APPEAL

SCHOLASTIC GENEALOGY OR 'MENTOR- STUDENT LINEAGES' IN PLANT TAXONOMY IN INDIA
AN APPEAL FOR STUDY AND RECORD

In simple terms Scholastic or Academic Geneology – and not biological inheritance, is mentor-student lineage of research workers.

India is known for teacher-taught tradition, or **"Guru-Shishya Parampara"**. The tradition is still deeply rooted in the field of music in India and the lineages are called 'Gharanas', such as 'Varanasi Gharana', 'Agra Gharana', 'Jaipur Gharana', 'Gwalior Gharana', and so on. In these Gharanas, students were taken after rigorous screening for talent, commitment, devotion and sincerity. The lineage included both men and women of different casts. There was no place for discrimination on the basis of cast, religion, sex or region. Students of one lineage were treated as of same clan or **'Guru-gotra'.**

The history of organised botanical explorations and taxonomic studies in India dates back to 16th century, but Hooker's *'Flora of British India'* (1872 -1896) is the main work covering the entire country. Revisionary or monographic studies were scarce till the first half of 20th century. Closer study of certain families were made in first half of 20th century, such as Cyperaceae by Clarke, Bignoniaceae by Chattarjee, Lamiaceae (Labiatae) by Mukherjee, and Poaceae (Gramineae) by Bor. Many botanists, like S.R.Kashyap, M.O.P. Iyengar, T.S. Sadasivan and R.N.Tandon, studied non-vascular plants.

There is hardly any systematic account of the chain of students who received training and degrees under these pioneers.

Effort is being made to study and record such genealogies for as many specialists in various group of vascular and non-vascular plants, and in floristics.

A tradition for three generations can be taken as a minimum for calling it a genealogy.

The starting point can be called generation 'A', students of 'A' as generation 'B' and students of 'B' as generation 'C', and so on.

The following two geneologies in Bryophytes and Vascular plants (though not complete) will illustrate the point.

1. Bryophytes (Taxonomy, Environmental and Molecular studies)

A S.R. Kashyap (Lahore),

B1 R.S. Chopra	B2 S.K.Pande	B3 P.N.Mehra
C1 (B2) D.C. Bharadwaj	C2 (B2) K.P. Srivastava	C3 (B2) Ram Udar

D1(C3) V.C. Bhatnagar, D2(C3) S.C. Srivastava, D3(C3) Dinesh Kumar, D4(C3) V. Nath, D5(C3) D.K. Singh, D6(C3) Asha Gupta, D7(C3) Adarsh Kumar, D8(C3) U.S. Awasthi, D9(C3) Farhat Shaheen, D10(C3) Dhirendra Kumar, D11(C3) Geeta Asthana, D12(C3) Anita Jain

E1(D2) A.K. Asthana, E2(D2) Deepak Sharma, E3(D2) Panzy Singh, E4(D2) Abha Srivastava, E5(D2) Renu Dixit, E6(D2) K.K. Rawat, E7(D2) P.K. Verma, E8(D2) Afroz Alam, E9(D2) Anshu Srivastava, E10(D2) Smita Srivastava

E1(D3) Navita Manocha, E2(D3) Pooja Tewari, E3(D3) Ruchi Shukla, E4(D3) Richa Mathur, E5(D3) Meeta Kaushik, E6(D3) Roli Budhwar, E7(D3) A.P. Singh, E8(D3) Anamika Tewari, E9(D3) Richa Srivastava, E10(D3) Sugandha Srivastava

E1(D4) Shalini Sharma, E2(D4) A.P. Singh, E3(D4) Alka Nivedan, E4(D4) Manjul Mishra, E5(D4) Ritu Kapoor

E1(D5) S.K. Singh, E2 (D5) P.K. Pusalkar

E1(D7) Meenakshi Shukla, E2(D7) Shazia Kazmi

E1 (D11) Neetu Srivastava (Names in all generations only as examples)

The number in brakets indicates the code no. of the mentor.

2. Vascular Plants and Phytogeography

A. S. K. Jain

B1 Sandhya Jyoti Das, B2 C.L.Malhotra, B3 P.K.Hajra, B4 U.N. Shukla,

B5 Ajai Mehrotra, B6 S.C.Srivastava, B7 Ved Prakash Tripathi, B8 Sunanda Bhatacharya (Maulik), B9 S. K. Borthakur, B10 D.C.Pal.

C1(B3) S. Basak, C2(B3) T. Bondopadhyaya, C3(B3) P.S.Negi.

C4(B7) Sunil Tripathi, C5(B9) Prativa Deka, C6(B9) Sunny Thomas, C7(B9)Chandra Barooah, C8(B9) Anupam Sarmah, C9(B9) Krishna Kanta Sarmah, C10(B9) P.C.Kalita, C11(B9) Rajib Gogoi, C12(B9) Namita Nath, C13(B9) Tika Prasad, C14(B10) D.K.Dey.

The appendix gives examples of details of some scientists

Appendix 1. (Bryophytes)

C3(B2)

Name	:	Ram Udar
Mentor	:	S.K. Pande
Year	:	1959
Institution	:	University of Lucknow, Lucknow
Title	:	Studies in Indian Hepaticae

(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)

D2(C3)

Name	:	S.C. Srivastava
Mentor	:	Ram Udar
Year	:	1970
Institution	:	University of Lucknow, Lucknow
Title	:	Studies in Indian Metzgeriniae

(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)

E1(D2)

Name : A. K. Asthana
Mentor : S. C. Srivastava
Year : 1989
Institution : University of Lucknow, Lucknow
Title : Studies in Indian Anthocerotae

(Materials in Herbarium of the Botany Department, University of Lucknow: *LWU*)

D3(C3)

Name : Dinesh Kumar
Mentor : Ram Udar
Year : 1974
Institution : University of Lucknow, Lucknow
Title : Studies in Indian Calobryales

(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)

E1(D3)

Name : Navita Manocha
Mentor : Dinesh Kumar
Year : 1994
Institution : University of Lucknow, Lucknow
Title : Monographic Studies on Indian Species of genus *Herbertus* Gray

(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)

D4(C3)

Name : Virendra Nath
Mentor : Ram Udar
Year : 1977
Institution : University of Lucknow, Lucknow
Title : Studies in Indian Frullaniaceae

(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)

E1(D4)

Name : Shalini Sharma
Mentor : Virendra Nath
Year : 2006
Institution : University of Lucknow, Lucknow
Title : Studies of Environmental Impact on Liverworts and Mosses in Mussoorie

(Materials in Herbarium of the National Botanical research Institute, Lucknow : *LWG*)

D5(C3)

Name : Devendra Kumar Singh
Mentor : Ram Udar
Year : 1979

Institution : University of Lucknow, Lucknow
Title : Studies in Indian Notothylaceae
(Materials in Herbarium of the Botany Department, University of Lucknow : *LWU*)
E1(D5)
Name : Sushil Kumar Singh
Mentors : D.K. Singh, R.D. Gaur
Year : 2005
Institution : H.N.B. Garhwal University, Srinagar (Garhwal)
Title : Morpho-taxonomic Studies on Hepaticae (Bryophyta) of the Protected Areas of Himachal Pradesh – with special reference to National Parks
(Materials in Herbarium of the Botanical Survey of India, Dehradun: *BSD* and Central National Herbarium, Howrah: *CAL*)
E2(D5)
Name : Prashant Keshav Pusalkar
Mentor : D.K. Singh, R.D. Gaur
Year : 2005
Institution : H.N.B. Garhwal University, Srinagar (Garhwal)
Title : Flora of Gangotri National Park, Uttarkashi, Uttaranchal, India
(Materials in Herbarium of the Botanical Survey of India, Dehradun: *BSD*)
D7(C3)
Name : Adarsh Kumar
Mentor : Ram Udar
Year : 1983
Institution : University of Lucknow, Lucknow
Title : Studies in Indian Jungermanniaceae
(Materials in Herbarium of the Botany Department, university of Lucknow : *LWU*)
E1(D7)
Name : Meenakshi Shukla
Mentor : Adarsh Kumar
Year : 2002
Institution : CSJM University, Kanpur
Title : Studies on Bryophytes in Relation to Pollution
(Materials in Herbarium of the Botany Department, Feroze Gandhi P. G. College, Raebareli)
E2(D7)
Name : Shazia Kazmi
Mentor : Adarsh Kumar
Year : 2006
Institution : CSJM University, Kanpur
Title : Bryophytes in Relation to Air Pollution in and around National Thermal Power Corporation, Unchahar, Distt. Raebareli
(Materials in Herbarium of the Botany Department, Feroze Gandhi P. G. College, Raebareli)

Appendix 2. (Vascular Plants)

A.

Name : Sudhanshu Kumar Jain
Mentors : H.Santapau, M.B. Raizada
Year : 1965
Institution : University of Poona, Pune
Title : Vegetation and Phytogeography of arid and semi-arid regions of Western India
(Material in Herbarium, Botanical Survey of India, Pune- *BSI.)*

B2.

Name : Sandhya Joyti Phukan (Ne Das)
Year : 1978
Institution : Guahati University, Guwahati
Title : Revision of the Orchid genus *Coelogyne* Lindl. in India and its Vicinity
(Material in Herbarium, Botanical Survey of India, Shillong- *ASSAM*)

B4.

Name : Upendra Nath Shukla
Year : 1989
Institution : University of Calcutta, Kolkata
Title : Studies on the Grasses of North Eastern India.
(Material in Herbarium, Botanical Survey of India, Shillong- *ASSAM*)

C14(B10).

Name : Dulal Kumar Dey
Year : 2002
Institution : Vidyasagar University, Midnapur
Title : The grass flora of Midnapur District, West Bengal
(Material in University at Midnapur.)

Some obvious advantages of the genealogies can be inter alia, the following :

1. The Institutions where certain discipline or special area in science evolved advanced expanded in their dimension and flourish.
2. Institutions where the research materials or voucher specimen can be available for study and reconfirmations/ or follow up R & D work.
3. Indicators (?) as to why a certain scientist could not carry forward the tradition (e.g. personal, financial, social or other compulsions).
4. Instances where a mentor trained student in more than one specialization will indicate versatility of that person which could provide biographical material on him.
5. Updated information on contact address of scientist will of course promote communication among scientists of similar interest.

It is useful to mention here that the society for economic botany functioning from U.S.A. will have its Golden Jubilee in 2009. It has launched academic genealogy project for its selected members and plans to bring out a published document and place the genealogies on website also.

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