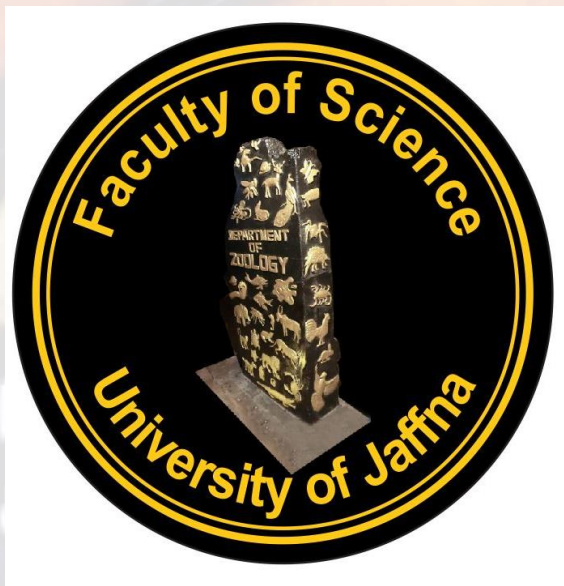




# Department of Zoology

## Zoology Newsletter

November 2017 Volume 07 NO 07



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# TRAINING WORKSHOP

## MICRO MANIPULATION & MICRO INJECTION OF INSECT DISEASE VECTORS




UNIVERSITY OF JAFFNA



UNIVERSITY OF MARYLAND

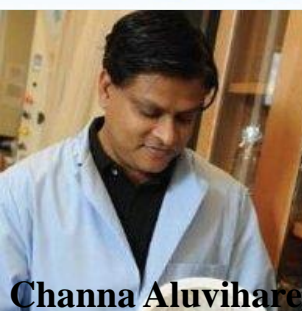
# TRAINING WORKSHOP ON MICRO MANIPULATION AND MICRO INJECTION OF INSECT DISEASE VECTORS

November 21, 2017

Department of Zoology, Faculty of Science, University of Jaffna

Hemsons International (Pte) Ltd


 Hemas Building, 36, Sir Razik Fareed Mawatha, Colombo 00100  
 Tel: 011-232-7948 | Fax: 011-247-8234 | Email: hemaslab@hemsons.lk | Web: www.hemsons.lk



Channa Aluvihare



William Reid



Our 3<sup>rd</sup> international workshop on “Transgenic insects micromanipulation and microinjection of insect disease vector” on the 21<sup>st</sup> November 2017. Vice Chancellor UOJ, Dean science & Head Zoology have been invited as guests and students and staff from 8 different universities were participated in this workshop.

“Insect vectors in Sri Lanka is transgenics a way forward” was the first lecture which has been conducted by Prof.S.N. Surendran and he has suggested different molecular techniques to manage insect vectors’ population with the theme of population reduction and population suppression.

As a continuation of professor’s lecture, our resource person Mr.Channa Aluvihare from University of Maryland, USA, has conducted his lecture on “Creation and maintenance of transgenic insects” and it was followed by laboratory sessions on micro injection. Then there was an online lecture on practical design and synthesis of Guide RNA for CRISPR cas 9 technology which was conducted by Mr.William Reid from University of Maryland And the workshop was concluded with awarding of certificates.

Congratulations to Prof. S.N. Surendran and his team



Hemsons International (Pte)





# DISSEMINATION OF KNOWLEDGE



Department of Zoology was requested by the Primate conservation project of Sri Lanka to work on questionnaire regarding the huge problem of monkeys in Thenmarachchi area. Three members from SPEARS foundation were actively involved in the survey with guidance of Ms. Surendrane Cabrel. Along with their team, Ms. Suntharavathani from agriculture research station, Thirunelveli and Ms. K.Kayavathani & Mr. S.Arthiyan from Department of Zoology has joined in the survey.

This survey was an interesting experience and knowledge sharing with public. The conversation with the people gave us more enthusiasm to work on that field in future as well. Thenmarachchi is an important area and being as a main contributor for the economical status of Jaffna Peninsula. But, they felt very sorry on the impacts from monkeys. We have collected the fact that if there is no monkey in their area they will contribute ten times in the economy of Jaffna than that of today. Because the monkeys migrated from the forest cause enormous losses to their farms and cultivations along with the house destructions.

The survey aims to design a possible insurance cover to the victims based on their annual economical losses due to the conflict of monkeys.

Main problems caused by monkeys in that areas are listed below:

1. Stealing things from the house and the kitchen
2. Damaging roofs by Jumping
3. Breaking off the branches of the trees having ripen fruits
4. Damage the buds of the coconut tree
5. Behave aggressively with ladies

Interesting one school has developed a chasing mechanism using the principle of resonance where that sound source produces unbearable noise within the restricted boundary of monkey attack. Therefore, the monkeys were chased off from that place. But unfortunately, if monkeys adapted to these frequencies, we have to change the frequency. This is the only drawback of that system. As a part of the survey, we were giving some suggestions to chase monkeys away from the garden & had a wonderful

Data collection sheet- Primate Conservation Project									
Quadrat:	No:	Date:	/ /	Time:	Data entry by:				
District:	Location:	GPS location:	Habitat type:	Sub/Habitat	Sub/Habitat	Plant/Tree	Plant/Tree	Plant/Tree	Plant/Tree
Age: 18-25, 26-35, 36-45, 46-55, 56-65, >65		Education: No/Primary/ Secondary (9-10)/ Tertiary		Commercial crop plants:					
Occupation/ Mode of income:		Seasonal/ all year round		If seasonal which month		How many		With infants? Problems? Y/N	
Species	Press at?	How often (every day, every other day, once a week)	Seasonal/ all year round	If seasonal which month		How many		With infants? Problems? Y/N	
Purple faced langur (PFL)									
Tanque monkey (TM)									
Grey langur (GL)									
Red slender loris									
Grey slender loris									
Human monkey conflict									
Type of issue	PFL	TM	GL	Remarks	Remarks	Amount of damage per month (E.g. kg of mangoes, number of roof tiles, number of ladies)			
Damage to commercial crop (CCD)									
Damage to non-commercial crop (NCCD)									
Roof tile damage									
Roof sheet damage									
Infrastructure damage				Tele wire	Light bulb				
Nuisance (littering, clothes/ aggressive behaviour)				Electric wire	antenna				
Food theft?									
Wounding humans?									
Roof kills?									
Electrocution?									
Drug takes?									
Injury caused by humans, shooting/ hunting?									
Poisoning									
Conflict									
Other									
Species	Any precautions/ action taken to prevent problem (fences, ditches, catapult, shoot, chase by shouting)			Monkeys present since when	Problem since when?	Reason for conflict		Remarks	
PFL									
TM									
GL									
Cost of damage per month									
<input type="checkbox"/> Its 0 <input type="checkbox"/> Less than Rs 500 <input type="checkbox"/> Rs 500-1000 <input type="checkbox"/> Rs 1000- 2000 <input type="checkbox"/> More than Rs 2000									
Other animals causing conflict:									
Bats	chiv	Porcupine	Wild boar	Crocodiles	Land monitor	Mongoose	Dog	Client squirrel	Peafowl
Monkey problem is greater/ lesser?									
Remarks:									









# WORKSHOP: HANDS ON TRAINING ON HERPETOLOGY



Dr. Abyerami Sivaruban & Dr. T.W.Shanthakumar has organized a workshop on “ Hands on training on Herpetology – Amphibians”. Dr.(Mrs).A. Sivaruban is basically a herpetologist & her research focus is on vertebrate biology where she has specialized in herpetofauna. At present, she is engaging the projects on avifaunal diversity. Dr.(Mrs).T.W. Shanthakumar is focus on Aquatic animal biology, physiology and molecular biology & she has worked on gene expression analysis with special reference to molecular immunology of fish and shellfish..



University of Jaffna,  
Sri Lanka

## Workshop

## Hands on Training on Herpetology – Amphibians



Department of Zoology, Faculty of Science,  
University of Jaffna

**14<sup>th</sup> DECEMBER, 2017**

The workshop is designed to provide hands on training to learn basic field techniques, field sampling and identification of Amphibians and making awareness to conserve Amphibians

### Target Group:

Undergraduate and Postgraduate students, Researchers, Academic, Non-academic and Supporting staff

### Resource Person:

Dr. (Mrs). Abeyrami Sivaruban  
Herpetologist  
Senior Lecturer, Department of Zoology,  
University of Jaffna

### Registration Fee:

For students: 500 LKR;

Others: 1000 LKR

**Contact for early registration & other inquires**

Dr. (Mrs). T.W. Shanthakumar  
T.P : 0779980471  
E-mail : thulasiwilliam@gmail.com

Dr. (Mrs). A. Sivaruban  
T.P : 0773506501  
E-mail : abyerami@gmail.com



## WISHES AND GREETINGS FROM ZOOLOGY



Ms. J.M.C. Rufeena , one of our graduate student has now been appointed as ENVIRONMENTAL OFFICER , in the Central Environmental Authority (CEA) for Northern region.

She was an outstanding student from our department and has actively participated in all the cultural activities and the sports activities in her undergraduate.

She is now reading her master degree program on Environmental Science in the postgraduate institute of Peradeniya as well.

Congratulations to you and on behalf of Department of Zoology, we all wish you for your better services to the Environment and Our nation in your future endeavors



On behalf of Department of Zoology, Advanced Merry merry Christmas  
and  
Happy New Year 2k18 to you all



Hi Graduates,

Congratulations to you on your Big Day- 33<sup>rd</sup> General convocation (08.12.2017)

EDITOR

ZOO NEWSLETTER

November 2k17