## Dr. Vivek Philip Cyriac

vivek.cyriac@gmail.com https://vivekcyriac.weebly.com/ Date of Birth: 15-Nov-1990 Centre for Ecological Science, Indian Institute of Science, CV Raman Rd, Bangalore, Karnataka, India. 560012. Phone: +917593978351

## Education

Aug 2014 – Aug 2019	School of Biology, Indian Institute of Science Education and Research
	Thiruvananthapuram: PhD, Evolutionary Ecology.
<i>Oct</i> 2011 – <i>Mar</i> 2014	Centre for Wildlife Studies, Kerala Veterinary and Animal Sciences
	University: Master of Science, Wildlife Biology, Kalpetta, India.
Aug 2008 – July 2011	St. Philomena's College, University of Mysore, Mysore:
	Bachelor of Science, Chemistry, Botany and Zoology, Mysore., India

# **Research Experience**

Feb 2021 – present	Postdoctoral Researcher
	Centre for Ecological Science, Indian Institute of Science, Bangalore
Aug 2014 – Aug2019	PhD Student
	School of Biology, Indian Institute of Science Education and Research,
	Thiruvananthapuram, India

# Activities

Research areas/skills Taxonomy & systematics, Molecular phylogenetics, Phylogenetic comparative methods, Macroevolution, Predator-prey interactions, Reptile behavioral ecology.

Surveys & Field workHerpetofaunal Survey of Wayanad Wildlife Sanctuary (2011), Silent Valley National<br/>Park (2011-2012), Shola National Parks (2013), Aaralam Wildlife Sanctuary (2013) and<br/>Parambikulam Tiger Reserve (2015) conducted for the Kerala Forest and Wildlife<br/>Department during 2011.

**Herpetofaunal Survey of Kottiyoor Reserve Forest** conducted for the Periyar Foundation during 2013 regarding the preparation of a **Management plan for the proposed Kottiyoor Wildlife Sanctuary**.

Herpetofaunal survey of Kattampalli Wetlands (Kannur, Kerala) conducted with the Malabar Awareness and Rescue Center (MARC) for the State Wetland Authority Kerala (SWAK) during 2019.

# Awards & Grants

Aug 2014 – Aug 2019	Fellowship: Ministry of Human Resource and Development (MHRD)
Nov 2016	Award: Dr. Chandrasekharan Memorial Award for outstanding research in
	Forest Ecology
July 2018	Travel Grant: Australian Society for the Study of Animal Behavior conference in
	Brisbane, Australia awarded by IISER Thiruvananthapuram.
September 2019	Full Travel Grant: 9th World Herpetology Congress 2020 in New Zeeland in
	January 2020, awarded by the Gans Collection and Charitable Fund.
Feb 2021 – Feb 2023	Fellowship: National Postdoctoral Fellowship, Science and Engineering
	Research Board (SERB), India.

#### **Other Academic Responsibilities**

Teaching Assistantship	Teaching Assistant for first and second year undergrad students in theory and practical courses on Evolution and Ecology (BIO111 and BIO211) at IISER Thiruvananthapuram during 2015–2016
Mentorship	Mentored three master's student's projects, three students on their minor projects, and five interns at IISER Thiruvananthapuram and three interns at IISc, Bangalore on several research projects.
Workshops/courses conducted	Conducted a two-day Workshop on <b>scientific writing</b> for Kerala Forest Research Institute in January 2020.
	Introduction to Herpetology module for M.S. students at the Centre for Wildlife Studies, College of Veterinary and Animal Science, Pookode, Wayanad in November 2021.
Committees	Invited as expert committee member for reptiles at KSBB- UNDP- GEF-India High range Mountain Landscape Project towards developing standardized protocol for biodiversity survey through citizen science for PBR updation (November 2019).
	Invited as expert member for reptiles by the Zoological Survey of India-WGRC towards preparation of Red Data book on terrestrial and fresh water fauna of Kerala for the Kerala State Biodiversity Board (September 2020 to present).
Citizen Science initiative	One of the core team members and founders of the <b>Shieldtail Mapping Project</b> , a citizen science initiative started in September 2021 in collaboration with India Biodiversity Portal. A primary goal of the project is to popularize the diversity of shieldtail snakes and use citizens as a data source to collect vital preliminary data on the poorly-studied fossorial and secretive shieldtail snakes.
Journal reviews	Reviewer for <b>Biological Journal of Linnean Society, Journal of Zoological</b> Systematics and Evolutionary Research, Vertebrate Zoology, Zootaxa and Records of the Zoological Survey of India.

## Submitted Manuscripts/Manuscripts in Preparation

- Goni B.\*,... V. P. Cyriac...[35 other authors], S. Meiri. Patterns and attributes of the world's rarest snakes. To be submitted to *Conservation Letters*.
- Sampaio F.L.\*, J. J. Day, M. Wickramasinghe, **V. P. Cyriac**, [11 other authors], D. J. Gower. A nearcomplete species-level molecular phylogeny of uropeltid snakes harnessing historical natural history collections as a DNA source. Submitted to *Molecular Phylogenetics and Evolution*.
- Cyriac V.P.\*, K. Bagde, L. Kumar & G. Martin. Should I stay or should I go: escape behaviour in Russell's viper, *Daboia russelii* (Shaw & Nodder, 1797) in India's agricultural landscapes. Submitted to *Animal Biology*.
- Cyriac V.P.\*, S. Dharwadkar, A. Mital & A.V. Mohan\*. 70 years of herpetology in India: insights into shifts in focal research areas and gender ratios among authors. Submitted to *Amphibia-Reptilia*.

## Journal Publications (peer-reviewed)

#### (\* indicates corresponding author, \$ indicates equal contributions)

- Pyron A.R.\*, **V.P. Cyriac**, S.R. Ganesh. A.K. Mallik, A. de Silva, A.N. Srikanthan & K. Shanker. First report of hemipenial variation among some genera and species of Shieldtail snakes (Serpentes: Uropeltidae). Accepted in *Ichthyology & Herpetology*.
- Cyriac V.P.\* & P.K. Umesh (2021). Natural History of the gecko *Hemidactylus prashadi* Smith, 1935: demography, spatial partitioning, diet, and reproduction in a human-altered habitat. *Herpetological Conservation and Biology*, 16 (2): 325–336.
- Sayyed A., V. P. Cyriac, A. Pradeshi, S. Sulakhe\* (2021). Dwarfs of the fortress: A new cryptic species of dwarf gecko of the genus *Cnemaspis* Strauch, 1887 (Squamata, Gekkonidae) from Rajgad fort in the northern Western Ghats of Maharashtra, India. *Evolutionary Systematics*, 5: 25–38.
- Sampaio F.L., S. Narayanan, V. P. Cyriac, V. Govindappa & D. J. Gower\* (2020). A new Indian species of *Rhinophis* Hemprich, 1820 closely related to *R. sanguineus* Beddome, 1863 (Serpentes: Uropeltidae). Zootaxa, 4881 (1): 001–024.
- Sayyed A\*\$, V. P. Cyriac<sup>\$</sup> & R. Dileepkumar (2020). A new cryptic species of *Cnemaspis* Strauch, 1887 (Squamata: Gekkonidae) belonging to the *C. littoralis* complex from Anakkal, Palakkad, Kerala, India. *Amphibian & Reptile Conservation*. 14 (13): 31–45 (e251).
- **Cyriac, V. P.\*** & U. Kodandaramaiah (2020). Warning signals promotes morphological diversification in fossorial uropeltid snakes. *Zoological Journal of the Linnean Society.* 191 (2): 468 481
- Cyriac, V. P.\*, M. J. Palot, K. Deuti & P. K. Umesh (2020). A preliminary 16s rRNA phylogeny of the Indian *Cnemaspis* Strauch, 1887 (Squamata: Gekkonidae) with description of two new cryptic species from the *C. wynadensis* clade. *Vertebrate Zoology*. 70 (2): 171 – 193.
- Cyriac, V. P., S. Narayanan, P. K. Umesh, F. L. Sampaio & D. J. Gower\* (2020). A new species of *Rhinophis* Hemprich, 1820 (Serpentes: Uropeltidae) from the Wayanad region of peninsular India. *Zootaxa*. 4778 (2): 329–342
- Cyriac, V. P.\* & U. Kodandaramaiah (2019). Conspicuous colours reduce predation rates in fossorial uropeltid snakes. *PeerJ.* 7:e7508 doi: 10.7717/peerj.7508.
- Cyriac, V. P.\*, & U. Kodandaramaiah (2019). Don't waste your time: Predators avoid prey with conspicuous colours that signal long handling time. *Evolutionary Ecology*. doi: <u>https://doi.org/10.1007/s10682-019-09998-9</u>.
- **Cyriac, V. P.\***, A. Johny, P. K. Umesh, M. J. Palot & P. D. Campbell (2019). Rediscovery of *Cnemaspis nilagirica* Manamendra-Arachchi, Batuwita and Pethiyagoda, 2007 (Squamata: Gekkonidae) from Kerala, India with notes on its morphology and distribution. *Zootaxa*. 4586 (1): 98-108.
- Cyriac, V. P.\*, A. Johny, P. K. Umesh, & M. J. Palot (2018). Description of two new species of *Cnemaspis* Strauch, 1887 (Squamata: Gekkonidae) from the Western Ghats of Kerala, India. *Zootaxa*. 4459 (1): 085–100

- **Cyriac, V. P.\***, & U. Kodandaramaiah (2018). Digging their own macroevolutionary grave: fossoriality as an evolutionary dead-end in snakes. *Journal of Evolutionary Biology*. 31(4):587-598. doi: 10.1111/jeb.13248.
- Cyriac, V. P.\*, & U. Kodandaramaiah (2017). Paleoclimate determines diversification patterns in the fossorial snake family Uropeltidae Cuvier, 1829. *Molecular Phylogenetics and Evolution*, 116, 97-107. <u>http://dx.doi.org/10.1016/j.ympev.2017.08.017</u>.
- Zachariah A, V.P. Cyriac, B. Chandramohan, B.R. Ansil, J. Mathew, D.V. Raju & R. K. Abraham\* (2016). Two new species of *Raorchestes* (Anura: Rhacophoridae) from the Silent Valley National Park in the Nilgiri Hills of the Western Ghats, India. *Salamandra*. 52(2): 63–76.
- Abraham, R.K\*., M. Jobin, V. P. Cyriac, A. Zachariah, D. V. Raju & A. Zachariah. (2015). A novel third species of the Western Ghats endemic genus *Ghatixalus* (Anura: Rhacophoridae), with description of its tadpole. *Zootaxa*, 4048 (1): 101-113. <u>http://dx.doi.org/10.11646/zootaxa.4048.1.6</u>.
- Abraham, R.K.\*, A. Zachariah & V. P. Cyriac. (2015). A reappraisal of the rhacophorid bush frog *Raorchestes flaviventris* (Boulenger, 1882), with an evaluation of the taxonomic status of *R. emeraldi* Vijayakumar, Dinesh, Prabhu and Shankar, 2014. *Zootaxa*, 4048 (1): 090-100. http://dx.doi.org/10.11646/zootaxa.4048.1.5.
- Cyriac, V.P.\* & P.K. Umesh. (2014). Description of a new ground-dwelling *Cnemaspis* Strauch, 1887 (Squamata: Gekkonidae) from Kerala, allied to *C. wynadensis* (Beddome, 1870). *Russian Journal of Herpetology*, 21 (3): 187-194.
- Cyriac V.P.\* & P.K. Umesh. (2013). Current status of *Cnemaspis littoralis* (Jerdon, 1853) (Sauria: Gekkonidae) with designation of a neotype. *Taprobanica*, 5 (1): 36-43. http://dx.doi.org/10.4038/tapro.v5i1.5660.

## **Conference Proceedings**

- Vivek Philip Cyriac: *Warning colours promote morphological diversification in fossorial uropeltid snakes;* 9<sup>th</sup> World Congress of Herpetology (WCH9), Dunadin, New Zealand; 2020.
- **Vivek Philip Cyriac:** *Digging into the evolution of conspicuous colourations in the fossorial snake family Uropeltidae;* **Annual meeting of the Australian Society for the Study of Animal Behavior** (ASSAB), Brisbane, Australia; 2018.
- Vivek Philip Cyriac: Herpetofaunal Diversity of Wayanad District, Kerala; National level Workshop on Biosystematics – Taxonomic awareness in the current biotechnological scenario, St. Philomena's College, Mysore; 2010
- Vivek Philip Cyriac: *Herpetofaunal Diversity around Mysore City*. State level seminar on Biosystematics and conservation, S. Nijalingappa College, Bangalore; 2009
- Vivek Philip Cyriac\*, A.N. Srikanthan: *Report of Typhlops thurstoni from Wayanad District, Kerala*. National Seminar on Current Research in Herpetology, North Orissa University, Baripada, Orissa; 2009

## **Poster Presentations**

- Vivek Philip Cyriac\*, P.K. Umesh: Preliminary Observations on the Population structure of Hemidactylus prashadi Smith, 1935 using Individual Photo Identification Technique. SERB, Second School of Herpetology, Madras Crocodile Bank Trust, Chennai, India; 12/2014
- **Vivek Philip Cyriac\***, U. Kodandaramaiah: *Digging into the temporal diversification of the fossorial snake family Uropeltidae*. **Third Bangalore school on population genetics** 2018, International Centre for Theoretical Science (ICTS), India; 03/2014

# **Technical Reports (non-peer-reviewed)**

- Cyriac V.P. (2011). An Assessment of the Reptile Diversity of Wayanad Wildlife Sanctuary. **Report** submitted to the Kerala Forest and Wildlife Department.
- Zachariah, A., B.R. Ansil, R.K. Abraham, D.V. Raju, S. Das, P.K. Umesh & V.P. Cyriac\*. (2012). An Interim Report of the Amphibians and Reptiles of Silent Valley National Park. Report submitted to the Kerala Forest and Wildlife Department
- Palot, M.J., P.K. Umesh & V. P. Cyriac. (2021). Assessing the conservation status of the reptiles of Kerala. Interim report submitted to the Zoological Survey of India and Kerala State Biodiversity Board.

# Popular Articles (non-peer-reviewed/lay-peer-edited)

**Cyriac V.P.** (2019). Digging into Evolutionary Time: Extinctions in the Fossorial Shieldtail Snakes. *Current Conservation (Research in Translation)* (<u>link</u>).

**Cyriac V.P.** (2018). Are burrowing snakes digging their own evolutionary grave? *TheScienceBreaker*, <u>https://doi.org/10.25250/thescbr.brk147</u>.

Roshnath, R. & V.P. Cyriac\*. (2013). Way Back Home — Butterfly Roadkills. Zoo's Print, 28 (12): 18-20.

**Cyriac V.P.**\*, C.P. Arjun & K.J. Tijo. (2011) Occurrence of the Anaimalai Gecko *Hemidactylus anamallensis* Gunther, 1875 from Chembra, Wayanad, Kerala. *Malabar Trogon*, 9 (3): 20-21.

Cyriac V.P.\* (2010). Pit vipers of the Western Ghats. Conservation Review, 1 (2): 4.

## **Professional References**

1. Dr. Ullasa Kodandaramaiah (PhD supervisor)

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2. Dr. Kartik Shanker (Postdoc mentor) Professor, Centre for Ecological Sciences, Indian Institute of Science, Bangalore, India Email: kshanker@iisc.ac.in