

## Reflection of feeding rations containing different levels of biological treated corn stalks on blood parameters and caecum microbial count for growing rabbits

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**Abstract :** This work aimed to investigate the effect of feeding fungal treated corn stalks with *Trichoderma reesei* on some blood parameters and caecum microbial count for rabbits. Forty-two weaned New Zealand white rabbits, six weeks of age, were equally divided into 7 experimental groups (Each group divided into three replicates of two rabbits in each). The first group was fed on the control diet, the other six groups were fed diets containing corn stalks which replaced clover hay at 33, 66 and 100% biologically treated with *Trichoderma reesei* or treated with media only (without *T. reesei*), the experiment lasted for 13 weeks. At the end of the experiment, the rabbits were slaughtered and blood samples were collected in heparinized tubes for biochemical analysis. Caecal total bacteria, fungi, actinomyces and cellulolytic bacteria microbial counts were estimated. Values of total protein, albumin, AST, ALT, creatinine, urea, cholesterol and triglyceride contents were within the normal range. Rabbits fed treated stalks with *T. reesei* recorded ( $P \leq 0.05$ ) lower values of total protein content than those fed without *T. reesei*, while no significant differences were recorded between treatments on the other blood parameters. The results indicated that the interaction was significant ( $P \leq 0.05$ ) at level of 33%, whereas total protein was decreased with *T. reesei*. Also, calcium, catalase (CAT) and lipid peroxidase (LPO) were ( $P \leq 0.05$ ) decreased with *T. reesei* in levels of 100, 66 and 100%, respectively. While ALT was significantly increased for rabbits fed treated corn stalks with *T. reesei* at level of 33%. Results indicated that rabbits fed fungal treated corn stalks showed ( $P \leq 0.05$ ) higher total bacteria, fungi, actinomyces and cellulolytic bacteria counts than those fed stalks without *T. reesei*. And the level of 100% recorded the highest values of microorganisms count, but level of 66% recorded the highest value of cellulolytic bacteria. The results shown that the interaction was ( $P \leq 0.05$ ) with fungal treated stalks at levels 66 and 100%. It could be concluded that can be used biological treated corn stalks with *T. reesei* in feeding growing rabbits.

**Key words :** Biological treatment, corn stalks, blood parameters, caecum microbial count and rabbits.