

## S. SHWETA, Ph.D.

Assistant Professor

Department of Botany

Guru Ghasidas Vishwavidyalaya

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### Research interest:

Systematics, Evolution and Biogeography of selected groups of flowering plants

### Education:

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2009-2015	Ph.D. in Systematics, Evolution and Biogeography of the genus <i>Crotalaria</i> L. Department of Botany, University of Delhi, Delhi - 110007
2007-2009	M.Sc. Botany ( <b>Gold Medalist</b> ) Department of Botany, University of Delhi, Delhi - 110007
2004-2007	B.Sc. Botany ( <b>Gold Medalist</b> ) University of Delhi, Delhi - 110007

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### Research experience:

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2015-2016	Research Associate Department of Botany, University of Delhi, Delhi - 110007
2013	Research scholar (invited) Department of Systematic Botany and Mycology Ludwig Maximilians Universitat, Munchen, Germany
2009-2015	Ph.D. Scholar University of Delhi, Delhi - 110007

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### Employment and work history:

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2020 - present	Assistant Professor – Botany Guru Ghasidas Vishwavidyalaya Bilaspur, Chhattisgarh – 495009
2018 - 2020	Assistant Professor – Botany ( <b>UPSC selection – 3<sup>rd</sup> Rank</b> ) Mahatma Gandhi Govt. Arts College, Mahe – 673311 Govt. of Puducherry
2016 - 2018	Assistant Professor – Botany Hansraj College, University of Delhi, Delhi - 110007
2015	Assistant Professor – Botany Zakir Hussain Delhi College, University of Delhi, Delhi - 110007
2014	Assistant Professor – Botany Dyal Singh College, University of Delhi, Delhi - 110007
2010 - 2014	University Teaching Assistant Department of Botany, University of Delhi, Delhi - 110007

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## Awards and achievements:

- **Awarded best poster presentation** in International Association of Plant Taxonomy 2016, on the topic "Systematics and evolutionary significance of pod morphology and anatomy in the genus *Crotalaria* L."
- **Awarded** "Fr. Antony Mukkath K.S. Manilal Award for **best paper presentation** under the category "Modern Techniques in Plant Taxonomy" presented at the Annual Conference of the Indian Association of Angiosperm Taxonomy of the year 2010 for the paper entitled "Molecular Systematics of Indian *Crotalaria* inferred from ITS Sequences of nuclear ribosomal DNA on 28th November 2010.
- Qualified joint **CSIR-UGC NET-JRF** examination held on 20-12-2009. Sr. No. 2120930672
- Qualified **Graduate Aptitude Test in Engineering** in 2009. Reg. No. XL 3410306
- **Gold medal** in MSc Botany from University of Delhi, Delhi – 110007
- **Gold medal** in BSc Botany from University of Delhi, Delhi – 110007

## Memberships:

- Member of **American Society of Plant Taxonomists**
- Member of **International Association of Plant Taxonomists**
- Member of **Indian Association of Angiosperm Taxonomy**
- Member of **Indian Botanical Society**
- In **review panel** of the journal **Phytotaxa**

## Publications:

- **Subramaniam Shweta**, Pandey AK, Geeta R, Mort ME (2013) Molecular systematics of Indian *Crotalaria* (Fabaceae) based on analyses of nuclear ribosomal ITS DNA sequences. *Plant Systematics and Evolution* 299: 1089-1106. **Impact Factor: 1.6**
- **Subramaniam Shweta**, Pandey AK (2013) Taxonomy and phylogeny of the genus *Crotalaria* (Fabaceae): an overview. *Acta Biologica Indica* 2: 253-264
- Chauhan V, **Subramaniam Shweta**, Pandey AK (2013) Relationships of Indian *Indigofera* L. (Fabaceae) based on ITS sequences of nuclear ribosomal DNA. *Phytomorphology* 63: 157-167. **Impact Factor: 0.1**
- **Subramaniam Shweta**, Pandey AK (2014) Reinstatement of *Crotalaria pellita* (Leguminosae, Papilionoideae) and a new combination for its variety. *Phytotaxa* 183: 051-055. **Impact Factor: 1.8**
- **Subramaniam Shweta**, Pandey AK, Rather SA (2015) Systematics and adaptive significance of seed morphology in *Crotalaria* L. (Fabaceae). *International Journal of Plant Reproductive Biology* 7: 135-146.
- **Subramaniam Shweta**, Pandey AK, Rather SA (2015) A revised circumscription of the species in Bracteatae complex (section *Calycinae*) in the genus *Crotalaria* L.: evidence from nuclear and chloroplast markers. *Plant Systematics and Evolution* 301: 2261-2290. **Impact Factor: 1.6**
- Danda S, **Subramaniam Shweta**, Rather SA, Pandey AK (2016) A new species of *Crotalaria* (Fabaceae, Crotalarieae) from Meghalaya, India. *Systematic Botany*. 41(2): 307-315. **Impact Factor: 1.89**

## **Publications contd:**

- Rather SA, **Subramaniam Shweta**, Danda S, Pandey AK (2018) Two new species of the legume genus *Crotalaria* L. (Fabaceae) from Maharashtra, India. *PLoS ONE*. pone0192226.

**Impact Factor: 3.5**

- Danda S, **Subramaniam Shweta**, Choudhary AK, Rather SA, Mishra G, Pandey AK (2019) Fatty acid profiling, multivariate analysis and ancestral state reconstruction in the genus *Crotalaria* reveals evolutionary trends. Under Revision, *Phytochemistry*. **Impact Factor: 3.0**

## **Invited talks/ Papers/posters presented:**

- **Subramnaim Shweta** (September 2019) “Molecular Systematics: Concepts, Methods and Applications” at Mansarovar Global University in a National Workshop in collaboration with NASI from 5-7<sup>th</sup> September, 2019 (**Invited talk**).
- **Subramnaim Shweta** (June 2018) “Trends in Plant Reproductive Biology and future perspectives” in “Department of Botany, Hansraj College, Delhi University” in **one-week summer school** under the aegis of DBT Star College Scheme (**Invited talk**).
- **Danda S, Subramaniam Shweta, Rather SA, Pandey AK. (2017)** “Infrageneric classification of Indian *Crotalaria* (Leguminosae) based on morphological and molecular markers in American Botanical Congress from June 24-28, at **Fort Worth Texas, USA (Poster presentation)**.
- **Subramaniam Shweta** and Pandey AK. (2015) Molecular Systematics of Indian *Crotalaria* inferred from ITS sequences of nuclear ribosomal DNA in “Modern Techniques in Taxonomy” at Indian Association for Angiosperm Taxonomy held at Coimbatore in December (**Oral presentation**).
- Chitrlekha P, Danda S, **Subramaniam Shweta** (2015) Self-parasitism in *Cuscuta reflexa* in proceedings of 102<sup>th</sup> Indian Science Congress from January 3-7, p. 172 (**Poster presentation**)
- Dwivedi MD, Pandey AK, **Subramaniam Shweta** (2015) Infrageneric relationships among Indian Cucurbitaceae based on ITS sequences of nuclear ribosomal DNA of 102<sup>th</sup> Indian Science Congress from January 3-7, p. 168 (**Poster presentation**)
- **Subramaniam Shweta**, Rather SA, Danda S, Pandey AK. (2015) Systematic and Evolutionary Significance of the pod Morphological and Anatomical Variations in the Genus *Crotalaria* (Fabaceae) in International Association for Plant Taxonomy. Silver Jubilee from November 19-21, p. 50 (**Poster presentation**)
- Danda S, **Subramaniam Shweta**, Rather SA, Pandey AK. (2015) Systematic Significance of Leaf Morphology and Anatomy in the genus *Crotalaria* L. in International Association for Plant Taxonomy. Silver Jubilee from November 19-21, p. 253 (**Poster presentation**)

## **Workshops/conferences/seminars organized and attended:**

- Organized a seminar on “Bioactive compounds & Plant Signalling” Organized by P.G. Dept. of Botany, Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry on 1<sup>st</sup> March, 2019

## **Workshops/conferences/seminars organized and attended contd:**

- Organized a **Science Academies Lecture Workshop** on 10<sup>th</sup> and 11<sup>th</sup> January, 2019 sponsored by **INSA, IAS** and **NASI** at P.G. Dept. of Botany, Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry.
- Organized a lecture series on “Diversity of Lower Plants in Western Ghats: Series II – Bryophytes and Pteridophytes” on 20<sup>th</sup> February, 2018 at P.G. Dept. of Botany, Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry.
- Organized one day seminar on “Floristic diversity of the Lateritic hills of Northern Kerala” on 7<sup>th</sup> February, 2018 at P.G. Dept. of Botany, Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry.
- Organized one day seminar on “Biodiversity and Conservation with special reference to *Rhododendrons*” on 30<sup>th</sup> January, 2018 at P.G. Dept. of Botany, Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry.
- Organized a one-week summer school on “Trends in Plant Reproductive Biology and Future Perspectives” under the aegis of DBT Star College Scheme at Hansraj College, University of Delhi from May 29- June 2, 2017.
- Organized a two day workshop on “Ecology: modern perspectives” under the aegis of DBT Star College Scheme at Hansraj College, University of Delhi from December 12-13, 2016
- Organized a two day National workshop on “Ethnobotany” in collaboration with Institute of Life Long Learning at Hansraj College, University of Delhi from September 16-17, 2016
- Attended Refresher Course on “Traditional and modern Approaches in Plant Taxonomy” held at University of Agricultural Sciences, Bangalore from 15-29 November, 2012
- Attended Workshop on “Biosystematics of Species Complex” held at Centre for Environmental Management of Degraded Ecosystems, University of Delhi from 2-11 February, 2012.
- Attended XXI Annual Conference of Indian Association for Angiosperm Taxonomy & National Seminar on Biodiversity Conservation and Climate Change” held at Institute of Minerals and Materials Technology, Council of Scientific and Industrial Research, Bhubaneswar, Odisha from 2-4 December, 2011.
- Attended National Workshop on “Evolutionary Perspectives in Modern Biological Teaching and Research” at University of Delhi from 9-10 May, 2011.
- Attended International Conference on “Recent trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) and other Chlorinated Contaminants” at University of Delhi from 9-11 February, 2011.
- Attended XX Annual Conference of Indian Association for Angiosperm Taxonomy and International symposium on “Taxonomy, Plant Diversity and Conservation” organized by the Department of Botany, Bharatiyar University, Coimbatore India from 26-28 November, 2010.
- Attended International Workshop on “Molecular Systematics of Flowering Plants” held at Department of Botany, University of Delhi from 5-10 October, 2009.

### **Workshops/conferences/seminars organized and attended contd:**

- Attended Orientation Course on “Renewable Energy Technologies” held at Mahatma Gandhi Institute of Integrated Rural Energy Planning & Development, Bakoli, Alipur, Delhi on 14-15 November, 2006.

### **Certification and Skills:**

- Apart from handling wet lab instruments having advanced level training in handling evolutionary biology and bioinformatics software's in both command line and Graphic user Interface viz., BayesTraits, BEAST, BEAUTi, DIVA, Geneious, Lagrange, MAFFT, MEGA, Mesquite, MacClade, MrBayes, PAUP, RAxML, Sequencher , Tracer etc.

### **Academic/Administrative Responsibilities held:**

- Member of the core committee of National Academic Depository (NAD) for establishment and maintainence of electronic store house of all academic awards in Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry from 2018-2020.
- Member of the committee for collecting and updating particulars in respect of ranking by recognized bodies including AISHE, NIRF, MIS, AAA etc. in Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry from 2018-2020
- Member – RUSA in Mahatma Gandhi Govt. Arts College, Mahe, Govt. of Puducherry from 2018-2020
- Cultural co-ordinator for the Department of Botany, Guru Ghasidas Vishwavidyalaya from 16<sup>th</sup> January 2020 till present

**S. Shweta**  
**24<sup>th</sup> January, 2020**