# **Prof. Anand S. Dixit**

**Curriculum Vitae** 

**Designation**: Professor

**Born** : 21<sup>st</sup> July 1958

**Address**: Department of Zoology, North-Eastern Hill University, Shillong- 793022,

Meghalaya.

**Email** : asdixitnehu@rediffmail.com, asdixitnehu@gmail.com; Cell: 9436312383.

**Qualification**: Ph.D. (1987): Banaras Hindu University, Varanasi.

### **Honours:**

# a) As faculty

 Vice-President and Executive committee Member: Indian Society for Chronobiology, 2013-2023.

- Vice- President: Association of Avian Biologists in India, 2018-2023.
- Subject Expert: Selection Committees for recruitment and promotion of faculty in many Indian Universities, State commissions and Colleges.
- Evaluator of research projects submitted to various funding agencies of Govt. of India like DST, Ministry of Environment and Forest etc.
- Member of the PG e pathsala team to develop e content for Zoology (Chronobiology) under UGC National Mission on Education through ICT (NME-ICT) Project.
- Reviewer for the development of NCERT Textbook in Biology (Class XII), 2006.
- Peer reviewer of various National and International Journals viz. J. Exp. Biol., Ind. J. Exp. Biol., Chronobiol. Int., Photochem. & Photobiol. Sci., Comp. Biochem. Physiol., etc.
- Editorial board member: Global Journal of Zoology, International Journal of Research Studies in Zoology, The NEHU journal etc.
- Ph. D. examiner in Zoology for number of Indian Universities including B.H.U., D.U, A.U., L.U., Meerut Univ., M.U. JNVU etc.
- Member: DST-National Planning Committee for SERB School in Chronobiology, 2010-15.
- Coordinator: DST-SERB School in Chronobiology, Shillong, 2009, 2012.
- Faculty: DST-SERC/SERB School in Chronobiology (2009-15).
- Coordinator: 3<sup>rd</sup> DST-SERB School in Avian Biology, Shillong, 2015.
- Member: National Coordination Committee, International Congress on Chronobiology, Dept. Zoology, Delhi University, 2012.
- Member: Organizing Committee, 96<sup>th</sup> Indian Science Congress, NEHU, Shillong, 2009.
- Moderator and evaluator of Zoology paper in Civil Services Examination, 2002.

### b) As student

- Research Associate, CSIR, Dept. of Zoology, B.H.U., May 1988- August 1990.
- Sr. Research Fellow, CSIR, Dept. of Zoology, B.H.U., January 1986- April 1988.
- Sr. Research Fellow, UGC-SAP, Dept. of Zoology, B.H.U., March 1985- December 1985.
- Jr. Research Fellow, UGC-SAP, Dept. Zoology, B.H.U., April 1983- February 1985.
- Certificate of Merit for best research paper and presentation, 71st ISCA, Ranchi, 1984.
- B.H.U. Research Scholarship, April 1981- March 1983.
- Dependent of Freedom Fighter Scholarship 1970 to 1975.

# **Teaching Experience:** About 32 years (Since August 1990).

- Professor, Dept. of Zoology, North-Eastern Hill University, 01.01.2012 till date.
- Associate Professor, Dept. of Zoology, North-Eastern Hill University, 27. 2. 2006-31.12.2011.
- Reader, Centre for Environmental Studies, North Eastern- Hill University, 1.12.2004-26.2.2006 later designated as Associate Professor from 1.1.2006.
- Reader, Dept. of Zoology, P.U.C., North Eastern- Hill University, 6.8.1999- 30.11.2004.
- Lecturer (Senior Scale), Dept. of Zoology, P. U. C, North -Eastern Hill University, 6.8.1995- 5.8.1999.
- Lecturer, Dept. of Zoology, P.U.C, North Eastern- Hill University, 6.8.1990- 5.8.1995.

### **Administrative Responsibilities:**

- Director: Internal Quality Assurance Cell (IQAC), North-Eastern Hill University, Shillong, 25.02.2021 to 21.09 2023.
- Chairman, Committee on Memorandum of Understanding, North-Eastern Hill University, Shillong from 11.02.2021 till date.
- Member, Planning Committee, North Eastern Hill University, Shillong. from March 2022 for three years.
- Observer, National testing Agency, Dept. of Higher Education, Ministry of Education, Govt. of India for JEE Main, NEET and CSIR-UGC NET etc.
- Member, Planning Committee, North Eastern Hill University, Shillong,14.02.2022-13.02 2025.
- Member: Internal Quality Assurance Cell (IQAC), North-Eastern Hill University, Shillong, 29.05. 2017- 24.02.2021.
- Member: Committee on National Institutional Ranking Framework (NIRF), North-Eastern Hill University, Shillong, 21.10.2016- till date.
- Member, Task Force for the implementation of Nation Education Policy, 2020, North Eastern Hill University.
- Member: Academic Council, North-Eastern Hill University, Shillong, 01.01.2012 till date.

- Member: Board of Research Studies, North-Eastern Hill University, Shillong, 1.8.2010 till date.
- Member: University Court, North-Eastern Hill University, Shillong, 01.01.2012 till date.
- Member, Board of studies in Medical and Nursing, North Eastern Indira Gandhi Institute of Health and Medical Sciences, Shillong till 2023.
- Member, Governing Body, Umshyrpi College, Shillong, 18.08.2020- 17.08.2023.
- Member, Advisory Board of DBT sponsored BioNest Bioincubator Centre, North Eastern Hill University, Tura Campus, 24.09. 2021- 24.09.2022.
- Member, Governing Body, St. Francis D' Assisi College, Nongstoin, 2017-2020.
- Chaiman, Interview Board, Kendriya Vidyalaya Sangathan, MHRD, Govt. of India, 26.03.2018.
- Chairman, NEHU visiting team for affiliation of PG courses of North Eastern Indira Gandhi Institute of Health and Medical Sciences, Shillong, 4<sup>th</sup> September, 2019.
- Chairman, NEHU visiting team for grant of permission to open Bachelor and Master in Optometry at Bansara Institute of Opthalamic sciences, Shillong, 9<sup>th</sup> October, 2020.
- Member, Advisory Committee for DSA Phase III, UGC-SAP, Dept. of Zoology, NEHU, Shillong, 2018-2023.
- Member: Board of Studies in Zoology, North-Eastern Hill University, Shillong, 1.8.2010 till date.
- Member, Advisory Committee for DSA Phase III, UGC-SAP, Dept. Zoology, NEHU, Shillong, 2018 to 2023.
- Member: Board of Studies in Physics, North-Eastern Hill University, Shillong, 14.01. 2021-13.01.2024.
- Member: Board of Studies in Geology, North-Eastern Hill University, Shillong, 02.03.2021-01.03.24.
- Member: School Board, life Sciences, North-Eastern Hill University, Shillong, 6.8.2008-5.8. 2010 and from 01.01.2012 till date.
- Member: Board of Post Graduate Studies in Zoology, North-Eastern Hill University, Shillong, 28.5.2007- 27.5. 2015.
- Member: Board of Under Graduate Studies in Pisciculture, North-Eastern Hill University, Shillong from 11.8. 2010- 10.8. 2012.
- Chaiman, Interview Board, Kendriya Vidyalaya Sangathan, MHRD, Govt. of India, 26.03.2018.
- Member: Vidyalaya Management Committee, Kendriya Vidyalaya, NEHU, Shillong, 2009-2010.

**Research Experience:** About 40 years (Since March 1981)

### **Research focus:**

Cycles in biological systems are all pervasive in Nature. Birds like any other species express daily rhythms in activity/rest, hormone secretion and several other rhythmic characteristics. Most bird species also show long-term cycles in feeding behavior, body fattening

(in migrants), reproduction, moult, or migration. Both daily and seasonal behaviors are under the strict control of the endogenous clock mechanisms, but the role of environment remains critical for optimal performance and ultimately the survival. Synchrony with the environment is achieved through interaction of clock component with external cues (e.g. photoperiod), and internal coordination among different rhythmic physiological correlates is achieved through neural and endocrine signaling. Thus, we are interested to learn about how birds achieve precision in timing their daily and seasonal activities in synchrony with the periodic environment. Our research effort mainly centers around the "Avian Circadian and Seasonal Systems: Study from Behavior to Molecules". The working hypothesis has been that specialized cells localized in different tissues express genes involved in the clock circuitry, and different cell populations control the food intake, body fattening, reproductive axis, molt and migration, in a way that each event can be timed and spaced with each other to optimize an ecological adaptation.

#### **Research Themes:**

- Clocks controlled daily and seasonal reproductive and associated behaviors.
- Neurobiology of seasonal behaviors. Neuronal changes in the brain in response to seasonality and hormone status. Hormonal modulation of brain functions.
- Hypothalamic expressions and roles of GnIH, GnRH-I, TSH $\beta$ , Dio2 and Dio3 in photoperiodic regulation of avian seasonality.
- Endocrinology of seasonal reproduction and related behaviors (with reference to hormones of HPG axis).
- Physiology of reproduction and migration.
- Metabolism: glucose uptake studies in response to daily and seasonal changes.
- Endocrinology of free-living birds. Measurement of hormones and recording of their behavioral changes.
- Clock and metabolism using migratory birds as model systems.
- Life style patterns and biological clock mediated functions in human.

**Model systems:** Non-migratory and migratory songbirds.

# Techniques we use:

- Monitoring of activity rest rhythm and feeding behavior by using chronobiology softwares.
- Anatomical modifications in the brain in relation to seasons and physiological status.
- ELISA.
- Immunohistochemistry.
- PCR and Real time quantitative PCR.

- Laparotomy and other approaches used for studying photoperiodism and seasonal reproduction.
- Non-invasive study of seasonality (feather regeneration and molt, body fattening, food intake, plumage and bill color scores etc.).

# **Research Projects (Principal Investigator):**

- 1. Principal investigator of DST project entitled "Role of proximate factors in timing the seasonal breeding in Passeriformes finches of North-East", Department of Science and Technology (DST), Govt. of India, New Delhi (2008- 2011), Rs. 37,96,497/-.
- 2. Principal investigator of DST project entitled "Role of kisspeptin and GnIH in regulation of seasonal breeding in the tree sparrow", Department of Science and Technology (DST), Gov.of India, New Delhi (2013-2016), Rs. 48,91,276/-.
- 3. Principal investigator of DBT project entitled "Anticipation in genes: Molecular, physiological and behavioral correlates of response of circa-annual clocks to seasons in night-migratory songbirds: Investigation of physiological and metabolic adaptations in migrants", Department of Biotechnology (DBT), Govt. of India, New Delhi (2013-2018), 69,88,400/-.
- 4. Principal investigator of DBT project entitled "Effect of climate change on breeding strategies of songbirds", Department of Biotechnology, DBT Twining, Govt. of India, New Delhi (2016-2019), Rs. 45,27,840/-, Principal investigator. 5.
- 5. Principal Investigator: UPE project, North Eastern Hill University, Shillong.

### **Research Supervision:**

Nine students. Five students have been awarded Ph.D. degree and four students have completed research work and are in the process of submission of thesis.

## **Membership of Scientific Societies:**

- Life and Executive Committee Member, Indian Society for Chronobiology.
- Life and Executive Committee Member, Association of Avian Biologists in India.
- Member: International Society for Chronobiology.
- Member: DST National Planning Committee, SERB School in Chronobiology,
  Department of Science and Technology (DST), New Delhi (2009- 2015).
- Member: International Ornithological Society.

### Participation in the scientific meetings/ Conferences / symposia/ workshops/ training courses:

- Attended and delivered an invited talk in "International Conference on Chronobiology ICC 2021", JNCASR, Bangalore, July 15<sup>th</sup> -17<sup>th</sup>, 2021.
- Organized a National Webinar on "National Education Policy, 2020" as coordinator, IQAC, NEHU, Shillong, 19<sup>th</sup> June, 2021.
- Attended and chaired a session in "International colloquium on Regulatory mechanisms underlying Behavior, Physiology and Development", Dept. Zoology, University of Delhi, Delhi, March 24<sup>th</sup>-26<sup>th</sup>, 2021.
- Attended "Annual Seasonality Symposium 2020, supported by J. Neurobiology, UK, October 2<sup>nd</sup>, 2020.
- Chaired a session in the "National Symposium on Recent Trends in Zoological Sciences",
  Dept. Zoology, NEHU, Shillong, February 28-29, 2020.
- Attended online "International Symposium on Annual Seasonality", October 02, 2020.
- Chaired a session and delivered an invited talk in the "2<sup>nd</sup> National Symposium on Avian Biology", ISSER, Tirupati, November 07-10, 2019.
- Chaired a session and delivered an invited talk in the "International Symposium on Biological Rhythms", Dept. of Zoology, Ch. Charan Singh University, Meerut, March 11-13, 2019.
- Delivered lecture as faculty in the workshop on "Time, Brain and Behavior", Dept. of Zoology, Ch. Charan Singh University, Meerut, March 6-10, 2019.
- Chaired a session and delivered an invited talk in the National Symposium on Avian Biology, Dept. of Zoology, Mizoram University, Aizawl, October 22-24, 2018.
- Delivered an invited lecture on Research Methodology, University of Science, Technology and Management, Meghalaya, May, 2018.
- Delivered an invited lecture in the "Workshop on mechanism of adaptation in the temporal environment", Dept. of Zoology, Mizoram University, Mizoram, May 22-23, 2017.
- Chaired a session and delivered a lecture in "Indo-US Workshop & International Symposium on Biological Timing and Health Issues in the 21<sup>st</sup> Century", Department of Zoology, February 21-24, 2017, University of Delhi, Delhi.
- Delivered an invited lecture on "Human Reproduction" in the Dept. of Philosophy, NEHU, Shillong, 2017.
- Delivered an invited lecture in the "XXVI National Symposium on Chronobiology", Dept. of Studies in Zoology, University of Mysore, Mysore, June 02-03, 2016.
- Delivered an invited lecture in the Dept. of Zoology, University of Science and Technology, Meghalaya, 2016.
- Presented research paper in the "Cold Spring Harbor Asia meeting on Biological rhythms", Cold Spring Harbor Laboratory, Suzhou, China, October 26-30, 2015.
- Delivered lectures as faculty in the "3<sup>rd</sup> DST-SERB School in Avian Biology", Dept. of Zoology, NEHU, Shillong, September 27 to October 11, 2015.
- Chaired a session and delivered an invited lecture in the "XXV National Symposium on Chronobiology-Time in Biology & Medicine", School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, March 27-29, 2015.

- Attended "2<sup>nd</sup> SERB School In Avian Biology", Dept. of Zoology and Environmental Sciences, Gurukul Kangri Vishwavidyalaya, Haridwar, March 08-21, 2015.
- Chaired a session in the "International Conference on Molecular Signaling: Recent Trends in Biosciences", Dept. of Zoology, NEHU, Shillong, November 20-22, 2015.
- Delivered lectures as faculty in the "DST-SERB School in Chronobiology", Mangalore University, Mangalore, December 22, 2014 to January 04, 2015.
- Attended and presented research paper in the "26th International Ornithological Congress",
  Rikkyo University, Tokyo, Japan, August 18-24, 2014.
- Attended "National symposium on advances in Zoology: Faunal diversity and Ecophysiology", North-Eastern-Hill University, Shillong, March 13-14, 2008.
- Delivered lectures in the "Refresher Course in Zoology", North-Eastern Hill University, Shillong, 2007.
- Delivered lecture in the "Training programme on Capacity Building of Functionaries in Environmental Education and Disaster Management" NERIE, NCERT, Shillong, 2006.
- Attended "XVIII National Symposium on Chronobiology", North-Eastern Hill University, Shillong, November 8-10, 2006.
- Attended "Seminar on Academic Wildlife Research and Its Relevance in Wildlife Management: New initiatives on strengthening research on wildlife in India and North East India in particular", Guwahati University, Guwahati, November 1, 2006.
- Attended "Regional Symposium on Research Thrust in Animal Sciences in N. E. Region-An Appraisal", North-Eastern Hill University, Shillong, March 24-25, 2006.
- Delivered Lecture in the "Refresher course in Geography", Mizoram University, Aizawl, 2001.

# Training/Workshop/Summer School organized:

- Coordinator, Refresher Course in Zoology, Department of Zoology, North- Eastern Hill University, Shillong, March 18- April, 2019.
- Organized a National Webinar on "National Education Policy, 2020" as coordinator, IQAC, NEHU, Shillong, 19<sup>th</sup> June, 2021.
- Organising Secretary, Symposium on Faunal Diversity and Ecophysiology at Department of Zoology, NEHU, Shillong, March 30, 2016.
- Coordinator, 3<sup>rd</sup> DST-SERB School in Avian Biology, , Department of Zoology, NEHU, Shillong, September 27- October 11, 2015.
- Organizing committee member, 2<sup>nd</sup> SERB School In Avian Biology, Department of Zoology and Environmental Sciences, Gurukula Kangri Vishwavidyalaya, Haridwar, March 08-21, 2015.
- Planning committee member, DST-SERB School in Chronobiology, Department of Biosciences, Mangalore University, Mangalore, December 22, 2014 January 04, 2015.
- Planning committee member, DST-SERC School in Chronobiology, JNCASR, Bengaluru, June 16 -30, 2013.

- Coordinator, DST-SERB School in Chronobiology, NEHU, Shillong, June 20- July 03, 2012.
- Planning committee member, DST-SERC School in Chronobiology, CCS University, Meerut, October 01- 14, 2011.
- Coordinator, SERC School in Chronobiology, Department of Zoology, NEHU, Shillong, June 06-20, 2009.
- Organizing Committee Member, 96<sup>th</sup> Indian Science Congress, NEHU, Shillong, 2009.

- 1. **A.S. Dixit**, S. Byrsat and B. Kataki (2022). Hypothalamic expression of GnRH-I and GnIH in the Eurasian tree sparrow over a single long day. Photochem. & Photobiol. Sci., doi: 10.1007/s43630-021-00143-6, **IF: 3.98.**
- 2. **A.S. Dixit**, R. Chetri and N.S. Singh (2022). Utilization of biomolecules as fuel energy and their physiological mechanism during migration in birds- A review. J. Environ. Biol. 43:1-10. **IF: 0.78.**
- 3. V. Siammawii, A. D. Tariang, L. Muansanga, F. Malsawmdawngliana, D. Khanikar, **A.S. Dixit** and H.T. Lalremsanga (2022). Larval oral morphology of *Fejervarya multistriata* (Hallowell, 1861) from Mizoram, Northeast India. *SAURIA*, Berlin, 44(3):61-62
- 4. N.S. Singh, **A.S. Dixit** and D. Khanikar (2021). Morphological and ultrastructural studies of pectin in the Eurasian tree sparrow. Microscopy & Microanalysis, doi:10.1017/S1431927621012885: 1-9. **IF: 4.13.**
- 5. **A.S. Dixit**, D. Khanikar and B. Kataki (2021). Environmental control of reproduction and related behaviours in song birds. In: Advances in Environmental Research (ed. Justin A. Daniels), Nova Science publishers, Inc. (USA), Vol.84, DOI: https://doi.org/10.52305/GQSU4556.
- 6. **A.S. Dixit**, S. Byrsat and N. S. Singh (2021). Avian diversity of North-Eastern Hill University campus, Shillong and need for its conservation., J. Exp. Zool. India, 24: 1395-1402.
- 7. **A.S. Dixit**, S. Byrsat and N.S. Singh (2020). Circadian rhythm in photoperiodic expressions of GnRH-I and GnIH regulating seasonal reproduction in the Eurasian tree sparrow, *Passer montanus*. J. Photochem. & Photobiol., B: Biology, 211: 111993. **IF: 6.44.**
- 8. **A.S. Dixit**, and N.S. Singh (2020). Circadian versus circannual rhythm in the photoperiodic programming of seasonal responses in Eurasian tree sparrow (*Passer montanus*). Photochem. & Photobiol. Sci., 19: 371-381. **IF. 2.89.**
- 9. **A.S. Dixit**, D. Khanikar and B. Kataki (2020). Photic and nonphotic cues in regulation of seasonal reproduction in birds. The NEHU journal, 18: 61-82.
- 10. **A.S. Dixit** and S. Byrsat (2018). Photoperiodic control of GnRH-I expression in seasonal reproduction of the Eurasian tree sparrow. Photochem. & Photobiol. Sci., 17: 934-945. **IF: 2.96.**

- 11. **A.S. Dixit**, I. Bamon and N.S. Singh (2018). Temperature modulates photoperiodic seasonal responses in the subtropical tree sparrow, *Passer montanus*. J. Comp. Physiol. A, 204: 721-735. **IF: 2.43.**
- 12. **A.S. Dixit**, N.S. Singh and S. Byrsat (2017). Role of GnIH in photoperiodic regulation of seasonal reproduction in the Eurasian tree sparrow. J. exp. Biol., 220: 3742-3750. **IF: 3.32.**
- 13. **A.S. Dixit**, N.S. Singh and I. Bamon (2017). Photoperiodic time measurement and photoentrainment of circadian locomotor activity rhythm in subtropical tree sparrow. Photochem. & Photobiol. Sci., 16: 1146-1152. **IF: 2.96.**
- 14. **A.S. Dixit**, N. J. Gupta, V. Dwivedi and S.K. Bhardwaj (2017). Control of annual gonadal cycles in Indian songbirds. Biol. Rhythm Res., 48(5): 701-721. **IF: 0.69.**
- 15. A.K. Trivedi, D. Singh, **A.S. Dixit** and V. Kumar (2017). Pineal gland, melatonin and timekeeping in non-mammalian vertebrates: Avian perspective. In: Biological Timekeeping: Clocks, Rhythms and Behaviour (ed. V. Kumar), Springer (India), DOI 10.1007/978-81-322-3688-7\_25, pp. 521-541.
- 16. **A.S. Dixit**, I. Bamon, S. Byrsat and R. Chetri (2017). Human circadian rhythms and their health implications. The NEHU J., Vol. XIII, No.1:97-118.
- 17. **A.S. Dixit** and N.S. Singh (2016). Seasonality in circadian locomotor activity and serum testosterone level in subtropical tree sparrow (*Passer montanus*). J. Photochem. Photobiol., B :biology, 158: 61-68. **IF: 2.96.**
- 18. N.S. Singh, I. Bamon and **A.S. Dixit** (2015). Structural variations and their adaptive significance in the bones of some migratory and resident birds. J. Basic and Appli. Zool.,70: 33-40.
- 19. **A.S. Dixit**, N.S. Singh and R. Sougrakpam (2014). A comparative study on photoperiodic control of seasonal cycles in the females of migratory yellow-breasted bunting and the resident tree sparrow. Photochem. Photobiol. Sci., 13: 1568-1579, **IF: 2.99.**
- 20. **A.S. Dixit** and N.S. Singh (2014). Photoperiodic control of testicular growth, histomorphology and serum testosterone levels in the male tree sparrow: Involvement of circadian rhythm. Gen. Comp. Endocrinol., 208: 5-11. **IF: 2.6.**
- 21. N.S. Singh and **A.S. Dixit** (2014). Morphology and ultrastructural studies of pineal organ of the tree sparrow (*Passer montanus*). Micron, 58: 9-14. **IF: 1.9.**
- 22. N.S. Singh and **A.S. Dixit** (2014). Participation of endogenous circadian rhythm in photoperiodic time measurement during ovarian responses of the subtropical tree sparrow, *Passer montanus*. Ind. J. Exp. Biol., 52(5): 1-7. **IF: 1.2.**
- 23. **A.S. Dixit** and R.Sougrakpam (2013). Photoperiodic regulation of seasonal reproduction, molt and body weight in the migratory male yellow-breasted bunting (*Emberiza aureola*). Anim. Repro. Sci., 141:98-108. **IF: 2.04.**

- 24. **A.S. Dixit** and N.S. Singh (2013). Environmental control of seasonal reproduction in the wild and captive Eurasian Tree Sparrow (*Passer montanus*) with respect to variations in gonadal mass, histology and sex steroids. Can. J. Zool., 91: 302-312, **IF: 1.52.**
- 25. **A.S. Dixit** and R. Sougrakpam (2012). Circadian rhythmicity in photoperiodic regulation of reproductive responses in the Yellow-breasted bunting. Biol. Rhythm. Res., 44(4): 589-600. **IF: 0.8.**
- 26. **A.S. Dixit** and N.S. Singh (2012). Seasonal variation in sensitivity of the photoperiodic response system in the subtropical tree sparrow (*Passer montanus*). J. Exp. Zool., 9999A: 1-12. **IF: 3.36.**
- 27. **A.S. Dixit** and N.S. Singh (2012). Photoperiod and circadian rhythmicity in testicular response of the tree sparrow. Biol. Rhythm Res., 44(3): 369-376. **IF: 0.8.**
- 28. N.S. Singh and **A.S. Dixit** (2012). Involvement of endogenous circadian rhythm in photoperiodic ovarian response of subtropical tree sparrow, *Passer montanus*. IMRJ. 2(2): 66-72.
- 29. **A.S. Dixit** and N.S. Singh (2011). Photoperiod as a proximate factor in control of seasonality in the subtropical male tree sparrow, *Passer montanus*. Front. Zool., 8:1-12, **IF:4.46.**
- 30. N.S. Singh, **A.S. Dixit** and R. Sougrakpam (2011). A report on the presence of three avian lice (Insecta: Phthiraptera) in different regions of North-East India. JBNHS, 108 (1): 65-67.
- 31. **A.S. Dixit** (2011). Photoperiod and Biological Rhythms in Regulation of Avian Reproduction. In: Perspectives in Animal Ecology and Reproduction (eds. V. K. Gupta, A. K. Verma and G. D. Singh), Daya Publication, Delhi, pp. 348-377.
- 32. **A.S. Dixit** and M.K. Satapathy (2007). Biodiversity and its conservation strategies for sustainable development. In: Edu. Environment and Sustainable Development (ed. M.K. Satapathy), Shipra publications, Delhi, pp. 122-139.
- 33. A.S. Dixit (2004). Potentials of Biological Rhythms. Science Vision, 4(3): 29-33.
- 34. **A.S. Dixit** (2002). Environmental control of annual Reproductive and body weight cycles in female rosefinch and yellow-throated sparrow. J. Exp. Zool. India, 5(2): 207-216.
- 35. **A.S. Dixit** (2002). Importance of Living avian resources. In: Biological and Biotechnological Resources (eds. G. Tripathi and Y.C. Tripathi), Campus Books, New Delhi, pp. 303-312.
- 36. **A.S. Dixit** (2001). Photoperiodic Control of Reproduction in Birds. In: Current Topics in Environmental Sciences (eds. G. Tripathi and G.C. Pandey), ABD Publishers, Jaipur, pp 368-384.
- 37. **A.S. Dixit** (1991). Mechanism involved in photoinduced ovarian growth in Yellow-throated Sparrow (*Gymnorhis xanthocollis*). Ind. J. Zool., 39: 86-89.

- 38. **A.S. Dixit**, P. M. Tripathi and P.D. Tewary (1991). Control of bill coloration in the Yellow-throated Sparrow (*Gymnorhis xanthocollis*). Bull. Pure & Appl. Sci., 86: 104-107.
- 39. **A.S. Dixit** and P.D. Tewary (1989). Involvement of Circadian rhythm in photoperiodic ovarian response of the Yellow-throated Sparrow (*Gynorhis xanthocollis*). J. Exp. Biol., 143:411-418, **IF: 3.04.**
- 40. **A.S. Dixit** and P.D. Tewary (1989). Photoperiodic ovarian response in Yellow-throated Sparrow (*Gymnorhis xanthocollis*): involvement of circadian rhythm, Acta Physiol. Hung., 73(4): 455-460, **IF: 0.75.**
- 41. **A.S. Dixit** (1989). Circadian periodicity and the termination of photo refractoriness in the female Yellow-throated Sparrow (*Gymnorhis xanthocollis*). Zool. Sci., 6:129-134, **IF: 0.82.**
- 42. P.D. Tewary and **A.S. Dixit** (1988). Circadian periodicity in photoperiodic ovarian response of the Rosefinch (*Carpodacus erythrinus*). Zool. Jb. Physiol., 92:71-76.
- 43. P.D. Tewary and **A. S. Dixit** (1986). Photoperiodic regulation of reproduction in subtropical female Yellow-throated Sparrow (*Gymnorhis xanthocollis*). Condor, 88:70-73, **IF: 1.290.**
- 44. V. Kumar, P. D. Tewary and **A. S. Dixit** (1985). Participation of circadian component in the photoperiodic mechanism of Black-headed Bunting (*Emberiza melanocephala*). Anim. Reprod. Sci., 9:375-382, **IF: 2.036.**
- 45. P.D. Tewary, **A.S. Dixit** and B.K. Tripathi (1984). Circadian basis of photoperiodic ovarian response in the passerines. J. Ster. Biochem., 20: 1577, **IF: 2.886.**
- 46. P.D. Tewary, **A.S. Dixit** and V. Kumar (1984). Circadian rhythmicity and initiation of reproductive functions in female passerines. Physiol. Zool., 57 (5): 563-566, **IF: 2.10.**
- 47. P.D. Tewary and **A.S. Dixit** (1983). Photoperiodic control of ovarian cycle in Rosefinch, *Carpodacus erythrinus*. J. Exp. Zool., 228: 537-542, **IF: 3.6.**
- 48. N.S. Singh, A.S. Dixit and D. Khanikar (2022). Adaptive strategy in control of ectoparasitic infection in Eurasian tree sparrow. *Journal of Basic and Applied Zoology*. (Communicated).