

# The Maharaja Sayajirao University of Baroda



DEPARTMENT OF ZOOLOGY  
FACULTY OF SCIENCE  
VADODARA 390 002, INDIA



## CERTIFICATE

This is to certify that the thesis “**Pesticide induced developmental malformations: a mechanistic study in chick embryo**” incorporates the results of investigation carried out by the candidate himself and analysed in the Department of Zoology, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara.

Candidate  
(Shashikant Sharma)

Guiding Teacher  
(Prof. B. Suresh)

## Urkund Analysis Result

**Analysed Document:** Shashi thesis urkund version.pdf (D59667480)  
**Submitted:** 26/11/2019 13:42:00  
**Submitted By:** b.suresh-zoo@msubaroda.ac.in  
**Significance:** 4 %

### Sources included in the report:

SP\_thesis\_final for urkund 2.pdf (D58435961)  
2010-08-13\_9907382.pdf (D2901474)  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5856662/>  
[https://www.researchgate.net/publication/323311921\\_Exposure\\_to\\_sub-lethal\\_dose\\_of\\_a\\_combination\\_insecticide\\_during\\_early\\_embryogenesis\\_influences\\_the\\_normal\\_patterning\\_of\\_mesoderm\\_resulting\\_in\\_incomplete\\_closure\\_of\\_ventral\\_body\\_wall\\_of\\_chicks\\_of\\_domes](https://www.researchgate.net/publication/323311921_Exposure_to_sub-lethal_dose_of_a_combination_insecticide_during_early_embryogenesis_influences_the_normal_patterning_of_mesoderm_resulting_in_incomplete_closure_of_ventral_body_wall_of_chicks_of_domes)  
[https://www.researchgate.net/figure/Photomicrograph-of-Day4-and-Day-10-chick-embryo-longitudinal-sections-of-A-Day-4\\_fig2\\_323311921](https://www.researchgate.net/figure/Photomicrograph-of-Day4-and-Day-10-chick-embryo-longitudinal-sections-of-A-Day-4_fig2_323311921)  
[https://www.researchgate.net/publication/44607415\\_Chronic\\_cadmium\\_exposure\\_induces\\_transcriptional\\_activation\\_of\\_the\\_Wnt\\_pathway\\_and\\_upregulation\\_of\\_epithelial-to-mesenchymal\\_transition\\_markers\\_in\\_mouse\\_kidney](https://www.researchgate.net/publication/44607415_Chronic_cadmium_exposure_induces_transcriptional_activation_of_the_Wnt_pathway_and_upregulation_of_epithelial-to-mesenchymal_transition_markers_in_mouse_kidney)

### Instances where selected sources appear:



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### **Certificate from the Guiding Teacher**

I certify that the research work carried out by **Mr. Shashikant Sharma (Reg. no. FoS/1902 dated 09/08/2014)** for the doctorate degree in Zoology is original and vouches that there is no plagiarism or any other academic dishonesty. Further it is certified that, this work has not been submitted for the award of any other Degree/Diploma of The Maharaja Sayajirao University of Baroda, Vadodara, or to any other University/Institution.

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**Undertaking from the Research Scholar**

I, **Mr. Shashikant Sharma (Reg. no. FoS/1902 dated 09/08/2014)** do solemnly declare that the research work carried out by me for the doctorate degree in Zoology is original and vouch that there is no plagiarism or any other academic dishonesty. Moreover, this work has not been submitted for the award of any other Degree/Diploma of The Maharaja Sayajirao University of Baroda, Vadodara, or to any other University/Institution.



Shashikant Sharma  
(Research Scholar)