

CURRICULUM VITAE



- 1. Name (in full)** : **DR. IRANI BISWAS (DEPT. OF BOTANY).**
- 2. Date of Birth** : 16th July, 1974
- 3. Father's Name** : Kanai Lal Biswas
- 4. Address for Communication** : C/o Dhiren Sur, 6 Sahachetan Road,
Mayurmahal, P.O.-Nutanganj
Dist.-Burdwan. Pin – 713102.
- 5. Permanent Address** : -----Do-----
- 6. Marital Status** : Married.
- 7. Nationality** : Indian
- 8. Educational Qualification** : i) **PhD (2014)** obtained from B.U. on the topic “**Studies on certain Pharmacognostic aspects of *Nyctanthes arbor-tristis* Linn.**
ii) **M.Sc. (1998)** – 72.75% . (Spl. Paper – Microbiology).
iii) **B.Sc. (Hons.) (1996)** – 66.5% .
- 9. National Tests Qualified** : i) **GATE (2000)** –84.21(Percentile Score).
ii) **NET (LS)** – December 2000.
iii) **NET (CSIR)** –July 2001.
- 10. Academic awards/ Remarkable Achievements :**
- i) Stood **Ist class Ist (University Gold medal recipient)** at M.Sc. level under B.U (1998).
 - ii) Stood **Ist class 2nd** at B.Sc (Hons.) level under B.U (1996).
 - iii) Obtained **National Scholarship** of Government of India in the Academic Session 1996-1998.
 - iv) **1st rank holder in merit panel of Botany under West Bengal College Service Commission 2015.**

- v) Placed in **2nd position in poster presentation** of the paper entitled “ Phytochemical investigation and antimicrobial activity of leaf extract of *Nyctanthes arbor-tristis* L.” in the **National seminar** organized by Department of Biotechnology, Burdwan University, 2015.

11. Present Occupation : Worked as Assistant Professor of Botany at Raja Rammohun Roy Mahavidyalaya from 01.02. 2007 till 02.01.2017. Recently joined M.U.C. Women’s college on 03.01.2017.

12. Teaching Experience : 10 years 01 month as Assistant Professor in Botany.

13. Area of research interests : Pharmacognosy, Phytochemistry..

14. Techniques learned :

a) Phytochemical techniques:

i) Extraction, isolation, characterization and identification of chemical compounds (particularly fatty acids, surface hydrocarbons, phenolic compounds) from different plant parts using standard methods by the help of Soxhlet apparatus, preparative TLC, GC, UV-IR spectroscopy.

ii) Analysis of macro- and micro- or trace elements in plant extracts by the help of Atomic Absorption Spectrophotometry (AAS).

b) Pharmacological techniques:

i) Assessment of hepatoprotective activity *in vivo* in animal models (albino rats) by liver enzyme assay technique (SGOT, SGPT, Alkaline phosphatase, total protein content etc) from blood serum and liver tissue using standard enzyme assay kits and following standard protocols.

ii) Permanent slide preparation of experimental liver tissues for histopathological examinations.

c) Pharmacognostic techniques :

i) Proper maintenance and preservation of sources of crude drugs (keeping its quality intact) in dried forms after collection for future use as authenticated drug.

ii) Evaluation and characterization of invaluable drug resources using light microscopy, SEM studies and phytochemical characterization techniques.

15. Ongoing research activities : Presently working on a **UGC sponsored minor project** entitled “Studies on certain pharmacognostic and phytochemical aspects of some medicinal plants of Leguminosae with special reference to their fatty acids and epicuticular wax constituents”. [UGC-MRP grant no. F.No.PSW-024/14-15(ERO)].

- 16. Participation in Faculty Development Programme :**
- i) Participation in the **83rd Orientation Programme** organized by Academic Staff College, B.U. from **10th Jan –6th February, 2012.**
 - ii) Participation in the **4th Refresher Course in Life Sciences** organized by Academic Staff College, B.U. from **3rd to 23rd November, 2012.**
- 17. List of publications :**
- a) **As edited Books :**
Partha Sarathi Mukherjee, **Irani Biswas** and Prasanta Mallick (eds) (2012). Biodiversity The Natural Wonder: Issues and Concern (Proceedings of the National Seminar). Levant Books (Publisher), Kolkata. **ISBN : 978-93-80663-61-6.**
 - b) **Publications in Journals :**
 - 1) Ukil, S., **Biswas, I.** and Laskar, S. (2015). Variation of n-alkanes and micromorphological pattern of the epicuticular wax in different plant organs of *Crotalaria pallida*. *World Journal of Pharmaceutical Research*, **4(11)**: 1593-1608. [ISSN: 2277-7105]. **SJIF impact factor: 5.990, GIF: 0.997; H-index: 22.**
 - 2) **Biswas, I.**, Ukil, S. and Mukherjee, A. (2014). Determination of n-alkane constituents and their phenological variation in the epicuticular wax of mature leaves of *Nyctanthes arbor-tristis* L. *Natural Product Research*, **28(5)**: 330-332. [ISSN: 1478 – 6419 (print); 1478 – 6427 (online)]. **Impact factor: 1.25. (As Corresponding author).**
 - 3) Bandyopadhyay, D., **Biswas, I.**, Laskar, S. and Basak, B. (2013). Evaluation of single electron transfer reduction products of 3-oxoindoles as antibacterial agents. *International Journal of Pharmacy and Pharmaceutical Sciences*, **5(3)** : 447 – 450. [ISSN: **0975 – 1491**]. **Impact factor: 1.1.**
 - 4) **Biswas, I.** and Mukherjee, A. (2011). Pharmacognostic studies on the leaf of *Nyctanthes arbortristis*. *Acta Botanica Hungarica*, **53(3-4)**: 225-234. [ISSN : 0236 – 6495]. [**H-index-10**].
 - 5) **Biswas, I.** and Mukherjee, A. (2011). Micromorphology of leaf of *Nyctanthes arbor-tristis*. *Indian Journal of Applied and Pure Biology*, **26(2)**:247 – 250 [ISSN: 0970 – 2091].
 - 6) Banerjee, G., **Biswas, I.** and Mukherjee, A. (2006). Therapeutic value of certain chemical substances present in *Trianthema portulacastrum* L. *Indian Journal of Applied and Pure Biology*, **21(1)**: 19 – 22. [ISSN: 0970 – 2091].
 - 7) **Biswas, I.** and Mukherjee, A. (2004). Leaf form and venation pattern of *Nyctanthes arbor-tristis* L. *Flora and Fauna*, **10(2)**: 125 – 127. [ISSN: 0971 – 6920].

- 8) Das D., Bhattacharjee, A., **Biswas, I.** and Mukherjee, A. (2004). Foliar characteristics of some medicinal plants of Zingiberaceae, *Phytomorphology*, **54(3 &4):** 291 – 302. [ISSN: 0031 – 9449].

18. Seminar/Symposium/Workshop attended :

a) Seminars attended :

- 1) **Oral presentation on the topic** “Determination of n-alkane constituents in the epicuticular wax of leaf and young pods of three species of *Cassia* often victimized by insect herbivory” in the **National seminar** organized by Botany Department of Sonamukhi college on the topic “Plants, The Natural Wonder: Issues and Concern” on 4th–5th October, **2016**.
- 2) **Oral presentation on the topic** “Therapeutic potential of anthraquinones and flavonoids isolated from different species of *Cassia*: A promising journey from ethnomedicine to biomedicine” in the **National seminar** organized by Botany Department of Visva-Bharati, Santiniketan on the topic “Plant and Microbe: Diversity and Utilization” on 19th–20th March, **2016**.
- 3) **Poster presentation** of the paper entitled “Phytochemical investigation and antimicrobial activity of leaf extract of *Nyctanthes arbor-tristis* L. in the **National seminar** organized by Department of Biotechnology, Burdwan University on the topic “Biotechnology in sustainable development” on 13th–14th March, **2015**. [**placed in 2nd position**].
- 4) **Oral presentation** on the topic “n-alkane constituents from surface wax of leaves, flowers and seeds of *Crotalaria pallida* serving as probable cues for host plant recognition” in the **National seminar** on the topic “Advanced Spectroscopy, Theoretical Chemistry, Synthesis, Reactivity and Structural Evaluation” held at Chemistry Department , Burdwan University on 19th–21st February, **2015**.
- 5) **Oral presentation** of the paper entitled “ Role of n-alkanes in leaf epicuticular wax of *Nyctanthes arbor-tristis* L. in understanding phonological variation and leaf micromorphological pattern” in the **National seminar** organized by Department of Botany, Burdwan University on the topic “Contemporary Progress in Plant Sciences” on 20th–21st March, **2015**.
- 6) **Oral presentation** of the paper entitled “Nutritional attributes and bioprospects of leaves, fruits and seeds of *Nyctanthes arbor-tristis* L.” in the **International “Tropical Ecology Congress 2014”** held at JNU, New Delhi on 10th–12th December, **2014**.
- 7) **Oral presentation** of the paper entitled “Protective effect of *Nyctanthes arbor-tristis* leaf on CCl₄ induced hepatotoxicity in male albino rats” at UGC sponsored **National Level Seminar** on the topic “Botanical Resources and human welfare” conducted by the

Department of Botany, Ramkrishna Mission, Vivekananda Centenary College, Rahara on 6th September, **2013**.

- 8) **Oral Presentation in the National Conference** on “Current Researches in Plants And Microbial Sciences” held at Burdwan University on 26-27th November, **2005** on the topic “Foliar Anatomy of *Nyctanthes arbor-tristis*”.
 - 9) Scientific Abstract entitled “Hepatoprotective action of leaf of *Nyctanthes arbor-tristis* L.” had been selected for **poster presentation** in the Souvenir of the **International Conference** on Biosciences, Biotechnology and Biodiversity Analysis” held at Pune on 8th-10th August, **2005**.
 - 10) **Oral Presentation in the National Seminar** on “Medicinal Plants, Plant Products & Patents” held at Kolkata on October, **2004** on the topic “Antibacterial activity of *Nyctanthes arbor-tristis* L. :Evaluation of its leaves and fruits”.
 - 11) **Oral Presentation in the National Conference-Cum-Workshop** on “Scientific growing, Socio-Economic Value and Proper Utilization of Medicinal and Aromatic Plants for the Welfare of the Rural People” held at Bejoynarayan Mahavidyalaya, Itachuna, Hooghly on 25-27 February, **2005** on the topic “Micro- and Internal Morphology of leaves of *Naringi crenulata* (Roxb.) Nicolson”.
- b) Workshop/Training programme attended:**
- 1) **Attended Workshop** on “**Preservation methods along with the practical techniques in Botany**” held at Botany Department of Burdwan University from 3rd – 7th March, **2014**.
 - 2) **Attended National Workshop On Scanning Electron Microscopy** held at USIC, Burdwan University from 1st to 4th February, **2005**.
 - 3) **Attended Training Programme** on “**Cultivation and Commercialization of medicinal and Aromatic Crops**” held at Burdwan University on 3rd & 4th September, **2005**.
- 19. Other Academic Activities:**
- i) Acknowledged as **reviewer for Manuscript ID GNPL-2016-1918 for Natural Product Research, a Taylor and Francis Journal with impact factor 1.05 on November, 2016.**
 - ii) Acknowledged as **reviewer for the International Journal of Pharma and Biosciences (Manuscript No. 7042); an international journal powered by Scopus of Elsevier) on March, 2015.**
 - iii) Acknowledged as reviewer for **Manuscript ID 6262-BH for the Journal of Serbian Chemical Society (an international Journal) on March, 2015.**

iv) Examiner of different Theoretical Examinations of Botany (Both Honours and Pass at undergraduate level) as well as Practical Examinations (as external and internal examiner) under Burdwan University since 2007.

20. Co-curricular activities:

- a) Placed in first position in **Bengali recitation** competition organised by Students' Health Home regional clinic, Burdwan in the year 1986.
- b) Placed in third position in **Bengali recitation** competition organised by Rittik Youth Coir in the district level cultural competition, 1987.
- c) Awarded **Sangeet Bhusan Diploma** in the year 1990 by Pracheen Kala Kendra, Chandigarh in Nazrul Geeti (Vocal).
- d) Awarded **Sangeet Visharad Pratham Khand Diploma** in 1991 by Pracheen Kala Kendra, Chandigarh in Nazrul Geeti (Vocal).
- e) Placed in first position in cultural competition (Nazrul Geeti) held at Burdwan Raj College, Burdwan in 1996.
- f) **Consistently involved in different cultural activities of college (RRR Mahavidyalaya) as convener of cultural committee; also acted as cultural programme organizer and performer during NAAC peer team visit on March 2007; often took the responsibility for judgement in recital and vocal music competitions annually organized by the college.**

BEST PUBLICATIONS

- 1) **Biswas, I.**, Ukil, S. and Mukherjee, A. (2014). Determination of n-alkane constituents and their phenological variation in the epicuticular wax of mature leaves of *Nyctanthes arbor-tristis* L. *Natural Product Research*, **28(5)**: 330-332. [ISSN: 1478 – 6419 (print); 1478 – 6427 (online)].
Impact factor: 1.25. (As Corresponding author).
- 2) Ukil, S., **Biswas, I .** and Laskar, S. (2015). Variation of n-alkanes and micromorphological pattern of the epicuticular wax in different plant organs of *Crotalaria pallida*. *World Journal of Pharmaceutical Research*, **4(11)**: 1593-1608. [ISSN: 2277-7105]. **SJIF impact factor: 5.990, GIF: 0.997; H-index: 22.**
- 3) Bandyopadhyay, D., **Biswas, I.**, Laskar, S. and Basak, B. (2013). Evaluation of single electron transfer reduction products of 3-oxoindoles as antibacterial agents. *International Journal of Pharmacy and Pharmaceutical Sciences*, **5(3)** : 447 – 450. [ISSN: **0975 – 1491**].
Impact factor: 1.1.
- 4) **Biswas, I.** and Mukherjee, A. (2011). Pharmacognostic studies on the leaf of *Nyctanthes arbortristis*. *Acta Botanica Hungarica*, **53(3-4)**: 225-234. [ISSN : 0236 – 6495].**[H-index-10]**.