

Mansoura University Faculty of Veterinary Medicine Department of Pharmacology

# Pharmacological studies on some anthelmintic in sheep

## A Thesis Presented By

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#### **Summary**

This work was planned to evaluate some pharmacological effects of ricobendazole and triclabendazole on blood picture, some liver and kidney functions and body weight in sheep.

Our study was performed on thirty apparently healthy sheep, 2-4 years old, with average body weight 55-60 Kg in especial farm at Dakahlia Governorate were used in this study. They were fed on concentrated ration (1.5 kg/head/day) and silage (3 kg/head/day) and water was provided ad-libidum .They were kept under complete hygienic conditions during the experimental period.

The present study revealed a significant increase on total erythrocytic count, heamoglobin content and Mean Corpuscular heamoglobin in ricobendazole and triclabendazole treated groups at first, second and third weeks post treatment compared to the control group.

The results showed a significant increase on mean corpuscular volume in ricobendazole and triclabendazole treated groups at first, second and third weeks post treatment compared to the control group, moreover our data mirrored that a significant increase on ricobendazole treated group compared to triclabendazole treated group at the third week post treatment. Moreover these data showed a significant increase on mean corpuscular heamoglobin concentration in ricobendazole and triclabendazole treated groups at third week post treatment compared to the control group.

Our results showed a significant increase on thrombocyte count in ricobendazole and triclabendazole treated groups at first, second and third weeks post treatment compared to the control group, moreover our data mirrored that a significant increase on triclabendazole treated group compared to ricobendazole treated group at the first week post treatment.

The present data mirrored a significant increase on total leucocytic counts in ricobendazole and triclabendazole treated groups at first, second and third week post treatment compared to the control group.

Our data detected a significant decrease on eosinophil percent in ricobendazole and triclabendazole treated groups at first week post treatment compared to the control group.

The present study mirrored a significant increase on lymphocyte in ricobendazole treated groups at first week post treatment compared to the control group.

Result evaluated a significant decrease on basophil in ricobendazole and triclabendazole treated groups at first and second week post treatment compared to the control group, while a significant increase was recorded on ricobendazole treated groups at second week post treatment compared to the control group.

Our work reflected a significant decrease on creatinine, uric acid, alanine transaminase (ALT), aspartate transaminase (AST) and alkaline phosphatase (ALP) in ricobendazole and triclabendazole treated groups at first, second and third weeks post treatment compared to the control group.

Moreover the results showed a significant decrease on total bilirubin in ricobendazole and triclabendazole treated groups at third week post treatment compared to the control group ,moreover our data mirrored that a significant decrease on ricobendazole treated group compared to triclabendazole treated group at the first and second week post treatment.

Not only that but also there was a significant increase on total protein in ricobendazole and triclabendazole treated groups at second and third weeks post treatment compared to the control group .Also the work detected a significant increase on albumin in triclabendazole treated groups at first week post treatment compared to the control group ,while at second week recorded a significant increase in triclabendazole treated groups at second week post treatment compared to reated groups at second week post treatment compared to the control group ,while at second week post treatment compared to reated groups at second week post treatment compared to reated groups.

Keeping with this line our data showed significant increase on globulin in ricobendazole treated groups at second week post treatment compared to the control group, while at third week recorded a significant increase in ricobendazole treated groups at second week post treatment compared to the triclabendazole group.

Also our results showed a significant increase on the body weight in ricobendazole and triclabendazole treated groups at first, second and third weeks post treatment compared to the control group.

Data detected a significant increase on weekly body gain in ricobendazole and triclabendazole treated groups at first and second weeks post treatment compared to the control group, while at third week recorded a significant increase in ricobendazole treated groups at second week post treatment compared to triclabendazole treated group.