PERSONAL DATA:

Name: Suyog S. Kuwar
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PERMANENT ADDRESS

792, Dhanagar Lane,
At Post – Vadel, Tal – Malegaon,
Dist – Nasik, Maharashtra, India
Pin – 423206
Date of Birth:13 October 1985
Nationality: Indian
Marital status: Married

EDUCATION:

01/2010 - 2016

Max Planck Institute for Chemical Ecology, Jena
PhD, Department of Entomology, Defense expected June 2016
Supervisor: Prof. Dr. David G. Heckel
"Transcriptional and translational responses to dietary protease inhibitors of the cotton bollworm, *Helicoverpa armigera*"
IMPRS International Max Planck Research School "The Exploration of Ecological Interactions with Molecular and Chemical Techniques"

04/2009 - 12/2009

Indian Institute of Science Education and Research, Pune
M. Tech. project student, in Biology discipline
Supervisor: Prof. Dr. Anjan Banerji
"Analysis of phloem proteome of potato in response to pathogen challenge"
Left in the middle to pursue PhD

06/2008 - 03/2009

National Chemical Laboratory, Pune
Master's degree project student in Biochemical Sciences Division
Supervisor: Dr. Vidya Gupta and Dr. Ashok Giri
"Identification and Characterization of *Helicoverpa armigera* gut amylases"
Degree: M. Sc. Biotechnology (5 years integrated), Cumulative GPA: 6.54/10, Obtained: A

03/2007 - 07/2007

National Chemical Laboratory, Pune
Summer project student in Biochemical Engineering Division
Supervisor: Dr. Sanjay Nene
"**Preparation of heterogeneous form of amino acylase (E.C.3.5.1.14) by covalent immobilization and crosslinking**"

06/2006 - 03/2007

Savitribai Phule Pune University, Pune
Bachelor's degree project student in Department of Microbiology
Supervisor: Prof. Dr. B. P. Kapadnis
"Screening of chitinase producing bacilli and degradation of chitin"
Degree: M. Sc. Biotechnology (3rd year project)

SUBJECT AND TECHNIQUE STUDIED

Major Subjects:

Cell Biology, Molecular Biology, Biochemistry, Microbiology, Animal and Plant tissue culture, Virology, Immunology, Plant biotechnology, fermentation technology, Nanotechnology, Bioinformatics, Genomics, Intellectual property rights, Environmental biotechnology, C-Programming

Techniques:

Basic separation technique, Immunological techniques, Molecular Biology technique, Enzyme techniques, Microbiology, Animal and Plant cell culture technique, fermentation technique, Bioinformatics.

AREAS OF RESEARCH INTEREST

Genomics, Molecular biology, Digestive physiology, Regulation of gene expression in eukaryotes (transcription factors), Cell biology (stem cell), Fermentation technology, Evolutionary adaptation of insects

SELECTED ORAL PRESENTATION

Kuwar S. Molecular evolution of the serine protease superfamily and adaptive response to a plant protease inhibitor in *Helicoverpa armigera*. 9th International Workshop on Molecular Biology and Genetics of the Lepidoptera, Kolympari, Crete, GREECE, Aug 2014

Kuwar S. Transcriptional and translational response to a plant protease inhibitor and Annotation of serine protease superfamily in *Helicoverpa armigera*. 2nd International Symposium on Insect Midgut Biology 2012, Guangzhou, CHINA, Sep 2012

Kuwar S. Adaptive evolution of serine protease superfamily and transcriptional response to a plant protease inhibitor in *Helicoverpa armigera*. 11th IMPRS Symposium, MPI for Chemical Ecology, Dornburg, GERMANY, Feb 2012

SELECTED POSTER PRESENTATIONS

Kuwar S.*, Pauchet Y., Vogel H., Heckel D.G. Adaptive regulation of midgut serine proteases of *Helicoverpa armigera* in response to Soybean Kunitz trypsin inhibitor. Seventh International Symposium on Molecular Insect Science, Amsterdam, Netherland, Jul 2014

Kuwar S.*, Pauchet Y., Vogel H., Wielsch N., Svatoš A., Heckel D. G. Molecular evolution of serine protease superfamily and adaptive response to a plant protease inhibitor in *Helicoverpa armigera*. SAB Meeting 2014, MPI for Chemical Ecology, Jena, GERMANY, May 2014

Kuwar S.*, Svatoš A., Pauchet Y., Vogel H., Wielsch N., Heckel D. G. Molecular evolution of serine protease superfamily and adaptive response to soybean Kunitz trypsin inhibitor in *Helicoverpa armigera*. International Chemical Ecology Conference 2013, International Society of Chemical Ecology, Asia-Pacific Association of Chemical Ecologists, Melbourne, AUSTRALIA, Aug 2013

Kuwar S.* Differential regulation of serine protease multigene family against a plant protease inhibitor in *Helicoverpa armigera*. SAB Meeting 2012, MPI for Chemical Ecology, Jena, GERMANY, Oct 2012

Kuwar S.*, Pauchet Y., Vogel H., Heckel D. G. Annotation of serine protease superfamily and transcriptional response to a plant protease inhibitor in *Helicoverpa armigera*. 6th Annual Arthropod

Genomic Symposium, Kansas State University, Arthropod Genomics Center, Kansas City, UNITED STATES, Jun 2012

Kuwar S.*, Pauchet Y., Vogel H., Heckel D.G. Adaptive evolution and regulation of digestive serine protease superfamily in *Helicoverpa armigera*. ICE Symposium, MPI for Chemical Ecology, Jena, GERMANY, Sep 2011

Kuwar S.* Molecular evolution of digestive serine proteases of *Helicoverpa armigera*. 10th IMPRS Symposium, MPI for Chemical Ecology, Dornburg, GERMANY, Feb 2011

Vaidya B. K., **Kuwar S.***, Golegaonkar S. B., Nene S. N. Kinetic modeling of thermal inactivation of soluble and immobilized aminoacylase on novel acrylic beaded polymers. Industry-IBB Meet organized by Institute of Bio-informatics and biotechnology, University of Pune, INDIA, Mar 2008

"National conference on Genomics, Proteomics and Systems biology" held at IISc campus Bangalore jointly organized by Department of Biotechnology, Sir M.VIT and department of Biotechnology DSCE, Bangalore, INDIA 1-3 Oct 2008.

ACHIEVEMENTS

ISCE Student Poster Award: for outstanding contribution as a poster in International Chemical Ecology Conference 2013, International Society of Chemical Ecology, Asia-Pacific Association of Chemical Ecologists, Melbourne, Australia, Aug 2013

International Max Planck Research School Fellowship for PhD studies, Max Planck Institute for Chemical Ecology, Jena, Germany. January 2010

GATE 2009 Qualified with 84.45 percentile

LIST OF PUBLICATIONS

Vaidya, B. K., **Kuwar, S.**, Golegaonkar, S. B., Nene, S. N., 2012. Preparation of cross-linked enzyme aggregates of L-aminoacylase via co-aggregation with polyethyleneimine. Journal of Molecular Catalysis B-Enzymatic, 74, 184-191, **doi**:10.1016/j.molcatb.2011.10.003

Kuwar, S. S., Pauchet, Y., Vogel, H., Heckel, D. G., 2015. Adaptive regulation of digestive serine proteases in the larval midgut of *Helicoverpa armigera* in response to a plant protease inhibitor. Journal of Insect Biochemistry and Molecular Biology 59, 18-29, **doi**: 10.1016/j.ibmb.2015.01.016

Kuwar, S. S., Pauchet, Y., Heckel, D. G., 2015. Effects of class-specific, synthetic and natural protease inhibitors on life history traits of *Helicoverpa armigera*. (Under review Entomologia Experimentalis et Applicata.)

Kuwar, S. S. and Heckel, D. G. Genome wide comparative analysis of digestive serine protease superfamilies in *Helicoverpa armigera*, *Spodoptera frugiperda*, and *Manduca sexta* (Prepared for submission: BMC Genomics)

Kuwar, S. S., Vogel, H., Heckel, D. G. Host specific transcriptional response of *Helicoverpa armigera* larvae fed on leaves of cotton or soybean (Prepared for submission: Insect Molecular Biology)

Kuwar, **S. S.**, Pauchet, Y., Vogel, H., Gebauer-Jung, S., Wielsch, N., Svatoš, A., Heckel, D. G. Identification of SKTI-sensitive and SKTI-insensitive proteases at translational level. (In preparation)

PROFESSIONAL SERVICES

Article reviewing for PLOS ONE

REFERENCES

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Dr. Heiko Vogel, Entomology
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Jena, 13 June 2016

Suyog S. Kuwar