

International J. of Math. Sci. & Engg. Appls. (IJMSEA)  
ISSN 0973-9424, Vol. 7 No. IV (July, 2013), pp. 11-18

## **SOLUTION ANALYSIS OF A FRACTIONAL ORDER PREDATOR -PREY SYSTEM**

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### **Abstract**

In this paper, the Homotopy perturbation method is applied for solving the nonlinear fractional differential equations arising in a predator - prey biological population dynamics system. Adomian decomposition method is used for numerical comparison.

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Key Words : *Homotopy perturbation, Adomian decomposition, Fractional order, Population dynamics.*

2000 AMS Subject Classification : 34A34, 34B15, 34D10, 37M99.

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