



Dr. Ajay Kumar Thakur

Scientist, Senior Scale
(Biotechnology)

- 1 Date of birth : 26-03-1979
- 2 Educational Qualification : Ph.D. (Biotechnology) (2008); M.Sc (Biotechnology) (2003)
Dr YS Parmar University of Horticulture & Forestry, Solan, HP
- 3 Joining Date in ICAR : 07-01-2008
- 4 Joining Date in DMR : 07-01-2008
- 5 Discipline /Specialization : Biotechnology (Plant science)
- 6 Research Experience : 6 years
- 7 Training/advance exposure in the area of work : Obtained training on “Fundamentals and Role of Computers in Bioinformatics”, at Bioinformatics Centre, Advanced Centre of Hill Bio-resources and Biotechnology at CSKHPKV, Palampur, HP; Creation and Management of Databases at Dr YS Parmar University of Horticulture & Forestry, Solan, HP; Marker Assisted Selection in Rice, at DRR, Hyderabad, AP ; Bioinformatics for agricultural sciences at CCSHAU, Hisar, Haryana and Gene isolation and characterization at NRCPB, New Delhi
- 8 Contribution to the Scientific advancement
 - Development of transgenics in *Populus ciliata* for reduced lignin content.
 - Standardization of *Agrobacterium tumefaciens*-mediated genetic transformation and regeneration protocols in *Brassica juncea*, *Populus ciliata*, *Capsicum annum* & *Punica granatum*.
 - Evaluation of genetic diversity in a representative population of *Valeriana jatamansi*.
 - Developed unique fingerprints for 1st Indian mustard hybrid, NRCHB-506 using SSR markers.
 - Carried out DNA fingerprinting of Indian mustard varieties using SSR markers.
- 9 Future planning of research
 - Rapeseed-mustard germplasm & varietal characterization and genetic diversity evaluation for various agronomically important traits.
 - Biotic Stress in Indian mustard through biotechnological interventions.

10 Awards/Recognitions

- Best Poster Award (2006) by National Society of Plant Science at CCS HAU, Hisar, Haryana.
- Merit certificate for outstanding academics by Himalayan Research Scholars Association, Shimla, H.P.
- University Merit Scholarship during Ph.D.
- State Board Merit Scholarship during B.Sc.

11 Publications (best five)

- **Thakur, AK**, Singh, BK, Verma, V and Chauhan, JS. (2013). High frequency plantlet regeneration in *Brassica juncea* var. NRCDR-2 from cotyledonary petiole explants and analysis of genetic uniformity using RAPD markers. *National Academy Science Letters*. **36** (4): 403-409.
- **Thakur, AK**, Aggrawal, G and Srivastava, DK. (2012). Genetic modification of lignin biosynthetic pathway in *Populus ciliata* Wall. via *Agrobacterium*-mediated antisense *CAD* gene transfer for quality paper production. *National Academy Science Letters*. **35** (2): 79-84.
- **Thakur, AK**, Saraswat, A and Srivastava, DK. (2012). In vitro plant regeneration through direct organogenesis in *Populus deltoides* clone G48 from petiole explants. *Journal of Plant Biochemistry and Biotechnology*. **21** (1): 23-29.
- **Thakur, AK** and Srivastava, DK. (2006). High efficiency plant regeneration from leaf explants of male Himalayan poplar (*Populus ciliata* Wall). *In Vitro Cell Dev Biol-Plant*. **42**: 144-147.
- **Thakur, AK**, Sharma, S and Srivastava, DK. (2005). Plant regeneration and genetic transformation studies in petiole tissue of Himalayan poplar (*Populus ciliata* Wall.). *Current Science*. **89** (4): 664-668.

12. Professional membership

- Indian Science Congress Association, Kolkata
- Society of Plant Biochemistry and Biotechnology, N. Delhi
- Society of Rapeseed-Mustard Research, Bharatpur, Rajasthan
- Society for Applied Biotechnology, Dharwad, Karnataka
- Biotech Research Society, Trivandrum, Kerala