ABSTRACT

SELIGI (Phyllanthus buxifolius) LEAF POWDER POTENTIAL AS A NATURAL FEED SUPPLEMENT TO IMPROVE LEPTIN PROFILES AND PHYSIOLOGICAL CHARACTERISTICS BROILER CHICKENS AS EFFORTS TO PRODUCE LOW FAT AND CHOLESTEROL MEAT

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The present study was designed with the aim to find a natural supplement herbal based feed from seligi (Phyllanthus buxifolius) leaf powder that can effectively affect the profile of leptin and physiological characteristics of broiler chickens as an effort to produce low in fat and cholesterol meat. Serum leptin levels, tissue leptin receptors, intracellular accumulation of fatty tissue, fat cells of the liver (fatty liver) are used to determine leptin profiles, while the final weight, carcass weight, protein digestibility, fat digestibility, fat content and cholesterol levels of meat, protein content of meat, and weight abdominal fat to determine the physiological characteristics of broiler chickens fed powdered leaves seligi. The addition of 5% powdered leaves seligi on commercial feed effect nutritional value, mainly protein, fat and carbohydrates, decrease 0.17% crude protein and 3.38% carbohydrates, as well as the increase in 0, 11% fat, increase the fiber content of feed, especially 5.55% pectin, 0.22% hemicellulose, 2.13% cellulose, and positive group contains flavonoids, tannins, and saponin. Giving seligi leaf powder can improve the profile of leptin and physiological characteristics of broiler chickens. Compared with controls, the biggest decline of serum leptin levels 152.984 pg/ml (60.961%) in chickens fed the powder for 14 days (age 35 days), 6.88% tissue leptin receptors in the provision of powder for 21 days (42 days old), 5.6% fat accumulation on the intracellular delivery of powder for 14 days (age 35 days), and 11.8% fatty liver in the provision of powder for 21 days (age 42 days). The largest decreased on occurred also 4.715% provision digestibility of fat in the powder for 21 days (age 42 days); 34.1 g (5.177%) abdominal fat weight in the administration of powder for 14 days (age 35 days); 9.325% fat content in meat giving 7 days (28 days) and 7.15% in the provision of 14 days (age 35 days), 33.08% (37.838 mg/100 g) meat cholesterol levels in the provision of 21 days (age 42 days); 270 g (13.982%) final body weight at age 35 days and the smallest 7.9 g (6.107%) given the weight of chicken powder for 7 days (28 days); and 274 g (19.97%) carcass weight and the smallest 49.8 g (5.702%) in the provision of powder during the 7 days (28 days). However, 5% powdered leaves seligi 4.715% increase in the provision the digestibility of protein for 21 days (age 42 days) and 1.956% protein content in the same age.

Key words : Seligi (P. buxifolius), broiler chickens, leptin profiles, physiological characteristics.