**ABSTRACT**

The present study was aimed to study the trends of body weight gain in Fayoumi and Sonali chickens under intensive farming condition. Data on the study population comprised of 3000 Fayoumi and 2500 Sonali chickens were collected using a predefined questionnaire. Descriptive statistical analyses for variables were performed using GraphPad Prism version 7.00. It was observed that same amount of handmade diet was supplied to chickens. Results show that the weekly live-weight gain was measured to compare the mean weight gain in Fayoumi and Sonali. The average feed by a bird at 1st, 10th and 17th weeks was 16gm, 60gm and 85gm, respectively. The average body weight at 1st week for a Fayoumi was 27.8±1.36 gm, whereas it was 28.20±1.39 gm for a Sonali chick. The mean body gain at 9th and 11th to 16th weeks in Fayoumi vs Sonali were 727.00± 2.30gm vs700.00±3.22gm; 1052.00±4.06gm vs 1006.00±5.34gm and 1145.00±4.18gm vs 1089.60±5.07gm, respectively, these variations were highly significant (p<0.0001) betwwen Fayoumi and Sonali chicken. The mean body weight gain in Fayoumi from 7th to 15th weeks was higher than that of Sonali chicken while the mean body weight gain at 16th week was higher in Sonali (101.8gm/bird) than Fayoumi chicken (66 gram/bird). The difference in mean body weight gain considerably variable due to genetic make-up under same feeding and management system.

**Keywords**: Fayoumi, Sonali chicken, Intensive farming, Body weight gain

**CONTENTS**

|  |  |  |
| --- | --- | --- |
| **Chapter** | **List of content** | **Page no** |
|  | Abstract  Contents  List of tables  List of figures  List of abbreviations | i  ii  iii  iii  iv |
| **I** | **Introduction** | **1-2** |
| **II** | **Materials and Methods**  2.1 Description of the study area  2.2 Study population  2.3 Sample population  2.4 Data collection  2.5 Statistical analysis | **3-4** |
| **III** | **Result and Discussion**  3.1 General management  3.2 Ration  3.3 Feed consumption  3.4 Body weight for Sonali and Fayoumi  3.5 Average weekly body weight gain in Sonali and Fayoumi | **5-8** |
| **IV** | **Conclusion** | **9** |
|  | **Acknowledgement** | **10** |
|  | **References** | **11-12** |
|  | **Biography** | **13** |
|  |

**List of Tables**

|  |  |  |
| --- | --- | --- |
| **Table No.** | **Contents** | **Page no.** |
| 1 | Ration used for different age of Fayoumi and Sonali under intensive farming system | 5 |
| 2 | Amount of feed consumed by per bird per day | 6 |
| 3 | Weekly mean body weight for Fayoumi and Sonali chicken under intensive farming | 7 |

**List of Figures**

|  |  |  |
| --- | --- | --- |
| **Figure No.** | **Contents** | **Page no.** |
| 1 | Map of Adarsha Sadar Upazilla, Comilla | 3 |
| 2 | Average weekly body weight gain in Sonali and Fayoumi under intensive farming system | 8 |

**List of Abbreviations**

|  |  |
| --- | --- |
| **Symbols** | **Elaborations** |
| % | Percentage |
| > | Greater than |
| < | Less than |
| Wt. | Weight |
| SE | Standard Error |
| Avg. | Average |
| et al. | Et alii (And others) |