new to the world -11**
Poecilochroa tridotus, Zelotes tambaramensis, Hyllus manu, Deinopsis scrubjunglei, Chryssilla jesudasi, Stenaelurillus metallicus, Harmochirus exaggeratus, Phanuelus

gladstone, Langona albolinea, Phlegra davidi, Phlegra prasanna

- **New Genus -1**

Phanuelus

- **Species newly recorded from India – 1**

Phintella volupe

- **Reports – 2**

Aetius decollates (after 81 years) & *Araneus viridisomus* (93 years) from India.

(Along with Mr. John Caleb, Research Scholar)

Dragonflies:

- **28** species of libellulids belonging to **17** genera were recorded from Mizoram. **10** species belonging to **8** genera were new records. This is the first scientific research on the molecular systematic and phylogenetic studies of libellulids in Mizoram. (Along with Ms.Laltanpuui, Research Scholar)

Otter

- First time tracking of Asian Small Clawed Otter (*Aonyx cinerea*) in river Moyar, Nilgris. (Along with Mr. Narasimharajan Research Scholar)

6. Positions Held in MCC & Other Bodies :

a) Madras Christian College:

1. Chairman, Board of Examiners, Department of Zoology, 2018-20
2. Member, Academic Council, Madras Christian College, Tambaram, 2003-2005, 2018-20
3. Vice-President, College Union Society, Madras Christian College, 2013-2015
4. Convener, Programmes Committee, Madras Christian College, 2013-2015.
5. Convener, Election Commission, College Union Election, 2013- 2015.
6. Member, College Calendar Committee, Madras Christian College, 2013-2015.
7. Member, Cafeteria Committee, Madras Christian College, 2013-2015.
8. Curator, Madras Christian College, 2012-15
9. President, Scrub Society, Madras Christian College, 2007- 2009.
10. Estate Co-ordinator, Madras Christian College, 2002 -2009.
11. Treasurer, Campus Ministries, Madras Christian College, 1999-2007.
12. Governing Board Member, Campus Matriculation School Committee, 1999-2001, 2003-2005.
13. Member, Farm Committee, Madras Christian College, 2001-2003.
14. Vice President, Zoological Society, Madras Christian College, 2001-2003.
15. Member, Sports Committee, Madras Christian College, 1994-2003, 2011-2013
16. Programme Officer, National Service Scheme, Madras Christian College, 1998-2001.
17. Staff -in-charge, Basket Ball Team, Madras Christian College, 1989-1996.
18. President, Blood Donor's Club, NSS, Madras Christian College, 2000- 2001.
19. Member, Anti-Ragging Committee, Madras Christian College, 1989-93, 1999-2003.
20. Co-ordinator, Central Mess Committee, Madras Christian College, 1989-90, 1993-94, 1998-2000.

21. Member, Programme Committee, Madras Christian College, 1997-99.
22. Additional Security Officer, Madras Christian College, 1995-96.
23. Secretary, Staff Study Circle, Madras Christian College, 1994-96.
24. Student Chairman, Zoological Society, Madras Christian College, 1985-86.

b) *Membership in Board/Association:*

1. Member, Board of Directors, Mar Thoma Theological Seminary, Kottayam, 2017-2020
2. Member, Board of Association, Lady Doak College, Madurai, Tamil Nadu, 2005 to till date.
3. Member, Senatus, Madras Christian College, Tambaram, 2013-2015.
4. Member, Board of Management, Kendriya Vidhyalaya No. 2, Tambaram, 2012-2015.
5. Member, Board of Directors, Mar Thoma College for Management and Technology, Perumbavoor, Kerala, 2006 -2013
6. Member, Board of Directors, Hoskote Medical Center & Nursing College, Hoskote, 2009-2012.
7. Member, Board of Directors, Mar Thoma English Medium School, Honovar, 2009-2012.
8. Member, Board of Directors, Mar Thoma Evangelistic Educational Society, Kerala 2006-2012
9. Vice Chairman, Board of Directors, Christian Counseling Centre, Vellore, Tamil Nadu 2005-2008
10. Vice President, Association, Christian Counseling Centre, Vellore, Tamil Nadu, 2006- 2008

c) *Membership in Scientific/Academic Bodies:*

1. Member, Board of Studies in Zoology(PG), University of Madras, 2017-2020
2. Vice President, South Asian Council of Odonatology affiliated to International Odonatological Society, Netherlands, 2008 to till date
3. Executive Council Member, South Asian Council of Odonatology affiliated to International Odonatological Society, Netherlands, 1986-2008.
4. Member, Board of Studies in Zoology for B.Sc., M.Sc., M.Phil., Madras Christian College, Tambaram.
5. Member, Board of Examiners, B.Sc., M.Sc., M.Phil. in Zoology, Madras Christian College, Tambaram.
6. Member, Doctoral Committee, Department of Zoology, Madras Christian College, Tambaram.

d) *Editorial Board - Scientific Journal*

1. **FRASERIA** – Editorial Board, South Asian Bulletin of Odonatology.
2. Member, Review Panel (Zoology) “**Hislopa Journal**” Hislop College, Nagpur.

e) *Malankara Mar Thoma Syrian Church*

1. Member, Episcopal Nomination Board (Bishop Nomination) Malankara Mar Thoma Syrian Church. 2016-17
2. Member, Mar Thoma Sabha Council (Executive Committee), 2011- 2014
3. Member, Mar Thoma Vaidika (Priest) Selection Committee, 2011-2014:2017-2020
4. Member, Ecumenical Relations Committee Mar Thoma Sabha, 2008-2014, 2014-2017.
5. Member, Executive Committee Mar Thoma Evangelistic Association, Kerala 2006-2012.
6. President, Mar Thoma Students' Conference, 101st Session, 2011.

f) Social Organizations

1. President, Lions Club International, Madras Metropolitan South, 2003-2004.
2. I Vice-President, Lions Club, Madras Metropolitan South, 2000-2003.
3. II Vice-President, Lions Club, Madras Metropolitan South, 1999-2000.
4. III Vice-President, Lions Club, Madras Metropolitan South, 1998-99.
5. Treasurer, Lions Club, Madras Metropolitan South, 1997-98.
6. Life Member, YMCA, Kuriannoor.

g) Sports, Games &NSS :

1. Programme Officer, National Service Scheme, Madras Christian College, 1998-2001.
2. Staff-In- charge, Madras Christian College Basketball Team, 1989-95.
3. Member, Madras Christian College Basketball Team, 1984-86.
4. Captain, Mar Thoma College Basketball Team, 1982-83.
5. Member, Kollam District Junior Basketball Team, 1978-80.
6. Member, Pathanamthitta District Senior, Junior Basketball Team, 1980-83.
7. Member, Kerala State Junior Basketball Coaching Camp, 1983
8. Member, Mar Thoma College Basketball, Athletic Team, 1978-83.
9. Volunteer Leader, National Service Scheme, Mar Thoma College, Thiruvalla, 1982-83.
10. Secretary, Blood Donor's Form, Mar Thoma College, Thiruvalla, 1982-83.
11. Member, Basketball, Athletic Team, SCS High School, Thiruvalla, 1974-77.

7. Participation In Conference/Symposium/Seminar:

1. Indian Conference on Odonatology, Dehra Dun, March,21-23,2018.
2. 9th International symposium on Reproductive Physiology of Fish,Kochi, Kerala August 9-14,2011
3. Recent Advances in Fish Reproduction, MCCChennai 28th -29th October, 2009.
4. The Eighteenth International Symposium of Odonatology, Nagpur, 5th-9th November,2008.
5. Regional Conference on Quality Improvement and Sustenance in Higher Education, Chennai, 20th -21st February, 2006.
6. VII South Asian Symposium of Odonatology, Nagpur, 9th-11th January, 2006.
7. United Nations University Fellowship for Biodiversity, University of Ghent, Belgium, September 2000 to February 2001.
8. International Congress of Odonatology, ,New York, USA,11th-17th July 1999.

9. Orientation Course NSS-TORC, Madras School of Social Work, 04th -13th October, 1999.
10. V South Asian Symposium of Odonatology, Nagpur, 20-22 December 1998.
11. Indian National Science Academy Visiting Fellowship to Desert Medicine Centre, Jodhpur to learn techniques in Cytogenetics in Anopheline Mosquito, Malariology, Essential oil extraction, 19th September-16 December 1996.
12. IX All India Congress on Cytology and Genetics, Punjab University, Chandigarh. 22nd-25th November 1996.
13. XIII International Symposium on Odonatology, University of Essen, Germany. 20th-25th August 1995.
14. Orientation Programme, Academic Staff College, University of Madras. 20th April to 17th May 1994.
15. XXI Annual Conference and National Colloquium on Perspectives in Animal Behaviour, S.V. University, Triupati, 11th-12th April 1993.
16. IV South Asian Symposium of Odonatology, C.M.P. College, Allahabad, 10th-12th 1992.
17. In Tune with Nature – Seminar, Women's Christian College, Madras, 29th-30th November 1990.
18. Training Course on Prevention of Drug Abuse and Alcoholism. National Institute of Social Defence, Ministry of Welfare, Government of India, Madras, 12th-18th February 1990.
19. III Indian Symposium of Odonatology, Chikkaiah Naicker College, Erode, 29th-31st January 1990.
20. National Workshop on Aquatic Pollution, Loyola College, Madras, 31st October to 12th November 1988.
21. International Conference on Biological Control of Vectors with Predaceous Arthropods, Loyola College, Madras, 7th-10th January 1988.
22. Orientation Course in Instrumental Methods, Madras Christian College, 27th-29th October 1986.
23. II Indian Symposium of Odonatology, D.A.V. College, Dehra Dun, 8th-10th October 1986.
24. Volunteer Leader's Training Camp, National Service Scheme, University of Kerala, 2nd-11th October 1981.

8. Paper Presentation: :

1. M. Chitra & Manu Thomas: Biochemical Characterization of gut microflora from *Bradinopyga geminata* (Anisoptera: Odonata), Indian Conference of Odonatology, Dehra Dun, 2018.
2. Anulin Christudhas & Manu Thomas : Identification of COI gene (Barcode) from *Crocothemis servilia* (Anisoptera: Odonata). , 23rd All India Congress of Zoology: National conference on conservation & management of faunal resources. Guru Nanak College, Chennai. 2012.
3. Kalluri Mellis Prem Roger, M. Chitra & Manu Thomas : Genetic diversity studies of *Orthetrum sabina sabina* using RAPD analysis (Odonata: Anisoptera). 23rd All India

- Congress of Zoology: National conference on conservation & management of faunal resources. Guru Nanak College, Chennai. 2012.
4. T.D. John Caleb & Manu Thomas: Faunistic study of scrub jungle spiders in MCC campus, Tambaram India (Araneae). 23rd All India Congress of Zoology: National conference on conservation & management of faunal resources. Guru Nanak College, Chennai. 2012.
 5. T.D. John Caleb & Manu Thomas: Spider diversity in MCC campus farm, Tambaram, Chennai (Araneae). Indian Society of Arachnology: 4th National symposium cum workshop on spider diversity in agro ecosystems. S.G.B. University, Amaravai, Maharashtra.
 6. Laltanpuui, Manu Thomas: Diversity of Libellulidae (Insecta: Odonata) in Mizoram, northeast India. National conference on Bioresource inventory and emerging conservation strategies with special reference to Northeast India (Bicon 2013) 7th – 8th March, 2013.
 7. Laltanpuui, Manu Thomas: Diversity and molecular phylogeny of Odonata: A case study in Mizoram University Campus, Mizoram, India. Advances in Environmental Chemistry, University of Mizoram, Mizoram, Nov 2011.
 8. Anulin Christudhas & Manu Thomas: Identification of Inducible Antimicrobial Defensin gene from the dragonfly *Crocothemis servila* (Drury), (Anisoptera: Odonata). The 18th International Symposium of Odonatology, Nagpur, 2008.
 9. Studies on the Metamorphosis of the tropical dragonfly *Bradinopyga geminata* (Rambur), (Anisoptera:Odonata). The 18th International Symposium of Odonatology, Nagpur,2008.
 10. Laltanpuui, Manu Thomas : Identification and Sequencing of Juvenile Hormone Acid Methyltransferase gene in the larva of *Bradinopyga geminata* (Rambur), (Anisoptera:Odonata). The 18th International Symposium of Odonatology, Nagpur,2008.
 11. Comparative Studies on the Morphology of the Proventricular Armature of Three species of dragonflies (Anisoptera:Odonata).International Congress of Odonatology, New York, 1999.
 12. Larval habit selection and food preference of *Brachythemis contaminata* (Fabricius) and *Ictinogomphus rapax* (Rambur). V South Asian Symposium of Odonatology, Nagpur, 1998.
 13. Predatory efficiency of *Bradinopyga geminata* (Rambur),*Ranatra elongata* (Fabricius) and *Laccotrepes grieseus* (Guerin) on mosquito larval prey.V South Asian Symposium of Odonatology, Nagpur, 1998.
 14. Morphological variations of the rectal gill chamber of *Ictinogomphus rapax* (Rambur) and *Anax guttatus* (Bermeister) (Anisoptera: Odonata), XIII International Symposium of Odonatology, Essen, Germany, 1995.
 15. Studies on the activity patterns of *Mus musculus* (Linnaeus) (Muridae: Mammalia). XXI Annual Conference and National Colloquium on Perspective in Animal Behaviour, Tirupati, 1993.
 16. Spatial distribution and food preference of two species of dragonfly naiads (Anisoptera: Odonata) IV South Asian Symposium of Odonatology, Allahabad, 1992.

17. Morphological studies on the branchial chamber and tracheal gill chamber of *Ictinogomphus rapax*(Rambur) and *Anax guttatus* (Burmeister) (Anisoptera:Odonata). IV South Asian Symposium of Odonatology, Allahabad, 1992.
18. Feeding efficiency of *Bradinopyga geminata*(Rambur) in relation of size and density of prey (Anisoptera:Odonata). IV South Asian Symposium of Odonatology, Allahabad, 1992.
19. Feeding behaviour of *Anax guttatus* (Burmeister)(Anisoptera). IV South Asian Symposium of Odonatology, Allahabad, 1992.
20. Impact of Prey density on the predatory efficiency of Three Species of dragonfly naiads. III Indian Symposium of Odonatology, Erode,1990.
21. Studies on the food preference in three species of dragonfly naiads with particular emphasis on mosquito larval predation.International Conference on Biological Control of Vectors with Predaceous Arthropods. Madras, 1988.
22. Dragonflies of Madras Christian College Campus. II Indian symposium of Odonatology, Dehra Dun, 1986.

9. Publications:

a) NCBI SUBMISSIONS/Publication (Gen Bank)

1. **Manu Thomas Mathai.** *Mashonarus davidi* voucher MCC-ARA-SR668-2B 16S ribosomal RNA gene, partial sequence; mitochondrial; 428 bp linear DNA. MF407453.1 GI:1312363067 19-DEC-2017
2. **Manu Thomas Mathai.** *Stenaelurillus metallicus* voucher MCC-ARA-SR668-3A 16S ribosomal RNA gene, partial sequence; mitochondrial; 430 bp linear DNA. MF407454.1 GI:1312363070 19-DEC-2017
3. **Manu Thomas Mathai.** *Phanuelus gladstone* voucher MCC-ARA-SR668-4A 16S ribosomal RNA gene, partial sequence; mitochondrial; 431 bp linear DNA. MF443882.1 GI:131236390519-DEC-2017
4. **Manu Thomas Mathai.** *Langona tigrina* voucher MCC-ARA-SR668-6B 16S ribosomal RNA gene, partial sequence; mitochondrial; 321 bp linear DNA. MF443883.1 GI:131236390819-DEC-2017
5. **Manu Thomas Mathai.** *Stenaelurillus lesserti* voucher MCC-ARA-SR668-7B 16S ribosomal RNA gene, partial sequence; mitochondrial; 429 bp linear DNA. MF443884.1 GI:131236391019-DEC-2017
6. **Manu Thomas Mathai.** *Thyene imperialis* voucher MCC-ARA-SR668-8A 16S ribosomal RNA gene, partial sequence; mitochondrial; 438 bp linear DNA. MF443885.1 GI:131236391319-DEC-2017

7. **Manu Thomas Mathai.** *Langona* sp. 1 MC-2017 voucher MCC-ARA-SR668-5A 16S ribosomal RNA gene, partial sequence; mitochondrial; 473 bp linear DNA. MF443886.1 GI:131236391519-DEC-2017
8. **Manu Thomas Mathai.** *Hyllus manu* voucher MCC-ARA-SR668-1A cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial; 658 bp linear DNA. MF443887.1 GI:131236475219-DEC-2017
9. **Manu Thomas Mathai.** *Stenaelurillus metallicus* voucher MCC-ARA-SR668-3A cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial; 658 bp linear DNA. MF443888.1 GI:131236475819-DEC-2017
10. **Manu Thomas Mathai.** *Phanuelus gladstone* voucher MCC-ARA-SR668-4A cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial; 658bp linear DNA. MF443889.1 GI:131236476219-DEC-2017
11. **Manu Thomas Mathai.** *Stenaelurillus lesserti* voucher MCC-ARA-SR668-7B cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial; 523 bp linear DNA. MF443890.1 GI:131236476619-DEC-2017
12. **Manu Thomas Mathai.** *Thyene imperialis* voucher MCC-ARA-SR668-8A cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial; 658 bp linear DNA. MF443891.1 GI:131236477019-DEC-2017
13. Chitra, M. and **Mathai, M.T.** *Enterobacter aerogenes* strain BGMCC01 16S ribosomal RNA gene, partial sequence 1084bp. KP896306 (2015)
14. Caleb, J.T.D., Chitra, M. and **Mathai, M.T.** *Hippasa madraspatana* voucher MCCSPI0001 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial GenBank: KP172156.1 GI:803574627 (2015)
15. Caleb, J.T.D., Chitra, M. and **Mathai, M.T.** *Lycosa bistrinata* cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial. KP874182 (2015)
16. Caleb, J.T.D., Chitra, M. and **Mathai, M.T.** Cytochrome oxidase subunit I, partial (mitochondrion) [*Hippasa madraspatana*] 199 aa Protein AKB09083.1 GI:803574628 (2015)
17. Caleb, J.T.D., Chitra, M. and **Mathai, M.T.** Cytochrome oxidase subunit I, partial (mitochondrion) [*Hippasa madraspatana*] 198 aa Protein AKC57722(2015)
18. Chitra, M., Jenifer, J. and **Manu Thomas, M.** Cytochrome oxidase subunit I, partial (mitochondrion) [*Bradinopyga geminata*] 233 aa Protein AIL55747.1 GI:675298122 (2015)
19. Chitra, M. and **Mathai, M.T.** *Sphingomonas parapaucimobilis* strain BGMCC02 16S ribosomal RNA gene, partial sequence 1113bp. KR055818(2015)
20. Chitra, M. and **Mathai, M.T.** *Shewanella putrefaciens* strain BGMCC03 16S ribosomal RNA gene, partial sequence 869bp. KR055819(2015)
21. Chitra, M. and **Mathai, M.T.** *Aeromonas veronii* strain BGMCC05 16S ribosomal RNA gene, partial sequence 736bp. KR055820(2015)

22. Chitra, M. and **Mathai, M.T.** *Lactococcus garvieae* strain BGMCC06 16S ribosomal RNA gene, partial sequence 688bp. KR055821(2015)
23. Chitra, M. and **Mathai, M.T.** *Chryseobacterium hispalense* strain BGMCC07 16S ribosomal RNA gene, partial sequence 827bp. KR055822(2015)
24. Chitra, M., Jenifer, J. and **Manu Thomas, M.** *Bradinopyga geminata* voucher MCCDF01 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial 702 bp. KM245283.1 GI: 675298121(2014)
25. Jins, Anulin Christudhas and **Manu Thomas,** *Diplacodes trivialis* cytochrome c oxidase subunit 1 gene, partial cds; mitochondrial. (Gen Bank Acc.No. JQ066261.1, Jan 2012)
26. Jins, Anulin Christudhas and **Manu Thomas,** Cytochrome c oxidase subunit 1 (*Diplacodes trivialis*). (Gen Bank Acc.No. AEW30999.1, Jan 2012)
27. Anulin Christudhas and **Manu Thomas,** *Pantala flavescens* cytochrome c oxidase subunit 1-like gene, partial sequence; mitochondrial. (Gen Bank Acc.No. JF821188.1, May 2011).
28. Hruaitluangi, Anulin Christudhas and **Manu Thomas,** *Crocothemis servilia* cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial. (Gen Bank Acc.No. JN119571.1, Oct 2011)
29. Hruaitluangi, Anulin Christudhas and **Manu Thomas,** Cytochrome c oxidase subunit 1, partial (*Crocothemis servilia*). (Gen Bank Acc.No. AEQ75452.1, Oct. 2011)
30. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis pallidinervis* voucher MZDF16 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 638 bp linear DNA KJ499455.1 GI: 631230023
31. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tholymis tillarga* voucher MZDF28 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 675 bp linear DNA KJ499454.1 GI: 631230021
32. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum pruinosum* voucher MZDF17 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 654 bp linear DNA KC122236.1 GI: 440656321
33. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tetrathemis platyptera* voucher MZDF27 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 669 bp linear DNA KC122235.1 GI: 440656319
34. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum sabina* voucher MZDF15 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 606 bp linear DNA KC122234.1 GI: 440656317
35. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tramea limbata* voucher MZDF14 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 572 bp linear DNA KC122233.1 GI: 440656315
36. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum glaucum* voucher MZDF13 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 621 bp linear DNA KC122232.1 GI: 440656313

37. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tramea basilaris* voucher MZDF12 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 645 bp linear DNA KC122231.1 GI:440656311
38. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Potamarcha obscura* voucher MZDF11 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 671 bp linear DNA KC122230.1 GI:440656309
39. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis tullia* voucher MZDF10 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 606 bp linear DNA KC122229.1 GI:440656307
40. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Acisoma panorpoides* voucher MZDF09 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 588 bp linear DNA KC122228.1 GI:440656305
41. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis intermedia* voucher MZDF08 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 585 bp linear DNA KC122227.1 GI:440656303
42. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Cratilla lineata* voucher MZDF07 cytochrome oxidase subunit 1 gene, partial cds; mitochondrial 558 bp linear DNA KC122226.1 GI:440656301
43. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tholymis tillarga* voucher MZDF28 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 502 bp linear DNA KC306716.1 GI:451329317
44. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Palpopleura sexmaculata* voucher MZDF24 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 466 bp linear DNA KC306715.1 GI:451329315
45. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Pantala flavescens* voucher MZDF03 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 520 bp linear DNA KC306714.1 GI:451329313
46. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Potamarcha obscura* voucher MZDF11 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 533 bp linear DNA KC306713.1 GI:451329311
47. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum glaucum* voucher MZDF13 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 505 bp linear DNA KC306712.1 GI:451329309
48. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum pruinosum* voucher MZDF17 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH

- dehydrogenase subunit 1 gene, partial cds; mitochondrial 530 bp linear DNA KC306711.1 GI: 451329307
49. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Diplacodes trivialis* voucher MZDF25 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 507 bp linear DNA KC306710.1 GI: 451329305
50. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum triangulare* voucher MZDF26 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 524 bp linear DNA KC306709.1 GI: 451329303
51. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachydiplax sobrina* voucher MZDF20 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 533 bp linear DNA KC306708.1 GI: 451329301
52. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Aethriamanta brevipennis* voucher MZDF18 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 516 bp linear DNA KC306707.1 GI: 451329299
53. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tetrathemis platyptera* voucher MZDF27 16S ribosomal RNA gene, partial sequence; tRNA-Leu gene, complete sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 536 bp linear DNA KC306706.1 GI: 451329297
54. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Aethriamanta brevipennis* voucher MZDF18 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 546 bp linear DNA KC287158.1 GI: 444300747
55. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachythemis contaminata* voucher MZDF21 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 504 bp linear DNA KC287157.1 GI: 444300745
56. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachydiplax chalybea* voucher MZDF19 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 597 bp linear DNA KC287156.1 GI: 444300743
57. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Diplacodes nebulosa* voucher MZDF22 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 591 bp linear DNA KC287155.1 GI: 444300741
58. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachydiplax sobrina* voucher MZDF20 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 591 bp linear DNA KC287154.1 GI: 444300739
59. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Diplacodes trivialis* voucher MZDF25 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 636 bp linear DNA KC287153.1 GI: 444300737

60. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum triangulare* voucher MZDF26 contains cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 645 bp linear DNA KC287152.1 GI:444300735
61. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Rhyothemis variegata* voucher MZDF23 contains cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 579 bp linear DNA KC287151.1 GI:444300733
62. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Rhyothemis variegata* voucher MZDF23.1 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 514 bp linear DNA KC197054.1 GI:441431782
63. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis pallidinervis* voucher MZDF16 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 527 bp linear DNA KC197053.1 GI:441431780
64. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tramea limbata* voucher MZDF14 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 531 bp linear DNA KC197052.1 GI:441431778
65. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis festiva* voucher MZDF06.1 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 543 bp linear DNA KC197051.1 GI:441431776
66. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Tramea basilaris* voucher MZDF12.1 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 541 bp linear DNA KC197050.1 GI:441431774
67. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis aurora* voucher MZDF05 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 526 bp linear DNA KC197049.1 GI:441431772
68. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Orthetrum sabina* voucher MZDF15 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 538 bp linear DNA KC197048.1 GI:441431770
69. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis tullia* voucher MZDF10 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 524 bp linear DNA KC197047.1 GI:441431768
70. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis intermedia* voucher MZDF08 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 496 bp linear DNA KC197046.1 GI:441431766
71. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis fulvia* voucher MZDF04 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 521 bp linear DNA KC197045.1 GI:441431764

72. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Diplacodes nebulosa* voucher MZDF22 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 517 bp linear DNA KC197044.1 GI:441431762
73. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Crocothemis servilia* voucher MZDF02 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 522 bp linear DNA KC197043.1 GI:441431760
74. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Cratilla lineata* voucher MZDF07 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 523 bp linear DNA KC197042.1 GI:441431758
75. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachydiplax chalybea* voucher MZDF19 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 502 bp linear DNA KC197041.1 GI:441431756
76. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Brachythemis contaminata* voucher MZDF21 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 511 bp linear DNA KC197040.1 GI:441431754
77. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Bradinopyga geminata* voucher MZDF01 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 498 bp linear DNA KC197039.1 GI:441431752
78. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Acisoma panorpoides* voucher MZDF09 contains 16S ribosomal RNA and tRNA-Leu gene, partial sequence; and NADH dehydrogenase subunit 1 gene, partial cds; mitochondrial 508 bp linear DNA KC197038.1 GI:441431750
79. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis festiva* voucher MZDF06 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817429.1 GI:385654619
80. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Trithemis aurora* voucher MZDF05 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817428.1 GI:385654617
81. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Neurothemis fulvia* voucher MZDF04 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817427.1 GI:385654615
82. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Pantala flavescens* voucher MZDF03 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817426.1 GI:385654613
83. Laltanpuii, K., Senthil Kumar, N. and **Manu Thomas, M.** *Crocothemis servilia* voucher MZDF02 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817425.1 GI:385654611

- 84.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** *Bradinopyga geminata* voucher MZDF01 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial 615 bp linear DNA JN817424.1 GI:385654609
- 85.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Trithemis pallidinervis*] 212 aa protein AHZ12741.1 GI:631230024
- 86.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Tholymis tillarga*] 225 aa protein AHZ12740.1 GI:631230022
- 87.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Orthetrum pruinatum*] 218 aa protein AGC22562.1 GI:440656322
- 88.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Tetrathemis platyptera*] 223 aa protein AGC22561.1 GI:440656320
- 89.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Orthetrum sabina*] 202 aa protein AGC22560.1 GI:440656318
- 90.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Tramea limbata*] 190 aa protein AGC22559.1 GI:440656316
- 91.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Orthetrum glaucum*] 207 aa protein AGC22558.1 GI:440656314
- 92.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Tramea basilaris*] 215 aa protein AGC22557.1 GI:440656312
- 93.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Potamarcha obscura*] 223 aa protein AGC22556.1 GI:440656310
- 94.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Neurothemis tullia*] 202 aa protein AGC22555.1 GI:440656308
- 95.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Acisoma panorpoides*] 196 aa protein AGC22554.1 GI:440656306
- 96.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Neurothemis intermedia*] 195 aa protein AGC22553.1 GI:440656304
- 97.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Cratilla lineata*] 186 aa protein AGC22552.1 GI:440656302
- 98.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Tholymis tillarga*] 127 aa protein AGF37503.1 GI:451329318
- 99.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Palpopleura sexmaculata*] 128 aa protein AGF37502.1 GI:451329316
- 100.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Pantala flavescens*] 128 aa protein AGF37501.1 GI:451329314
- 101.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Potamarcha obscura*] 130 aa protein AGF37500.1 GI:451329312
- 102.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Orthetrum glaucum*] 127 aa protein AGF37499.1 GI:451329310

- 103.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Orthetrum pruinosum*] 131 aa protein AGF37498.1 GI:451329308
- 104.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Diplacodes trivialis*] 125 aa protein AGF37497.1 GI:451329306
- 105.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Orthetrum triangulare*] 129 aa protein AGF37496.1 GI:451329304
- 106.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Brachydiplax sobrina*] 120 aa protein AGF37495.1 GI:451329302
- 107.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Aethriamanta brevipennis*] 114 aa protein AGF37494.1 GI:451329300
- 108.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Tetrathemis platyptera*] 132 aa protein AGF37493.1 GI:451329298
- 109.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Aethriamanta brevipennis*] 182 aa protein AGD98698.1 GI:444300748
- 110.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Brachythemis contaminata*] 168 aa protein AGD98697.1 GI:444300746
- 111.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Brachydiplax chalybea*] 199 aa protein AGD98696.1 GI:444300744
- 112.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Diplacodes nebulosa*] 197 aa protein AGD98695.1 GI:444300742
- 113.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Brachydiplax sobrina*] 197 aa protein AGD98694.1 GI:444300740
- 114.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Diplacodes trivialis*] 212 aa protein AGD98693.1 GI:444300738
- 115.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Orthetrum triangulare*] 215 aa protein AGD98692.1 GI:444300736
- 116.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Rhyothemis variegata*] 193 aa protein AGD98691.1 GI:444300734
- 117.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Rhyothemis variegata*] 130 aa protein AGC31644.1 GI:441431783
- 118.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Trithemis pallidinervis*] 129 aa protein AGC31643.1 GI:441431781
- 119.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Tramea limbata*] 131 aa protein AGC31642.1 GI:441431779
- 120.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Trithemis festiva*] 130 aa protein AGC31641.1 GI:441431777
- 121.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Tramea basilaris*] 132 aa protein AGC31640.1 GI:441431775
- 122.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Trithemis aurora*] 129 aa protein AGC31639.1 GI:441431773

- 123.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Orthetrum sabina*] 132 aa protein AGC31638.1 GI:441431771
- 124.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Neurothemis tullia*] 132 aa protein AGC31637.1 GI:441431769
- 125.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Neurothemis intermedia*] 124 aa protein AGC31636.1 GI:441431767
- 126.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Neurothemis fulvia*] 127 aa protein AGC31635.1 GI:441431765
- 127.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Diplacodes nebulosa*] 132 aa protein AGC31634.1 GI:441431763
- 128.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Crocothemis servilia*] 129 aa protein AGC31633.1 GI:441431761
- 129.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Cratilla lineata*] 132 aa protein AGC31632.1 GI:441431759
- 130.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Brachydiplax chalybea*] 120 aa protein AGC31631.1 GI:441431757
- 131.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Brachythemis contaminata*] 129 aa protein AGC31630.1 GI:441431755
- 132.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Bradinyopyga geminata*] 125 aa protein AGC31629.1 GI:441431753
- 133.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** NADH dehydrogenase subunit 1, partial (mitochondrion) [*Acisoma panorpoides*] 126 aa protein AGC31628.1 GI:441431751
- 134.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Trithemis festiva*] 205 aa protein AFI62050.1 GI:385654620
- 135.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Trithemis aurora*] 205 aa protein AFI62049.1 GI:385654618
- 136.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Neurothemis fulvia*] 205 aa protein AFI62048.1 GI:385654616
- 137.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Pantala flavescens*] 205 aa protein AFI62047.1 GI:385654614
- 138.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Crocothemis servilia*] 205 aa protein AFI62046.1 GI:385654612
- 139.Laltanpuii,K., Senthil Kumar,N. and **Manu Thomas,M.** cytochrome oxidase subunit 1, partial (mitochondrion) [*Bradinyopyga geminata*] 205 aa protein AFI62045.1 GI:385654610
- 140.Anulin Christudhas and **Manu Thomas,** *Crocothemis servilia* defensin alpha 1-like gene, Partial sequence. (Gen Bank Acc.No. GU93414.1, Mar 2010).

b) Paper Publication

1. Shalu Thomas, Sangamithra Ravishankaran, Aswin Asokan, N. A. Johnson Amala Justin1,T. Maria Jusler Kalsingh, **Manu Thomas Mathai,** Neena Valecha and Alex Eapen

- Socio-demographic and household attributes may not necessarily influence malaria: evidence from a cross sectional study of households in an urban slum setting of Chennai, India. *Malaria Journal* 17:4,2018.
2. Shalu Thomas, Sangamithra Ravishankaran†, N. A. Johnson Amala Justin, Aswin Asokan, T. Maria Jusler Kalsingh, **Manu Thomas Mathai**, Neena Valecha, Jacqui Montgomery, Matthew B. Thomas and Alex Eapen. Microclimate variables of the ambient environment deliver the actual estimates of the extrinsic incubation period of *Plasmodium vivax* and *Plasmodium falciparum*: a study from a malaria-endemic urban setting, Chennai in India. *Malaria Journal* 17:201,2018
 3. Caleb, J.T.D & **Mathai, M. T.** First description of the male swift spider *Aetius decollates* **O. Pickard-Cambridge, 1896** (Araneae: Corinnidae) (in communication, Zootaxa).
 4. Shalu Thomas, Sangamithra Ravishankaran, Johnson A. Justin, Aswin Asokan, **Manu T. Mathai**, Neena Valecha, Matthew B. Thomas and Alex Eapen. Overhead tank is the potential breeding habitat of *Anopheles stephensi* in an urban transmission setting of Chennai, India. *Malaria Journal* 15:274, 2016, Impact factor 3.11.
 5. M.Chitra, T.D. John Caleb, Karen Christopher, Triphina Joyce and **Manu Thomas Mathai**. DNA Barcoding of Lycosid Spiders using COI Gene Sequence. Proceedings of WCC Centenary International Conference on Viable Synergies in the Mathematical and Natural Sciences. ISBN: 978-93-85374-38-8, pg.no. 434-440. 2016
 6. Caleb, J. T. D & **Mathai, M. T.** A new jumping spider of the genus *Stenaelurillus* Simon, 1886 (Araneae: Salticidae: Aelurillinae) from India. *Zootaxa*, 4103(2)185-188.,2016.
 7. D. Alexander, Anulin Christudhas and **Manu Thomas Mathai**. Impact of isolated diets on the growth rate of *Chrysomya megacephala* (Diptera). *Munis Entomolgy and Zoology*. Vol.10, No. 2, 2015
 8. Caleb, J. T. D, Soriephy Mungkung and **Manu Thomas Mathai**. Four new species of jumping spider (Araneae: Salticidae: Aelurillinae) with the description of a new genus from South India. *Peckhamia* 124.1:1-18, 2015
 9. Caleb, J. T. D, Soriephy Mungkung and **Manu Thomas Mathai**. Four new species of jumping spider (Araneae: Salticidae: Aelurillinae) with the description of a new genus from South India. *Peckhamia* 124.1:1-18, 2015
 10. Caleb, J. T. D & **Manu Thomas Mathai**. Description of a New Species of *Harmochirus* Simon (Araneae: Salticidae) From South India. *Munis Entomolgy and Zoology* 10(1):117-121. 2015.
 11. Caleb, J. T. D & **Mathai, M. T.** Record of *Araneus viridisomus* Gravely, 1921 (Araneae: Araneidae) from Tamil Nadu, India, *Indian Journal of Arachnology*, 3(2): 1-5. 2014
 12. Anulin Christudhas and **Manu Thomas Mathai**. Antibacterial assay of protein from *Pantala flavescens* (Fabricius, 1798) (Odonata : Libellulidae). *Journal of Advanced Zoology*, 35(2): 78-81, 2014
 13. Laltanpuii, Senthil Kumar N., and **Manu Thomas Mathai**. Molecular and phylogenetic analysis of the genus *Orthetrum* (Odonata; Anisoptera; Libellulidae) using mitochondrial COI gene. *Sci. Vis*, 14(3); 152-157, 2014

14. Gomathy, Anulin Christudhas and **Manu Thomas Mathai**. Bioecology of Pyrrhocorid Plant Bug *Iphita limbata* (Stal). *Munis Entomolgy and Zoology*, 9(2), 2014.
15. Sheeba, T. J., **Manu Thomas Mathai**, Aneesh Nair and Florida Tilton. Molecular Taxonomy and Genetic Diversity Analysis of *Therea petiveriana* L. *Asian Journal of Science and Technology*, 5(4): 281-284, 2014.
16. Anulin Christudhas and **Manu Thomas Mathai**. Genetic variation of a migratory dragonfly characterized with random DNA markers. *Journal of Entomology and Zoology Studies*, 2(2): 182-184, 2014.
17. K. Narasimmarajan, Aniruth, Kumar Vasava, Subhasis Mahato, Abinash Parida and **Manu Thomas Mathai**. Butterflies Diversity in Gugamal National Park, in the Melghat Tiger Reserve, Maharashtra-Central India. *World Journal of Zoology*, 9(2): 71-79, 2014.
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19. Caleb, J. T. D and **Manu Thomas Mathai**. Description of some interesting jumping spiders (Araneae: Salticidae) from South India. *Journal of Entomology and Zoology Studies*, 2(5): 63-71, 2014.
20. Caleb, J. T. D and **Manu Thomas Mathai**. Faunistic study of spiders from the scrub jungle in MCC Campus, Tambaram, India (Araneae). *Biodiversity, Environment and Probiotics*, pages 55 – 59, 2014.
21. Caleb, J. T. D & **Manu Thomas Mathai**. A new species of *Deinopsis* MacLeay (Araneae: Deinopidae) from India. *Indian Journal of Arachnology*, 3(1), 2014.
22. Caleb, J. T. D, Anulin Christudhas, K. Laltanpuii and M. Chitra. New species of *Hyllus* C. L. Koch (Araneae: Salticidae) from India. *Munis Entomolgy and Zoology*, 9(2): 616-619. 2014.
23. Laltanpuii, **Manu Thomas Mathai**, G. Gurusubramanian, H.T. Lalremsanga & N. Senthil Kumar. Diversity of Libellulidae (Insecta: Odonata) in Mizoram, northeast India in Bioresources and traditional knowledge of northeast India, 2013, Chapter 3, 236- 240. (ISBN: 978-81-924321-3-7)
24. Anulin Christudhas and **Manu Thomas Mathai**. Identification of COI Gene from *Crocothemis servilia* (Anisoptera: Odonata) *Biodiversity, Environment and Probiotics*, Pages 23 – 34, 2014.
25. Kalluri Mellius Roger, M. Chitra and **Manu Thomas Mathai**. Genetic diversity studies of *Orthetrum sabina sabina* using RAPD analysis (Odonata: Anisoptera). *Biodiversity, Environment and Probiotics*, pg. 43-49. 2014.
26. Caleb, J. T. D & **Manu Thomas**. New species of *Poecilochroa* Westring, 1874 and *Zelotes* Gistel, 1848 (Araneae: Gnaphosidae) from Tamil Nadu, India. *Indian Journal of Arachnology*, 2: 1-6, 2013
27. Lauren J Cator, Shalu Thomas, Krijn P Paaijmans, Sangamithra Ravishankaran, Johnson A Justin, **Manu T Mathai**, Andrew F Read, Matthew B Thomas and Alex Eapen: Characterizing microclimate in urban malaria transmission settings: a case study from Chennai, India. *Malaria Journal* 12:84, 2013, Impact factor 3.19
28. K. Narasimmarajan, Dhruva Chetri, Chandan R.I. and **Manu Thomas Mathai**. Bird species of conservation concern along the Brahmaputra river in Assam, North-East India. *Podoces*, 8(2), 31-37, 2013.

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35. **Manu Thomas** and Mohan Daniel. Studies on the feeding behaviour of Odonates. *Fraseria*, 14&15: 64, 1988.
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37. **Manu Thomas**, A Mohan Daniel and M.Gladstone: Studies on the Food preference in three species of dragonfly naiads with particular emphasis on Mosquito larval predation., *Proc. Int. Conf. Biol.*, Control of vectors with predaceous arthropods (Bicovas) I, 34-41, 1988.

10. Research Guidance:

a) *Ph.D.*

1. Molecular Systematics and Phylogenetics of *Pantala flavescens*, *Crocothemis servilia* and *Diplacodes trivialis* in the light of DNA barcoding and Defensin gene. (Mrs. Anulin Christudhas, Degree Awarded, 2012)
2. Molecular Systematics and Phylogenetics of the family libellulidae (Anisoptera : Odonata) of Mizoram. (Laltanpuii, Degree Awarded, 2015)
3. Molecular Characterization, Phylogenetics and Genetic Diversity Analysis of *Therea petiveriana* (L) (Polyphagidae : Blattodea) (Ms. Sheeba T. J, Degree Awarded, 2016)
4. Diversity Studies and Phylogenetics of Spiders in MCC campus. (Mr. T.D. John Caleb, Degree Awarded, 2016)
5. Study the Bionomics of Urban Malaria Vector *Anopheles stephensi* and sustainable methods to control malaria (Mrs. Shalu Thomas, Thesis submitted, 2016)
6. Isolation and Characterization of Entomopathogenic fungi *Beauveria bassiana* and their pathogenicity in mosquito larvae (Mr. Murali Shankar to be submitted)
7. Study of Otter in River Moyar, Western Ghats, Southern India. (Mr. K. Narasimhrajana, Synopsis submitted)
8. Characterization of gut microflora in *Bradinopyga geminata* (Anisoptera: Libellulidae) (Mrs. M. Chitra, Synopsis submitted)

9. Altitudinal and landscape diversity and distribution of Odonata in Manipur, North- East India. (Ms. Soreiphy Mungkung, to be submitted)
10. Genetic Epidemiology of *Plasmodium vivax* and *Plasmodium falciparum* in Chennai. (Ms. Lakshmi Priya, Synopsis submitted)
11. Vector Mosquitoes and persistent Malaria transmission in Chennai. (Ms. Sangamithra, to be submitted)

M.Phil.

1. A Study on the Fluctuating Asymmetry in *Brachythemis contaminata* (Fabricius 1793) in Podavoor Village, Kanchipuram. (Anisoptera: Odonata), 2018.
2. Host preference of mosquito vectors in a Shrub Ecotype (MCC Campus). 2015 (Ms. Maiby)
3. Abiotic and Biotic factors and its influence on immature mosquitoes in a Pond ecosystem. 2015 (Mrs. Arya)
4. Identification of Cytochrome C oxidase subunit (CO1) gene in *Bradinopyga geminata* (Odonata: Anisoptera) 2014 (Ms. Jenifer.J)
5. Genetic diversity studies of *Orthetrum sabina sabina* using RAPD analysis (Anisoptera: Odonata). 2011 (Mr. Kalluri. Mellius Prem Roger)
6. Bioinformatic Study of Troponin T in dragonfly *Libellula pulchella* (Drury) (Anisoptera Odonata) 2010. (Mr. Sam Thomas)
7. Identification of Juvenile Hormone Methyl transferase (JHAMT) gene in *Bradinopyga geminata* (Rambur). 2007. (Ms. Laltanpuii)
8. Morphology of the Cephalo-pharyngeal Skelton along with Growth rate of *Chrysomya megacephala* on isolated diets. 2005. (Mr. D. Alexander)
9. Effect of Bio-insecticide (Econeem) against the Larval Mosquitoes of *Culex quinquefasciatus* (Say). 2000 (Ms. Vimala Devi)
10. The Social Behaviour and Adaptability of Mentally Retarded Children. 1999 (Ms. Lithi Lazar).
11. Comparative Studies on the Proventricular armature of Six species of Dragonflies (Anisoptera: Odonata). 1997 (Ms. R. Jayanthi).
12. Comparative Studies on the Predatory Efficiency of *Poecilia reticulata* (Roisen and Baily), *Gambusia affinis* (Baird and Girard) and *Bradinopyga geminata* (Rambur) on mosquito larvae. 1995 (Ms. Anumol Mathew).
13. Studies on the Impact of Larval Feeding on the Biology of *Chrysomya megacephala* (Fabricius) (Calliphoridae: Diptera). 1994 (Mr. R. Renganathan).
14. Studies on Comparative Predatory Efficiency of Four Aquatic Predators. 1994 (Ms. Sharon Rose).

11. Any Other:

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