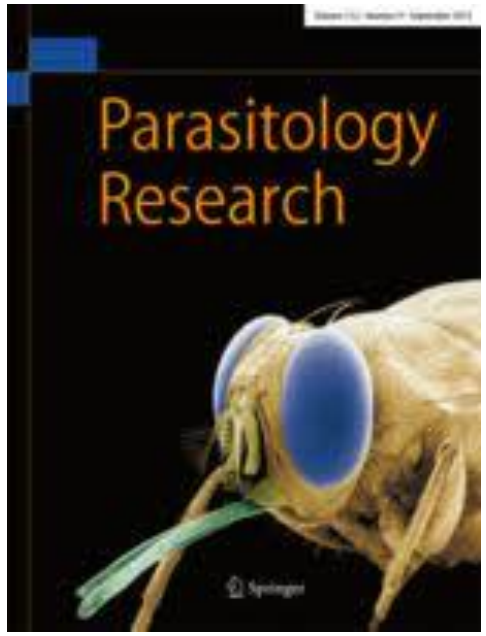
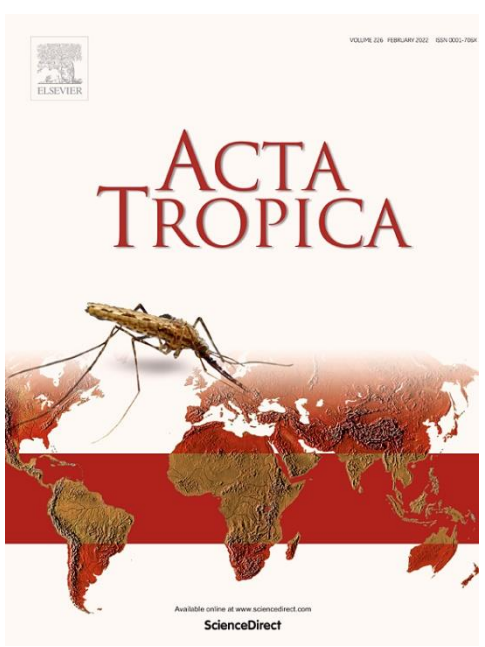
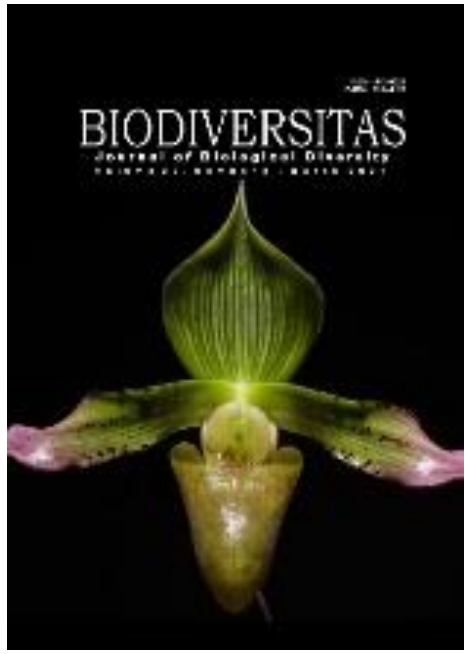
Center of Excellence in Biodiversity Research







Assist. Prof. Dr. Sudarat Thanonkeo, Director

Walai Rukhavej Botanical Research Institute, Mahasarakham University, Thailand

Research teams and collaboration

National collaboration

- Khon Kaen University
- Thammasat University
- Naresuan University
- Maejo University
- University of Phayao

Department of Biology,

Faculty Science, MSU

Center of Excellence in Biodiversity Research

Walai Rukhavej Botanical

Research Institute, MSU

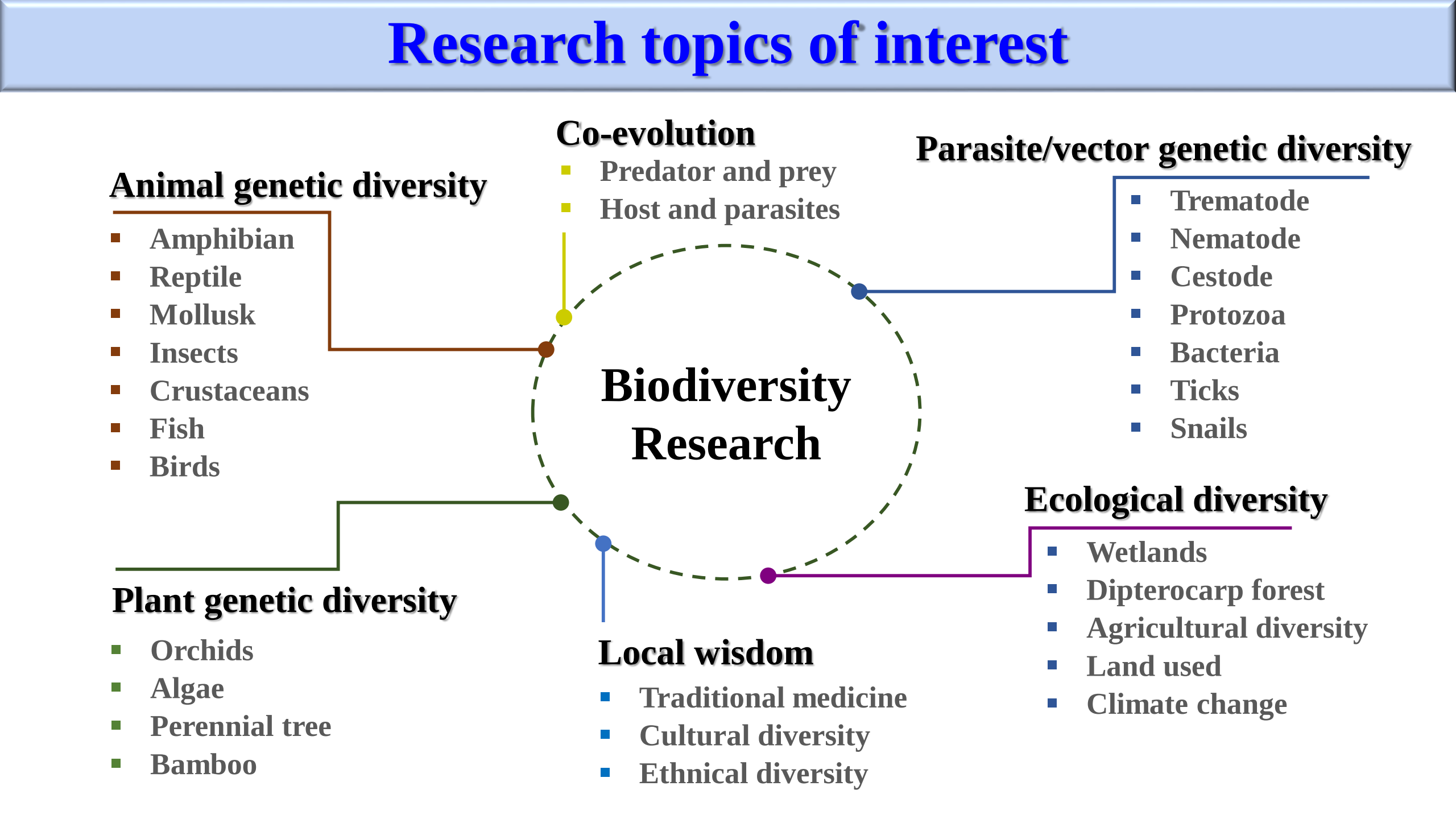
Department of Veterinary Clinic,

Faculty Veterinary Sciences, MSU

International collaboration

- Imperial college, UK
- Kochi University, Japan
- University of Barcelona, Spain
- Statens Serum Institut, Denmark

Research topics of interest



Research projects supported in FY2022

1. *Blastocystis* subtype diversity in animals in Thailand.

- The experiment have been done 100%.
- Ethic for animal research has been issued.
- Manuscript was submitted in "***Research in Veterinary Sciences***", **Q1 in SCIE.**

2. Parasitic infection in cats and dogs in Maha Sarakham Province, Thailand.

- The experiment have been done for 80%, the molecular part is now in progressing.
- Ethic for animal research has been issued.
- Manuscript is preparing and plan to submit to "***Veterinary Research Communications***", **Q1 in SCIE.**

3. Biodiversity of endophytic actinobacteria from Thai medicinal plant and their potential as antibiotics producer.

- The experiment have been done 100%.
- Manuscript is preparing and plan to submit in "***Microbial Ecology***", **Q1 in SCIE.**

Research outputs in FY2022

PHYCOLOGIA
https://doi.org/10.1080/00318884.2022.2130829

International Phycological Society

Taylor & Francis

Q1

Check for updates

Neocylindrospermum variakineticum gen. & sp. nov. (Nostocales, Cyanobacteria), a novel genus separated from *Cylindrospermum* using a polyphasic method

Wittaya Tawong[1,2], Pongsanat Pongcharoen[1,2] and Weerachai Saijuntha[3]

[1]Department of Agricultural Sciences, Faculty of Agriculture Natural Resources and Environment, Naresuan University, Phitsanulok 65000, Thailand
[2]Center of Excellence in Research in Agricultural Biotechnology, Naresuan University, Phitsanulok 65000, Thailand
[3]Walai Rukhavej Botanical Research Institute, and Center of Excellence in Biodiversity Research, Mahasarakham University, Maha Sarakham 44150, Thailand

Experimental and Applied Acarology (2022) 86:535–548
https://doi.org/10.1007/s10493-022-00704-z

Q2

Check for updates

Genetic diversity and phylogenetic analyses of ixodid ticks infesting cattle in northeast Thailand: the discovery of *Rhipicephalus microplus* clade C and the rarely detected *R. haemaphysaloides*

Chairat Tantrawatpan[1] · Kotchaphon Vaisusuk[2] · Wasupon Chatan[3] · Warayutt Pilap[4] · Warong Suksavate[5] · Ross H. Andrews[6,7] · Trevor N. Petney[8] · Weerachai Saijuntha[4]

Note

Algae 2022, 37(1): 1-14
https://doi.org/10.4490/algae.2022.37.3.10
Open Access

Q2

ALGAE

Amazonocrinis thailandica sp. nov. (Nostocales, Cyanobacteria), a novel species of the previously monotypic *Amazonocrinis* genus from Thailand

Wittaya Tawong[1,2,*], Pongsanat Pongcharoen[1,2], Piyawat Pongpadung[1], Supat Ponza[1] and Weerachai Saijuntha[3]

[1]Department of Agricultural Sciences, Faculty of Agriculture Natural Resources and Environment, Naresuan University, Phitsanulok 65000, Thailand
[2]Center of Excellence in Research in Agricultural Biotechnology, Naresuan University, Phitsanulok 65000, Thailand
[3]Walai Rukhavej Botanical Research Institute, Mahasarakham University, Maha Sarakham 44150, Thailand

International Journal of Tropical Insect Science (2022) 42:955–964
https://doi.org/10.1007/s42690-021-00622-4

Q3

ORIGINAL RESEARCH ARTICLE

Check for updates

Genetic variation of *Tarbinskiellus portentosus* (Lichtenstein 1796) (Orthoptera: Gryllidae) in mainland Southeast Asia examined by mitochondrial DNA sequences

Nakorn Pradit[1] · Weerachai Saijuntha[1] · Warayutt Pilap[1] · Warong Suksavate[2] · Takeshi Agatsuma[3] · Kamonwan Jongsomchai[4] · Watee Kongbuntad[5] · Chairat Tantrawatpan[6]

AQUATIC INSECTS
2022, VOL. 43, NO. 3, 307–318
https://doi.org/10.1080/01650424.2022.2035399

Q3

Taylor & Francis
Taylor & Francis Group

SHORT COMMUNICATION

Check for updates

Genetic variation of the giant water bug *Lethocerus indicus* (Lepeletier and Serville, 1825) (Hemiptera: Belostomatidae) collected from natural habitats in northeastern Thailand

Nakorn Pradit[a], Chairat Tantrawatpan[b], Issara Thanee[c], Piangpen Jayareon[d], Warayutt Pilap[a] and Weerachai Saijuntha[a]

Phytotaxa 558 (1): 033–052
https://www.mapress.com/pt/

Article

Q4

ISSN 1179-3155 (print edition)
PHYTOTAXA
ISSN 1179-3163 (online edition)

https://doi.org/10.11646/phytotaxa.558.1.2

Siamcapillus rubidus gen. et sp. nov. (Oculatellaceae), a novel filamentous cyanobacterium from Thailand based on molecular and morphological analyses

WITTAYA TAWONG[1,2,5*], PONGSANAT PONGCHAROEN[1,2,6], TOMOHIRO NISHIMURA[3,7] & WEERACHAI SAIJUNTHA[4,8]

[1] Department of Agricultural Sciences, Faculty of Agriculture Natural Resources and Environment, Naresuan University, Phitsanulok 65000, Thailand
[2] Center of Excellence in Research in Agricultural Biotechnology, Naresuan University, Phitsanulok 65000, Thailand
[3] Cawthron Institute, Nelson 7010, New Zealand
[4] Walai Rukhavej Botanical Research Institute, and Center of Excellence in Biodiversity Research, Mahasarakham University, Maha Sarakham 44150, Thailand

HELMINTHOLOGIA, 59, 1: 111 - 116, 2022

Q4

Research Note

Trematode infection in a freshwater snail *Hydrobioides nassa* (Gastropoda: Bithyniidae) in Thailand

S. TAPDARA[1], N. BUNCHOM[2], W. PILAP[2], C. TANTRAWATPAN[3], W. SAIJUNTHA[2,*]

[1]Clinical Pathology Laboratory, Amnatcharoen Hospital, Amnatcharoen 37000, Thailand; [2]Walai Rukhavej Botanical Research Institute, Mahasarakham University, Maha Sarakham 44150, Thailand, *E-mail: *weerachai.s@msu.ac.th*; [3]Division of Cell Biology, Department of Preclinical Sciences, Faculty of Medicine, and Center of Excellence in Stem Cell Research, Thammasat University, Rangsit Campus, Pathum Thani 12120, Thailand

Article info

Received November 25, 2021
Accepted March 19, 2022

Summary

1,024 individuals of *Hydrobioides nassa* were collected from 12 different localities in eight provinces from north, west, and central regions of Thailand. The infection of parasitic trematodes was investigated using shedding and crushing methods to search for cercariae and metacercariae. Trematode infection was found at a relatively low prevalence of 5.57%. Five different morphological types of cercariae were detected; xiphidio, monostome, mutabile, ophthalmoxiphidio, and microcercous, and three different morphological types of unknown metacercariae were observed. Microcercous cercariae of the lung fluke genus *Paragonimus* is reported here for the first time in a bithyniid snail. Our current finding show that *H. nassa* can serve as intermediate host for a range of parasitic trematodes in Thailand.

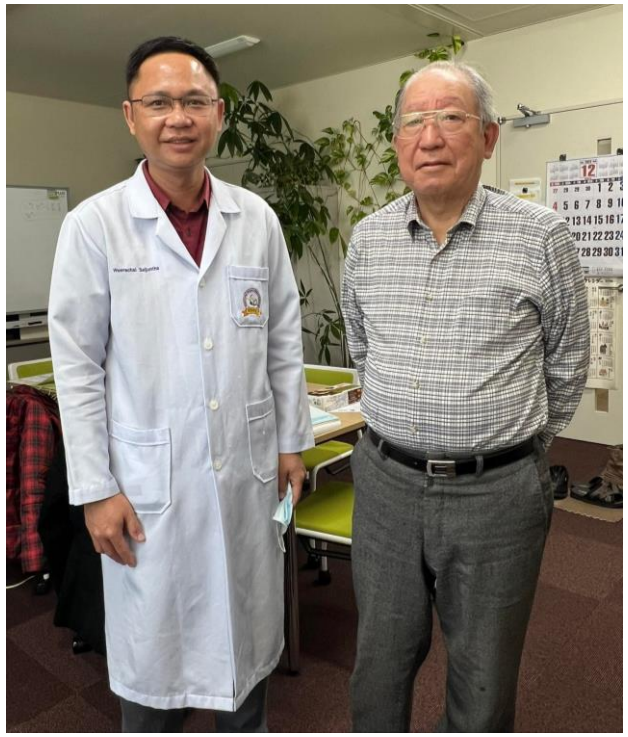
Keywords: Bithyniid; parasitic trematode; cercariae; shedding methods; crushing methods

Research activities

Visiting professor

Prof. Dr. Ross Andrews, Imperial College, London, visits WRBRI to extend research collaboration and conduct a workshop on tick research.

Short-term research in Japan



Assoc. Prof. Dr. Weerachai Saijuntha, head of CoEBiR, got a JSPS scholarship to do short-term research in Kochi Medical School, Kochi, JAPAN during 15 December, 2022 – 12 February, 2023.

Future plans

- Extending the national and international research collaborations.
- Applying for external grants, including national and international grants.
- Increasing the publication in high quality journal Q1 and Q2 of ISI database.
- Extending the research collaboration with multidisciplinary fields, such as agriculture, architecture, engineering, medical sciences, and social sciences.
- Focusing on research topics related to the sustainable utilization and conservation of biodiversity and local wisdom in northeastern Thailand.

Thank you for your kind attention