

Profile of Scientist

- 1. Name of the Scientist:** Dr Ashwini Dutt Pathak
- 2. Personal Bio-data:**
- A. Position/Designation:** Director
- B. Contact Details:**
- a. ICAR Email ID:** director.sugarcane@icar.gov.in
- b. Personal Email ID:** pathakashwini@rediffmail.com
- c. Mobile No.:** +91 9450373565
- C. Joining date in:**
- a. ICAR-SBI, Coimbatore:** 21st January, 1985
- b. ICAR-IISR, Lucknow:** 6th November, 1994
- D. Discipline and Specialization:** Plant Breeding
Genetic enhancement in sugar crops.



Contribution to the scientific advancement:

- Development of sugarcane varieties as CoLk 07201, CoLk 9709 and Co 89029 for different agro climatic zones of sub tropical India. Expansion of area under CoLk 94184 in north central zone.
- Development of 18 genetic stocks developed through gene introgression from *Erianthus species* for top borer tolerance in sugarcane.
- Development of breeding stocks for adaptations to prolonged winter chillness, high temperature and ratoonability under low temperature harvest in sugarcane for enhancing productivity in sub tropical India.
- Development of sugarcane variety as Co 92030 for late planted conditions after wheat harvest in sub tropical India.
- Initiated identification of Central Varietal Release Committee released varieties of sugarcane as recommended ones in states of UP and Bihar which transformed sugar industries in sub tropical India.
- Started breeder seed production in PPP mode in Bihar.
- Sugarbeet research for adaptation to Indian conditions and diverse end use led to establishment of sugarbeet based industries in India.
- Capacity building through summer school on sugarbeet.
- Initiated quality jaggery production in India through IISR technology for enhancing profitability of sugarcane growers

Training Organized:

Name of the programme	Function(s) performed	Title	Year	Duration
Workshop	Organizing Secretary	Natural Farming and cow based economy under Unnat Bharat Abhiyan	2015	2 days
Winter school	Facilitator as Head of Division and resource person	Novel Genomics tools and Breeding Approaches for Sugar Crops Improvement	2014	21 days
Summer School	Course coordinator	Adaptive production technologies for sugarbeet cultivation in India	2011	21 days
National consultation	Joint Organizing Secretary	Sugarbeet as a Supplementary Sugar Crop in India	2011	1 day
IISR-Industry Interface on	Organizing Secretary	Research and Development Initiatives for Sugarbeet in India	2013	2 days
National Seminar	Organizing Secretary	IISR Initiatives for Improving Sugarcane and Sugar Industry in sub-tropical India	2013	2 days
National Seminar	Organizing Secretary	IISR-Industry Interface on Improving Sugar and Sugarcane Productivity of Uttarakhand	2014	2 days

Training Attended:

- Attended 10th Executive Development programme at NAARM, Hyderabad from February 18 to 22, 2017
- Attended Management Development Programme at NAARM, Hyderabad from December 1-12, 2014

Future Planning of research:

- Improvement in cane yield and sugar recovery
- Developing superior sugarcane varieties with adaptation to climatic changes
- Management of biotic and abiotic stresses
- Farmers entrepreneurship under skill India for doubling the farmers income
- Quality seed production
- Improving bio-ethanol recovery from sugar crops

4. Publications:

1. **A. D. Pathak, A. K. Srivastava, A. K. Srivastava, R. Kumar, R. K. Rai and S. Srivastava** (2016): Adaption behaviour of sugarcane varieties against high temperature stress in subtropical India. *Res. Environ. Life Sci.*, **9** (5): 521-525.
2. R. Kumar, P. K. Bajpai, and **A. D. Pathak** (2016): Comparison of modified joint regression analysis, fitcon analysis, EM-AMMI and proposed improved-IMAMMI under incomplete genotype and environment interaction data of sugarcane. *International Journal Agricultural Statistical Science*, **12** (1): 210-216.
3. **A. D. Pathak**, Raman Kapur, S. Solomon, Rajesh Kumar, Sangeeta, Srivastava and P. R. Singh (2014): Sugar Beet: A Historical Perspective in Indian Context. *Sugar Tech*, **16** (2): 125–132.
4. Rajesh Kumar, **A D Pathak** and PK Bajpai (2013): Genotype x Environment Interaction in Sugarbeet under sub-tropical conditions. *Indian J. Sugarcane Tech.*, **28** (2): 100-101.
5. **A. D. Pathak**, R. Kapur, R. Kumar and M. K. Vishwakarma (2011). Impact of different vernalization treatments on flowering and seed production in sugarbeet (*Beta vulgaris* L.). *Indian Journal of Sugarcane Technology*, **26** (1): 24-27.
6. S. Srivastava, **A. D. Pathak** and P. S. Gupta (2011): Molecular Characterization Based on RAPD Markers of High and Low Sugar Inter-generic Hybrids of *Saccharum* and *Erianthus*. *Tropical Agriculture*, **88** (4): 186-192.
7. **A. D. Pathak**, N. Kulshrestha, R. Kumar and V. K. Saxena (2009): Genotype x environment interaction in sugarcane under late planting conditions. *Indian Journal of Sugarcane Tech*, **24-25**: 1-6.
8. A. K. Shrivastava, A. K. Srivastava, N. Kulshreshtha, S. Srivastava, **A. D. Pathak**, S. Soloman, B. L. Srivastava, M. K. Srivastava, R. K. Rai, I. Singh, Pushpa Singh, P. S. Gupta, A. Sawnani, C. P. Prajapati, A. Gaur, V. K. Saxena and A. K. Mishra (2005). Influence of prolonged winter chill induced low temperature stress in sugarcane. *Sugarcane International*, **23** (3): 3-11.
9. **A. D. Pathak**, U. S. Natarajan and N. Kulshreshtra (2002): Divergence studies among inter specific hybrids of sugarcane (*Saccharum sp.*). *Annals of Agril. Res.*, **21** (13): 410-12.
10. **A. D. Pathak**, R. Kumar and R. K. Rai (2001): Evaluation of interspecific hybrids of sugarcane using cluster analysis. *Sugarcane International*, **20** (11): 14-16.

5. Recognition and award

Award	Year	Society
Dr. Panjab Singh Eminent Agricultural Scientist Award	2016	Uttar Pradesh Academy of Agricultural Sciences
Life Time Achievement Award	2016	Pearl Foundation
Best Scientist Award	2016	EET CRS Academic Achievement Award
Excellence in Science	2015	North Indian Sugarcane and Sugar Technologists Association (NISSTA)
Life Time Achievement Honour	2013	N.D. University of Agriculture and Technology, Kumarganj, Faizabad