

## **Fecal microbial population, and growth in broiler fed organic acids and palm fat-composed diet**

### **ABSTRACT**

A linear stability assessment was performed to study the impact of internal heating and variable gravity in an anisotropic porous medium of a ferrofluid layer system on the onset of Benard-Marangoni convection. The system is heated from below with both the lower and upper limits are considered as completely insulated to the disturbance of the temperature. The eigenvalue problem is solved by using regular perturbation technique to obtain the critical Marangoni number and also the critical thermal Rayleigh number. It is noted that the increase of value anisotropic permeability, Darcy number and also magnetic number will enhance the convection of the system while the increasing values of anisotropic thermal diffusivity will help to stabilize the system.

**Keyword:** Ferrofluid; Anisotropic; Variable gravity