METABOLIC EFFECTS OF ACTIVE IMMUNIZATION AGAINST SOMATOSTATIN IN BROILER CHICKENS

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CERTIFICATE

This is to certify that the thesis entitled, "**METABOLIC EFFECTS OF ACTIVE IMMUNIZATION AGAINST SOMATOSTATIN IN BROILER CHICKENS**" submitted in partial fulfilment of the requirements for the degree of **MASTER OF VETERINARY SCIENCE in PHYSIOLOGY** to the Tamil Nadu Veterinary and Animal Sciences University, Madras is a record of bonafide research work carried out by **Thiru P. SELVARAJ** under my supervision and guidance and that no part of this thesis has been submitted for the award of any degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

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ABSTRACT

METABOLIC EFFECTS OF ACTIVE IMMUNIZATION AGAINST SOMATOSTATIN IN BROILER CHICKENS

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Active immunization against somatostatin was carried out in broiler chickens. Somatostatin was conjugated with both human serum α-globulin and human serum albumin. Forty, one-day old broiler chicks of Ross Strain were selected and randomly divided into five groups consisting of eight chicks in each group. The group I, II, III, IV and V received injections of SRIF-hSαg, hSαg, SRIF-hSA, hSA and saline respectively.

The SRIF-hSαg group gained 13.6 and 19.16 per cent more weight than hSαg group and control group birds. The weight gain was significantly higher ($P<0.01$) compared to other groups.

Feed efficiency was enhanced in the SRIF-hSαg group compared to all the other groups. The feed efficiency was 2.15 and utilization of feed was 8.5 per cent more than the other group of birds.

The abdominal fat was considerably reduced in the SRIF-hSαg group and the reduction was to the extent of 26.67 per cent.

The triglycerides levels were significantly ($P<0.01$) lowered in the SRIF-hSαg group compared to other group of birds.