

## **Dr. Kasim Khan**

Assistant Professor,

Dr. D. Y. Patil Biotechnology and Bioinformatics Institute,

Dr. D. Y. Patil Vidyapeeth, Tathawade, Pune, India

### **Academic Records:**

#### **2009-2017: PhD (Biotechnology)**

CSIR-National Botanical Research Institute, Lucknow.

#### **2006-2008: M.Sc. (Biotechnology)**

RTM Nagpur University, Nagpur, India.

#### **2001-2004: B.Sc. (Botany and Chemistry)**

MJP Ruhelkhand University, Bareilly, India

### **Research Experience:**

- 1. Assistant Professor:** Dr. D Y Patil Biotechnology and Bioinformatics Institute, Dr. D Y Patil Vidyapeeth, Pune, April 2018-till date
- 2. Post PhD:** Two years of experience on an ICAR funded NPTC project “*Functional Genomics of Mango*” at Central Institute for Subtropical-Horticulture, Lucknow, India.
- 3. PhD (Biotechnology):** CSIR-National Botanical Research Institute, Lucknow (UP) India. (2009-2017).  
**PhD Thesis Title:** “Identification and Characterization of Transcription Factors Regulating Seed Oil Biosynthesis from *Jatropha curcas*”

### **Fellowships and Awards:**

1. Best Poster award in *Global Conference on Perspective of Future Challenges and Options in Agriculture-2016*, Jain Hills JISL, Jalgaon.
2. Best Poster award in *7<sup>th</sup> Indian Horticulture Congress-2016*, ICAR- Indian Agricultural Research Institute, New Delhi.
3. Senior Research Fellowship from Indian Council of Agricultural Research, 2015-2017
4. Best Poster award at an international conference *Global Sustainable Biotech Congress-2014*, North Maharashtra University Jalgaon.
5. Best Poster award in international conference *International Conference on Environment, Health and Industrial Biotechnology-2013* Motilal Nehru Institute of Technology Allahabad.
6. Graduate Aptitude Test in Engineering (GATE) (94.8 Percentile), 2008.
7. Biotech Industrial Training Programme (BITP), 2007-2008.
8. Availed a scholarship from DBT Govt. of India during M.Sc. Biotechnology course. 2006-2008.
9. Combined Entrance Examination for Biotechnology (CEEB) conducted by Jawaharlal Nehru University, New Delhi, supported by Department of Biotechnology under Ministry of Science & Technology, Govt. of India, 2006.

## Recognitions:

1. **Editor:** Tropical Plant Research Journal (<http://www.tropicalplantresearch.com/board>).
2. **Founder member** of “Society for Tropical Plant Research” (<http://www.tropicalplantresearch.com/society>).

## Scientific Research Publications:

- 1) *JcMYB1* of *Jatropha curcas* modulates TAG biosynthesis-a potential regulator of oil biosynthetic pathway **Kasim Khan**, Abhishek Niranjana, Arti Shanware, Vidhu A Sane. **Plant and Cell Physiology** 2018.
- 2) Heterologous expression of two GPATs from *Jatropha* alters seed oil levels in transgenic *Arabidopsis thaliana*. Aparna Misra<sup>#</sup>, **Kasim Khan**<sup>#</sup> Vinod Kumar, Abhishek Niranjana, Vidhu A Sane. **Plant Science** 2017; <https://doi.org/10.1016/j.plantsci.2017.07.003>. (<sup>#</sup>Equal contribution).
- 3) Molecular Analysis of anthocyanin biosynthesis pathway genes and their differential expression in mango peel. Anju Bajpai; **Kasim Khan**; M, Muthukumar; S Rajan; Narendra Singh, **Genome** 2017; <https://doi.org/10.1139/gen-2017-0205>.
- 4) MiSNPDb: a web based genomic resources of tropical ecology fruit mango (*Mangifera indica* L.) for phylogeography and varietal differentiation" **Nature Scientific Reports** 2017; <https://doi.org/10.1038/s41598-017-14998-2>.
- 5) Origin, Diversity and Genome Sequence of Mango (*Mangifera indica* L.). Indian Journal of History of Science, 51.2.2 (2016) 355-368; <https://doi.org/10.16943/ijhs/2016/v51i2.2/48449>.
- 6) Heterologous Expression of Two *Jatropha* Aquaporins Imparts Drought and Salt Tolerance and Improves Seed Viability in Transgenic *Arabidopsis thaliana*. **Kasim Khan**, Pallavi Agarwal, Arti Shanware, Vidhu A Sane. **PLoS ONE** 2015; <https://doi.org/10.1371/journal.pone.0128866>.
- 7) Over-expression of *JcDGAT1* from *Jatropha curcas* increases seed oil levels and alters oil quality in transgenic *Arabidopsis thaliana*. Aparna Misra, **Kasim Khan**, Abhishek Niranjana, Pravendra Nath, Vidhu A. Sane. **Phytochemistry-2013**; <https://doi.org/10.1016/j.phytochem.2013.09.020>.
- 8) Differential expression of several xyloglucan endotransglucosylase/hydrolase genes regulates flower opening and petal abscission in roses. Amar Pal Singh, Shveta Dubey, Deepika Lakhwani, Saurabh Prakash Pandey, **Kasim Khan**, Upendra Nath Dwivedi, Pravendra Nath and Aniruddha P. Sane. **AoB PLANTS-2013**; <https://dx.doi.org/10.1093%2Faobpla%2Fplt030>.

**Book Chapter:** Genetic engineering of fruit for value addition. Vidhu Sane, Rakesh Upadhyay, **Kasim Khan**, Smriti Srivastava, Pravendra Nath.

## Conference Publications:

### Poster presentation:

#### 1. 7th Indian Horticulture Congress-2016,

ICAR- Indian Agricultural Research Institute, New Delhi.

Poster title: Transcriptional regulation of flowering genes in mango. (**Best poster award**)

#### 2. Global Conference On Perspective Of Future Challenges And Options In Agriculture-2016,

Jain Hills JISL, Jalgaon.

Poster title: Differential expression of phenylpropanoid pathway genes in mango associated peel colour formation. (**Best poster award**).

#### 3. 3rd Global Sustainable Biotech Congress (1-5th Dec. 2014)

North Maharashtra University Jalgaon, India.

Poster title: Over-expression of *Jatropha* aquaporins enhance drought and salt tolerance in *Arabidopsis thaliana*. (**Best poster award**).

#### 4. Recent Advances in Biochemistry and Biotechnology: Application in health, Environment and Agriculture, (October 29-31, 2013)

Lucknow University Lucknow, India

Poster title: *JcMYB1* a R2R3 MYB transcription factor enhances seed oil content in *Arabidopsis thaliana* and *Nicotiana tabacum* by DGAT regulation”

#### 5. International Conference Biosangam 2013” International Conference on Health, Environment & Industrial Biotechnology ( 21- 23 Nov. 2013).

Motilal Nehru Institute of Technology Allahabad, India

Heterologous expression of *Jatropha* aquaporins imparts drought and salt tolerance in transgenic *Arabidopsis thaliana*. (**Best poster award**)

#### 6. 80th Annual Meeting of the Society of Biological Chemists: Metabolic Pathway Modulations-Applications in Health and Agriculture (November 12-15, 2011). CSIR-CIMAP (Central Institute of Medicinal and Aromatic Plants) Lucknow, India.

#### 7. ICPSPE-2011: International Conference: Plant Science in Post Genomic Era (17-19 Feb, 2011). Sambhalpur University, Orissa, India.

### Participation

1. Participated in **ICPEP 2010 & 2015**: Fourth and Fifth International Conference on Plant and Environment Pollution, CSIR-National Botanical Research Institute Lucknow, India.

2. Participated in **Indo-French Seminar 2010**: Genomics And Biotechnology Of Fruit Quality: Recent Advances” CSIR-National Botanical Research Institute Lucknow, India..

#### 3. Participated in **Global Sustainable Biotech Congress 2006**:

International Conference on Innovations in Biotechnology, Nagpur University Nagpur, India.