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Newsletter



Department of Zoology University of Jaffna



DEPARTMENT OF ZOOLOGY



NEWSLETTER

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From the Editor's Desk

We are delightful to share our wisdom of knowledge to the students, scientific society and public members. Our courage is to develop a better place for human and other animals, without conflicts to hold this natural beauty with prolonging diversity. This zoology community's annual targets had come with great success. We have contributed our part to earn our respect in national and international levels by contributing through education, consultations to scientific communities, community project assessments, exhibitions and workshops. As the editorial team it's our privilege to present this newsletter to our readers on behalf of the Department of Zoology. We believe this issue will manifest our contribution and give our readers the chance to acknowledge the divine success of our annual representation!

Ms. S.Kokila (Editor)



Mr. Nadika Abevaweera (Editorial Team member)



Mr. A.A.K.P.Amarasinghe (Editorial Team member)

New Year ~2019



The dawn of the New Year 2019 was celebrated in the department with the presence of Fulbright scholar Prof. Prema Arasu, all the academic staffs, non-academic staffs and special degree students. This New Year gathering gave opportunities to review the past year with the warmest memories and to welcome New Year with new hopes, faith and love!



Professor. S. N. Surendran; A tremendous asset to the Department

Gold Medalist -Iulv 2019-

Prof. S.N.Surendran received Professor Kandiah Balasubramanium GOLD MEDAL, awarded by Jaffna Science Association (JSA) on 31st of July 2019 at the Annual Session of JSA. He delivered the GOLD MEDAL AWARD LECTURE on "An emerging challenges in the control of mosquito borne diseases" at the ceremony.

Recipient of President's Award for Scientific Research

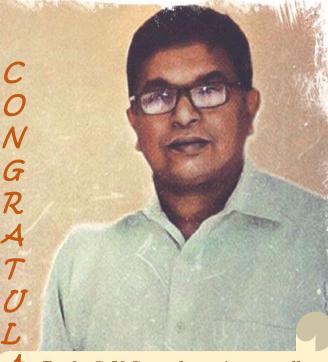
-August 2019-

Prof. S.N.Surendran has been conferred on 26/08/2019 with the President's Awards for Scientific Research for one of his highly rated scientific publications. The awarding occasion was graced by HE Maithripala Sirisena (President of the Democratic Socialist Republic of Sri Lanka) and held at the Grand Marquee, Taj Samudra Colombo.

Recipient of NSF Award -December 2019-

Prof. S.N.Surendran, received two NSF awards, Certificate of Commendation for the research project titled 'Development of DNA based techniques to differentiate Anopheles culicifacies species B from species E and An. subpictus from An. sundaicus' and SUSRED award (Award for supervision of PhD degree) for thesis titled 'DNA barcoding, genetic diversity, genetic structure and age structure of selected mosquito species of Sri Lanka'

These awards were presented in the NSF annual awards ceremony, NSF Awards-2018 which was held on 18th December 2019 at BMICH.



Prof. S.N.Surendran is a wellknown scientist from Sri Lanka, who collaboratively works with researchers from all across the globe. This Zoology community heart fully wishes our Professor in his great success and future endeavors. Also we are proud and prestigious to inform about him as a family!

Invited Consultant to WHO- Geneva *-June 2019-*

Prof. S.N.Surdndran has been invited by the World Health Organization (WHO) attend a consultation meeting held from 25th to 27th June 2019 in Geneva. Objective of the meeting was have a technical consultation on the Anopheles spread stephensi mosquito.

Community Engagement

CCH (Center for Children's Happiness) conducted a learning session on "Field identification of Avifauna at Moonamadu Kulam, Vavuniya" for rural women societies on the 24th February, 2019 where Ms. Gajavathany Kandasamy and Dr. Mrs. Abyerami Sivaruban served as resource persons. Simple tips for the identification of birds were offered. Field kits such as binoculars and spotting scopes were used in the session to explain the birding.



Mr.S.Arthiyan-Extracurricular activity



Mr. S.Arthiyan served as Coach for Men and Women basketball team of the University of Jaffna at SLUG-2019 (September 2019) held in the University of Ruhuna. Great job indeed!

Sharing expertise by Dr. Mrs. Abyerami Sivaruban

Dr. Mrs. Abyerami Sivaruban participated and served as the resource person for the Sri Lanka Reptile Assessment at Wattegama, Kandy from 14th - 19th September, 2019.



Sandfly training programme



The training programme was organized by the Department of Zoology in collaboration with the RDHS, Anuradhapura under the Fairmed fund. The programme was held on 4th and 5th September 2019 at the department. The major area of the programme is vector sampling and identification of sandflies. The training was facilitated by **Dr. K.Gajapathy** and assisted by Postgraduate student Ms. P.Sharmintha

Commercial Law Development Program (CLDP) Participated by Dr.T.Eswaramohan, Funded By U.S. Department of State



Dr.T.Eswaramohan attended in the Technology Transfer Consultations, in the area of intellectual property (IP) and technology management, June 11-21, 2019 in Washington, D.C and Concord, New Hampshire, USA, under the sponsorship of Commercial Law Development Program (CLDP), United States Department of Commerce. He was exposed five institutes in USA during the visit. Initially he was exposed to Commercial Law Development Program (CLDP), Washington, D.C then at United States Patent Trademark Office (USPTO), Virginia, then at National Science Foundation, at Georgetown University and then at University of New Hampshire.

He was also exposed to a world standard expertise in IP law at the Franklin Pierce Law Center for IP, Faculty of Law, University of New Hampshire and, most importantly, the simulation exercise pertaining to licensing agreement through a case study.

Knowledge Sharing: Workshop for Science Teachers

Our staff members Mrs. P.Sivakumar, Mr. JohnPriyanth, Mrs. AJohnPriyanth and Mr. S.Arthivan have been invited for workshop and awareness talks by Centre for Children's Happiness (CCH) to the teachers of Northern Province. The goal of the programme was to create active environmentalists to the society. The target group was the teachers who were in charge of the school environmental societies. Teachers have been selected from all the four administrative divisions (Thenmarachchi, Vadamarachchi, Valikamam, and Island Zone) to disseminate the gained knowledge to the students.



Agriculture Exhibition-2019



The annual Agriculture exhibition organized by the Northern provincial Agriculture ministry was held at the department of Agriculture, Thirunelveli from 17th to 21st September 2019. The department of Zoology has been supportive for this event from 2017. This year also our staff and the students worked hard and enjoyed in disseminating their knowledge to the general public.

A team of the members of the Department of Zoology was fully engaged in demonstration of very good established models in two stalls, with two sub themes;

Theme-I: Food production with no toxins through biodiversity conservation

Theme II: Parasites and their management in animal husbandry

This event was coordinated by Prof. Mrs.R.Gnaneswaran. The team was steered by our Lecturers Mr. S.Arthiyan and Ms. S.Kokila with assistance the of demonstrators and special degree students. Congratulations and Thank you to each member of the team.

Team work makes the dream work!

Certificate Course in Molecular Laboratory Techniques-Batch II

The second batch has been successfully completed the Certificate Course in Molecular Laboratory Techniques. The certificate awarding ceremony for the successful candidates was held on 15th Feb 2019 at Department of Zoology. Ten participants from batch II and two participants from batch I completed the course and awarded certificates.

Prof. S.N.Surendran, Dr. K.Gajapathy, Dr. T.Eswaramohan, Dr. A.Murugananthan and Dr. Mrs.T. W.Shanthakumar served as resource persons. Postgraduate students Mr. T.T.Thanesh and Mr. T. Thiruchchenduran served as demonstrators for practical sessions. This Certificated Course was coordinated by Dr. Mrs.T.W.Shanthakumar.

Newspaper articles

Dr.Mrs.A.Sivaruban has written six continuous chapters of Tamil popular article titled "Let's identify snakes; Some of the snakes found in Northern Province". These articles were published through the Jaffna Science Association (JSA) Section A' in Valampuri Tamil Newspaper on 28.12.2018, 11.01.2019, 25.01.2019, 08.02.2019, 22.02.2019, 2019 and 12.04.2019. Furthermore Ms. Gajavathany Kandasamy and Dr. Mrs. Abyerami Sivaruban have written a series of another Tamil popular article having 3 continuous chapters titled "Mermeid's get together at "*Mandaitivu*"- "ഥண്டെதீவில் தேவ கன்னிகைகளின் ஒன்றுகூடல்;" published in *Uthayan* Tamil Newspaper on 14th, 21st and 28th July, 2019. Apart as an academic Dr.Mrs.A.Sivaruban is a well-known herpetologist from Sri Lanka who loves **SNAKES!!** We highly appreciate her work and wish our brave lady get more success...



Outreach of Professor (Mrs). R. Gnaneswaran



- Delivered a talk on "Biodiversity and conservation of Insect fauna in Sri Lanka" as invited presenter on 6th November 2019 at the Department of Entomology, Assam Agriculture University, Jorhat, Assam, India.
- ➤ **Invited as speaker** in the panel of "Child Friendly Environment at Children's rights symposium, held at Tilco City Hotel, Jaffna on 23rd December 2019 organized by Centre for Children's Happiness, Sri Lanka.
- ➤ Delivered a talk on "Environmental perspective" as invited presenter to Panel Discussion under the Theme: "Searching for Regional Sustainability" at International Conference Contemporary Management (5th ICCM) conducted by Faculty of Management studies and commerce University of Jaffna, from 29-30 July 2019.
- Exposure visit to the Central Muga Eri Research and Training Institute and to a tribal silk farmer's (woman) house in Jorhat, Assam, India in November 2019.
- Described training of Trainer course on "Integrated Coastal Management (ICM) at Aquaculture and aquatic resource management, school of environment, resources and Development, Asian Institute of Technology (AIT), Thailand during 25th June -27th July 2018.





Outreach

- Dr. K.Gajapathty has served as the coordinator for submitting an EIA report for the proposed water supply scheme from Thondamanaru lagoon, which was proposed by Department of Irrigation. The team included Mrs. P.Sivakumar and Mr. S.Arthiyan. The EIA has been submitted and presented at the Department of Wildlife Conservation, Colombo.
- Dr. K.Gajapathy has served as the team leader for a group of researchers to analyze and submit a report on a Wind turbine programme proposed by a Private Company in Maravanpulavu. The request was made by the Secretary of the Governor's Office for Northern Province. The report was submitted and presented at the District Secretariat of Jaffna.
- Dr. K.Gajapathy and Mr. S.Arhtiyan were involved in a field visit to Nandikadal lagoon upon the request of Department of Fisheries, Mullaitivu to do a feasibility study for deepening the lagoon.



New appointments and retirements

Mr.K.Rathangan has joined the department as a Lab attendant in August 2019.

Mr.P.Vimalananthan has retired as a Special Grade Lab Attendant in November 2019. The department wish him all the very best for his retired life.

Achievements of Dr. Mrs. T.W. Shanthakumar



- Dr. Mrs. T.W.Shanthakumar served as a resource person for the training workshop on 'Identification and control of Invasive Alien Species (IAS)' for School teachers conducted by Ministry of Mahaweli Development and Environment in May 2019.
- Dr.Mrs. T.W.Shanthakumar is one of the project winning team members of AHEAD-Faculty of Science grants and serving as one of the activity coordinators.
- Dr.Mrs. T.W.Shanthakumar was selected to visit the USA under Women in STEM-IVLP program by the US embassy to Sri Lanka from 28th October 2019 to 15th November 2019. (Not attended).

Student Exposure



Prof. Mrs.R.Gnaneswaran and final year Zoology special students participated at the "International training course on field sampling and identification of Ants" held from 10-12 February 2019 at the Regional Centre for Asian Ant Research, University of Kelaniya .Sri Lanka.

Activities done by ZSA with the UNDP/ GEF SGP Grant -2019-



Zoological Students' Association (ZSA) carried out several activities to the beneficiary community in Kavutharimunai, Pooneryn with the grant from UNDP/ GEF/ SGP of USD \$35000.00.





Activities conducted:

- Plantation of 8000 mangroves at Kavutharimnai
- Initiation of home gardening practices by conductive workshops and providing trees, seeds, seedlings and tools.
- Establishing small museum of specimen collected from coastal environment of Jaffna for the environmental laboratory
- Arranged workshops on home garden practices in drought condition and field visit to organic farm in Adampan, Mannar.

The project is coordinated by Mr.S. Arthiyan as a signatory authority of the entire project.

Inter-University Biology Quiz competition

IOBSL was organized the Inter-University Biology Quiz competition for the undergraduates of State Universities for the 2nd consecutive year in 2019.Out of the 40 participants, two students from UOJ have been selected for oral examination.

1. Ms.Thadchayini (Level 2G Zoology student)

2. Mr. C.Piranavan

Mr.S.Arthiyan has served coordinator for the above competition.

Convocation-2019

34th Convocation of University of Jaffna was held on 6th December 2019. On the ceremony Ms.S.Kokila pursued her Master's degree (M.Phil in Zoology) and along with zoology general degree students eighteen zoology special degree students gained their Bachelor's degree.

Many Congratulations to all graduates and best wishes for a successful future!!



Netball Champions-SLUG 2019

The netball tournament of the Sri Lanka University Games (SLUG) 2019, started on the 27th April at the Kotawila grounds, Matara. The tournament concluded on the 29th of August with the University of Jaffna crowns as SLUG Netball champions after defeating the University of Colombo in the final. It is noteworthy to mention that one of our Zoology special degree student (3M) Ms. Benthota Gamage Imesha Dayangika was the Vice Captain the of title winning team.

We congratulate the winners and wish them for continued success!





AHEAD Grant- Department of Zoology

The grant program aims to support Higher Education Institutions to produce students who are well-qualified academically and also suitably prepared for the world of work and for wider civic and social life. The Department of Zoology won the grant in round 2 and the amount is 18 Million LKR. grant Dr.Mrs.T.W.Shanthakumar, Dr. Mrs.A.Sivaruban and Mrs. P.Sivakumar contributed to the proposal for the grant. The grant programme is coordinated by Dr.Mrs.A.Sivaruban with Mrs.P.Sivakumar Dr.K.Gajapathy serving as activity coordinators.

Congratulations to team for job well done!

University Research Grant

Prof.S.N.Surendran and Ms.S.Kokila, Dr. Mrs.T.W.Shanthakumar and Dr.K.Gajapathy have secured their University research Grant worth 0.8 Million LKR each for the year 2019. Great job!

NSF Awards- 2018



Ms.Kokila Sivabalakrishnan, received NSF award, Certificate of Commendation for her M.Phil Research project which is funded by NSF and supervised by Prof. S.N.Surendran, Professor in Zoology, Department of Zoology, University of Jaffna.

Award was presented in the NSF annual awards ceremony, NSF Awards-2018 which was held on 18th December 2019 at BMICH. Department of Zoology congratulates Ms. Kokila Sivabalakrishnan for the recognition by NSF.

Publications-2019

Dr. Mrs.A.Sivaruban and **Ms.K.Gajavathani** have published full research papers and number of abstracts on 2019.

Full Paper (Journal Article):

- ➤ Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Diversity and Abundance of Waterbird communities in the Jaffna and Kilinochchi Districts: Where do we have to go from here? Vingnanam Journal of Science, 14 (1): 15-21.
- Arthiya Rajasingham, Abyerami Sivaruban* 2019. Water Quality Assessment of the Pond "Ariyakulam", Jaffna - A view through Correlation Study and Regression Analysis. J Jaffna Sci Association, 2019, 1(1), 41-49 41

Abstracts in Proceedings:

- ➤ Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Foraging and nesting habitats of water birds in Mankumban. Page 27-27 *in* First Research Symposium of the Ocean University of Sri Lanka.
- ➤ Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). The value of Community-based Avitourism in a post-conflict rural area in Kavutharimunai. Page 08-08 *in* the First International conference on Biodiversity and Environmental Management (BEM, 2019) organized by Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Sri Lanka.
- Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Avitourism potential along the coastline from Mandaitivu to Kayts along the northern coastline in the Jaffna Peninsula, Sri Lanka. Page 05-05 in Fifth National Symposium on Marine Environment organized by Marine Environment Protection Authority (MEPA).
- Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Community structure of waterbirds in Thadduvankoddy, Kapputhu and Nagarkovil in the northern region of Sri Lanka. Page 124-130 in Proceedings of the Vavuniya Campus International Research Symposium VCIRS 2019.
- Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Diversity and habitats of waterbirds in Mandaitivu, Northern region of Sri Lanka. Page 260-260 in Association for tropical biology and conservation- Asia Pacific Conference.
- Kandasamy, G., Weerakoon, D. K., Sivaruban, A., & Jayasiri, H. B. (2019). Waterbird diversity and availability of planktonic food sources in Kavutharimunai in the Northern Region of Sri Lanka. Page 60-60 in Annual Scientific sessions organized by National Aquatic Resources Research and Development Agency (NARA) Sri Lanka.

Mrs.P.Sivakumar has published two abstracts on 2019.

- ➤ Jenenan, T. and and **P. Sivakumar** (2019). Zooplankton diversity in selected coastal waters of Mandaithivu Island, Jaffna, Sri Lanka. *Proceeding of the Jaffna Science Association*. P.12.
- ➤ P. Sivakumar (2019). Report on massive fish death in Thondamanaru lagoon, Jaffna, Sri Lanka. Symposium Proceedings, Seventh International Symposium on Water Quality and Human Health: Challenges Ahead, pp 54.

Publications by Medical Entomology Research Group

During 2019 Professor S.N.Surendran and his team has published six full research papers in indexed journals. Also they have published eight abstracts in National & International Conference Proceedings on 2019.

- Sinnathamby N. Surendran, Tibutius T.P. Jayadas, Kokila Siyabalakrishnan, Sharanga Santhirasegaram, Kalingarajah Karvannan, Thilini C. Weerarathne, S.H.P. Parakrama Karunaratne, Ranjan Ramasamy (2019). Development of the major arboviral vector Aedes aegypti in urban drain water and associated pyrethroid insecticide resistance is a potential global health challenge. Parasites & Vectors; 12:337.
- S.N. Surendran, J.P. Marasinghe, K. Gajapathy, T. Tharmatha, K. Sivabalakrishnan, T.C. Weeraratne, S.H.P.P. Karunaratne (2019). Genotyping of *Bemisia tabaci* (Hemiptera: Aleyrodidae) Reveals the Presence of Two Genetic Groups in Sri Lanka. Journal of Entomological Science; 54(2):87-93.
- Sinnathamby N. Surendran, Kokila Sivabalakrishnan, Arthiyan Sivasingham, Tibutius T. P. Jayadas, Kalingarajah Karvannan, Sharanga Santhirasegaram, Kanapathy Gajapathy, Meena Senthilnanthanan, S.H.P. Parakrma Karunaratne, Ranjan Ramasamy (2019). Anthropogenic Factors Driving Recent Range Expansion of the Malaria Vector Anopheles stephensi. Frontiers in Public Health; 7:53.
- Kokila Siyabalakrishnan, Thilini C. Weerarathne, Amirtharasa Thileepan, S.H.P. Parakrama Karunaratne, Ranjan Ramasamy and Sinnathamby N. Surendran (2019). Susceptibility to common insecticides and detoxifying enzyme activities in *Anopheles sundaicus* (sensulato) after cessation of indoor residual spraying of insecticides in the Jaffna Peninsula and its surroundings in northern Sri Lanka. Parasites & Vectors; 12:13.
- S.N. Surendran, K. Sivabalakrishnan, T.T.P. Jayadas, S. Santhirasegaram, A. Laheetharan, M. Senthilnanthanan R. Ramasamy (2019). Adaptation of Aedes aegypti to salinity: Characterized by larger anal papillae in larvae. Journal of Vector Borne Diseases; 55:235-238.
- TTP. Jayadas, T. Kumanan, V. Arasaratnam, Gajapathy, SN Surendran (2019). The clinical profile, hematological parameters and liver transaminases of Dengue NS1 Ag positive patients admitted to Jaffna Teaching Hospital, Sri Lanka. BMC Research Notes. 12(1):604.

Dr.Mrs. T.W.Shanthakumar has published the following manuscripts;

- Subothini, G and Thulasitha, W. S. 2019. Preliminary study on the effect of 2-methyl-4-chlorophenoxy acetic acid (MCPA) on the gonadal development of zebra fish Danio rerio. Proceedings of Jaffna Science Association, Volume: 26 (1): 14.
- Rajapiravinthan, R and Thulasitha, W. S. 2019. Species composition and abundance of zooplankton from Ariyakulam freshwater pond, Jaffna, Sri Lanka. Proceedings of Jaffna Science Association, Volume: 26 (1): 9.

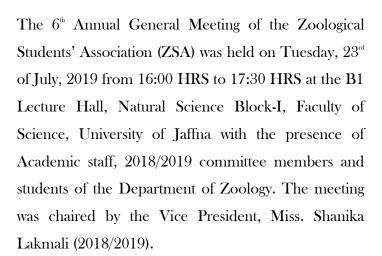
Miss. N.Ratnasabapathy has published the following full paper;

Nithiyagowry R, Chathurica Thilini R, 2019. Insecticidal efficacy of leaf extract of some medicinal plants on adult mortality and adult emergence of rice weevil, Sitophilus oryzae L. (Coleoptera: Curculionidae). International Journal of Entomology Research. Vol.4 (6): 40-44.



6th Annual general meeting and appointment of new Office bearers of ZSA

COMMITTEE MEMBERS



In this meeting, the new committee for the year 2019/2020 was elected by the students. The newly elected committee then decided to appoint Dr. (Mrs.) T.W.Shanthakumar as the senior treasurer of the association for the year 2019/2020.

Miss. S. Raveendren (Ex.Co. Member (1G))



Miss. S.A.T.C. Siyambalapitiya Ex. Co. Member (2G)



Miss. C.Thudshayini Ex. Co. Member (3M/3G)



Miss. Imesha D. Gamage Ex. Co. Member (4M)



(4M)President



Mr. M. N. Rafeedh (3M)Vice President



Miss. M.A.F. Hasna (4M) Junior Treasurer



Dr.Mrs.T.W.Shanthakumar Senior Treasurer



Mr. Nadika Abeyaweera (4M) Secretary



Mr. R. Nirujan (3M)Vice Secretary



Miss. Vashni Olivia Patrick (4M) Editor