


NAME	ARUNA KUMAR		
DESIGNATION	Associate Professor		
EMAIL ID	akumar@amity.edu		
CONTACT NUMBER			
RESEARCH INTERESTS	Plant Molecular Biology, Molecular Genetics, Biochemistry, Plant Biotechnology.		
EDUCATIONAL QUALIFICATIONS:			
Name of College / University		Degree	Year
Hindu College/ University of Delhi		Bsc (Hons)- Botany	1993
Department of Microbiology and Biotechnology centre, M. S. University of Baroda		Msc-Biotechnology	1995
NRCPB, IARI, New Delhi		PhD-Molecular Biology and Biotechnology	2001
Title of Ph.D. thesis:			
EXPERIENCE (in chronological order): Total 20 Years Research & Teaching			
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Post-doctoral fellow	Research	School of Molecular Biosciences, Washington State University, Pullman, WA, USA	2003-2005
Post-doctoral fellow	Research	Department of Biochemistry, University of Missouri, Columbia, MO, USA	2008-2010
Assistant Professor Grade III	Teaching/Research	Amity Institute of Biotechnology, Amity University, Noida	2011-2019
Associate Professor	Teaching/Research	Amity Institute of Biotechnology, Amity University, Noida	2019-present
No. of Ph.D. students supervised		Awarded: 05	
		Ongoing: 01	
PUBLICATIONS (mention total no. here)		Details: 1. Dhawan G, Prakash V, Kumar A , Kumar P, Rajeev R, Singh AK. marker assisted selection through cost-effective assay of sd1 gene in rice (<i>Oryza sativa</i>). Indian Journal of Agriculture Sciences 2021, 91(3) [Impact Factor : 0.371] 2. Nitasha Grover, Aruna Kumar , Ranjith K. Ellur, Ashutosh K. Yadav, S. Gopala Krishnan, K. K. Vinod, Rakesh K. Verma,	

Viswanathan Chinnusamy, Prolay K. Bhowmick, Haritha Bollinedi, M. Nagarajan, M. Raveendran, Amitha Mithra V. Sevanthi, Nagendra K. Singh, Sheshshayee M. Sreeman, Trilochan Mohapatra and Ashok K. Singh. Development and validation of a functional dCAPS marker for OsAHASrb governing imazethapyr tolerance in rice. **Indian Journal of Genetics and Plant Breeding**, 2021 Sept 17 , 81 (3)[Impact Factor : 0.508]

3. Singhal T, Satyavathi CT, Singh SP, **Kumar A**, Sankar SM, Bhardwaj C, Mallik M, Bhat J, Anuradha N, Singh N. Multi-Environment Quantitative Trait Loci Mapping for Grain Iron and Zinc Content Using Bi-parental Recombinant Inbred Line Mapping Population in Pearl Millet. **Frontiers in Plant Science**. 2021 May 18;12:744. [Impact Factor : 5.753]

4. Yadav AK, **Kumar A**, Grover N, Ellur RK, Bollinedi H, Krishnan SG, Bhowmick PK, Vinod KK, Nagarajan M, Singh AK. Genome-Wide Association Study Reveals Marker-Trait Associations for Early Vegetative Stage Salinity Tolerance in Rice. **Plants**. 2021 Mar;10(3):559. 1-17 (2.762) [Impact Factor : 3.935]

5. Dhawan G, **Kumar A**, Dwivedi P, Gopala Krishnan S, Pal M, Vinod KK, Nagarajan M, Bhowmick PK, Bollinedi H, Ellur RK, Ravikiran KT. Introgression of qDTY1. 1 Governing Reproductive Stage Drought Tolerance into an Elite Basmati Rice Variety "Pusa Basmati 1" through Marker Assisted Backcross Breeding. **Agronomy**. 2021 Feb;11(2):202. [Impact Factor : 2.240]

6. Grover N, **Kumar A**, Yadav AK, Krishnan SG,

Ellur RK, Bhowmick PK, Vinod KK, Bollinedi H, Nagarajan M, Viswanathan C, Sevanthi AM. Marker assisted development and characterization of herbicide tolerant Near Isogenic Lines of a mega Basmati rice variety, "Pusa Basmati 1121". **Rice**. 2020 Dec;13(1):1-3. [Impact Factor : 4.783]

7. Dubey KK, Yadav J, Upadhyaya KC, **Kumar A**. Accumulation of ricinoleic acid in developing seeds of castor (*Ricinus communis*) from India. **Indian Journal Of Agricultural Sciences**. 2020 Nov 1;90(11):2145-9. [Impact Factor : 0.371]
8. Yadav AK, **Kumar A**, Grover N, Ellur RK, Krishnan SG, Bollinedi H, Bhowmick PK, Vinod KK, Nagarajan M, Krishnamurthy SL, Singh AK. Marker aided introgression of 'Saltol', a major QTL for seedling stage salinity tolerance into an elite Basmati rice variety 'Pusa Basmati 1509'. **Scientific reports**. 2020 Sep 4;10(1):1-5. [Impact Factor : 4.379]
9. Dubey KK, Jeyaseelan C, Upadhyaya KC, Chimote V, Veluchamy R, **Kumar A***. Biodiesel production from Hiptage benghalensis seed oil. **Industrial Crops and Products**. 2020 Feb 1;144:112027. [Impact Factor : 5.645] . [Impact Factor : 5.645]
10. **Kumar A**, Postle K. Characterization of Escherichia coli ExbD protein modification in vivo. *BioRxiv*, 2020.
11. Upadhyaya, **Kumar A**: Perspective of Human Genome (2020) -Animal Biotechnology: Models in Discovery and Translation (2nd Edition), Academic Press (Elsevier) USA, ISBN: 978-0-12-416002-6. Page no 543-565

12. Dhar Dubey KK, Sharma G, **Kumar A***. Conjugated linolenic acids: Implication in cancer. **Journal of Agricultural and Food Chemistry**. 2019 May 9;67(22):6091-101. [Impact Factor : 5.279]
13. Singhal T, Satyavathi CT, Singh SP, Sankar SM, Anuradha N, Bharadwaj C, **Kumar A**, Mallik M, Singh N. Identification of new stable and high iron rich fertility restorers in pearl millet. *Indian J. Genet.* 2019 Aug 1;79(3):552-62. [Impact Factor : 0.508]
14. Singhal T, Satyavathi CT, **Kumar A**, Sankar SM, Singh SP, Bharadwaj C, Aravind J, Anuradha N, Meena MC, Singh N. Genotype × environment interaction and genetic association of grain iron and zinc content with other agronomic traits in RIL population of pearl millet. **Crop and Pasture Science**. 2018 Nov 12;69(11):1092-102. [Impact Factor : 2.286]
15. **Kumar A***, Sharma A, C Upadhyaya K. Vegetable oil: nutritional and industrial perspective. **Current Genomics**. 2016 Jun 1;17(3):230-40. [Impact Factor : 2.236]
16. Tovar-Méndez A, **Kumar A**, Kondo K, Ashford A, Baek YS, Welch L, Bedinger PA, McClure BA. Restoring pistil-side self-incompatibility factors recapitulates an interspecific reproductive barrier between tomato species. **The Plant Journal**. 2014 Mar;77(5):727-36.[Impact Factor : 6.417]
17. **Kumar A**, Upadhyaya KC : Perspective of Human Genome (2014) -Animal Biotechnology: Models in Discovery and Translation (1st Edition), Academic Press

(Elsevier) USA, ISBN: 978-0-12-416002-6.
Page no 577-596

18. Chalivendra SC, Lopez-Casado G, **Kumar A**, Kassenbrock AR, Royer S, Tovar-Méndez A, Covey PA, Dempsey LA, Randle AM, Stack SM, Rose JK. Developmental onset of reproductive barriers and associated proteome changes in stigma/styles of *Solanum pennellii*. **Journal of Experimental Botany**. 2013 Jan 1;64(1):265-79. [Impact Factor : 6.992]
19. Ollis AA, **Kumar A**, Postle K. The ExbD periplasmic domain contains distinct functional regions for two stages in TonB energization. **Journal of Bacteriology**. 2012 Jun 15;194(12):3069-77. [Impact Factor : 3.490]
20. Bedinger PA, Chetelat RT, McClure B, Moyle LC, Rose JK, Stack SM, van der Knaap E, Baek YS, Lopez-Casado G, Covey PA, **Kumar A**. Interspecific reproductive barriers in the tomato clade: opportunities to decipher mechanisms of reproductive isolation. **Sexual Plant Reproduction** (now called Plant reproduction). 2011 Sep;24(3):171-87. [Impact Factor : 3.767]
21. Covey PA, Kondo K, Welch L, Frank E, Sianta S, **Kumar A**, Nuñez R, Lopez-Casado G, Van Der Knaap E, Rose JK, McClure BA. Multiple features that distinguish unilateral incongruity and self-incompatibility in the tomato clade. **The Plant Journal**. 2010 Nov;64(3):367-78. [Impact Factor : 6.417]

	<p>22. Kumar A, McClure B. Pollen–pistil interactions and the endomembrane system. Journal of Experimental Botany. 2010 Apr 1;61(7):2001-13. [Impact Factor : 6.992]</p> <p>23. Pathania A, Kumar R, Kumar VD, Dwivedi KK, Kirti PB, Prakash S, Chopra VL, Bhat SR. A duplicated coxI gene is associated with cytoplasmic male sterility in an alloplasmic Brassica juncea line derived from somatic hybridization with Diplotaxis catholica. Journal of Genetics. 2007 Aug 1;86(2):93-101. [Impact Factor : 1.166]</p> <p>24. Pathania A, Bhat SR, Kumar VD, Kirti PB, Prakash S, Chopra VL. Cytoplasmic male sterility in alloplasmic Brassica juncea carrying Diplotaxis catholica cytoplasm: molecular characterization and genetics of fertility restoration. Theoretical and Applied Genetics. 2003 Aug;107(3):455-61. [Impact Factor : 5.669]</p>
PATENTS (<i>total no.</i>)	<i>Details: Nil</i>
RESEARCH PROJECTS Completed: (<i>total no.</i>):01 Ongoing: (<i>total no.</i>):Nil	<i>Details:</i> DBT- BioCARE, ~44.6 Lakhs, 2014-2018
AWARDS & HONOURS/ DISTINCTIONS	<i>Details:</i> JRF-SRF-NET-CSIR, NET-ICAR, DBT Fellowship for PG.
MEMBERSHIP with Professional/ Academic bodies	<i>Details:</i>