

## Division of Livestock and Fishery Management

Personal Details	
	<b>Dr. Kamal Sarma</b> Principal Scientist  Address : ICAR Research Complex for Eastern Region, Patna- 800014 Email-ID: kamalsarma6@rediffmail.com
Research Interest	
Aquaculture, stress physiology and aquatic environment	
Research Highlights	
Stress physiology and aquatic environment related aspects	
Memberships / Fellowships	
Technology Developed	
Publication Details	
<ol style="list-style-type: none"><li>1. <b>Kamal Sarma</b>, A. K. Pal, N. P. Sahu, R. S. Dalvi, Nirupama Chatterjee, S. C. Mukherjee, Kartik Baruah. 2011 . Acute and chronic effects of endosulfan on the haemato-immunological and histopathological responses of a threatened freshwater fish, spotted murrel, <i>Channa punctatus</i>. <i>Fish Physiol Biochem</i>, DOI 10.1007/s10695-011-9530-z.</li><li>2. <b>Kamal Sarma</b>, A. K. Pal, N. P. Sahu, R. S. Dalvi, Nirupama Chatterjee, S. C. Mukherjee, Kartik Baruah. 2011. Acute and chronic effects of endosulfan on the haemato-immunological and histopathological responses of a threatened freshwater fish, spotted murrel, <i>Channa punctatus</i>. <i>Fish Physiol Biochem.</i>, DOI 10.1007/s10695-011-9530-z.</li><li>3. <b>Kamal Sarma</b>, N. Ravisankar, S. Dam Roy, G. Grinson and R.C. Srivastava. 2009. Prospects of Fish Culture in the Broad Bed and Furrow system in Andaman: A Case Study. <i>Environment and Ecology</i>, 28(1):86-90.</li><li>4. <b>Kamal Sarma</b>, A. K. Pal, N. P. Sahu , S. C. Mukherjee, Kartik Baruah. 2009. Biochemical and histological changes in the brain tissue of spotted murrel, <i>Channa punctatus</i> (Bloch), exposed to endosulfan. <i>Fish Physiol. Biochem.</i> 36(3):597-603.</li><li>5. <b>Kamal Sarma</b>, A. K. Pal, Grinson George and Kartik Baruah. 2015. Effect of sublethal concentration of endosulfan on fatty acid profile of spotted murrel, <i>Channa punctatus</i>. <i>Journal of Environment Biology</i>, 36(2) : 451-454.</li><li>6. <b>Kamal Sarma</b>, A. K. Pal, Kartik Baruah, 2011. Alterations of the ionic composition in different organs of spotted murrel (<i>Channa punctatus</i>) exposed to sublethal concentration of endosulfan. <i>Turkish Journal of Fisheries and Aquatic Sciences</i> 11: 93-99.</li></ol>	

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8. **Kamal Sarma**, K. Prabakaran, P. Krishnan , G. Grinson and A. Anand Kumar. 2012. Response of a freshwater air-breathing fish, *Clarias batrachus* to salinity stress: an experimental case for their farming in brackishwater areas in Andaman, India. *Aquacult Int* , DOI 10.1007/s10499-012-9544-2
9. **Kamal Sarma**, Pal AK, Sahu NP, Ayyappan S. and Baruah K. 2009. Dietary high protein and vitamin C mitigates endosulfan toxicity in the spotted murrel, *Channa punctatus* ( Bloch,1793). *Sci Total Environ*. 407(12):3668-73.
10. **Kamal Sarma**., A. K. Pal, S. Ayyappan, T. Das, S. M. Manush, Dipesh Debnath and Kartik Baruah. 2008. Acclimation of *Anabas testudineus* (Bloch) to three test temperatures influences thermal tolerance and oxygen consumption. *Fish Physiology and Biochemistry*. 10.1007/s10695-008-9293-3.
11. Binod Kumar Choudhary, **Kamal Sarma**, Sullip K. Majhi, D. K. Kaushal, A. Dey and B.P. Bhatt. 2013. Climate Change and Its Impact on Fisheries and Aquatic. Ecosystem in Bihar. *International Journal of Advanced Research*, 2( 1): 587-592.
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