

BODY WEIGHT RESPONSE TO SEASONAL STRESS AND ANTIOXIDANTS

**ARINDAM CHAKRABORTY, ANUBHABARUAH, B.C.SARMAH, J.GOSWAMI, ARUNDHATI BORA,
D.J.DUTTA, R.K.BISWAS, DHIRESWARKALITA & DONNA PHANGCHOPI**

Department of Veterinary Physiology, College of Veterinary Science,
Assam Agricultural University, Khanapara, Guwahati, Assam, India

ABSTRACT

The present experiment was conducted to study the body weight gain in the crossbred pigs (Hampshire × Local) under the agroclimatic condition of Assam. The experiment included a total of 36 numbers of crossbred weaned female pigs. Eighteen (18) animals were subjected to treatment separately during summer and winter. The selected animals were divided into three groups with six pigs in each group consisting of the control group (Treatment 1), one group was fed melatonin @3 mg/animal (Treatment 2) and the other group was fed Vitamin E @100 mg (Treatment 3) for both the seasons. The animals were maintained at AICRP on Pig, College of Veterinary Science, AAU, Khanapara, and Guwahati-22. Temperature-Humidity Index was calculated out from the data of ambient temperature and relative humidity by using standard formula. The Temperature Humidity Index (THI) during the study period was indicative of thermal stress to the experimental animals in the summer as compared to winter season. The mean body weight value in the three treatment groups during summer was found to be 23.22 ± 0.78^A whereas it was 25.61 ± 0.93^B during winter.

KEYWORDS: Antioxidants, Body Weight Gain, Seasonal Stress