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الآية

بسم الله الرحمن الرحيم

قَالَ تَعَلَّىٰ يُرِي (دَابَّةٌ فِي الْأَرْضِ طَائِرٌ يَطِيرُ بِجَنَاحَيْهِ
ذَٰلِكُمْ مِمَّا فَرَّطْنَا فِي الْكِتَابِ مِنْ شَيْءٍ ثُمَّ إِلَىٰ رَبِّهِمْ
يُحْشَرُونَ (38))

صدق الله العظيم

سورة الأنعام الآية (38)

Dedication

To the fountain of patience and optimism and hope my dear mother

To my big heart - dear father

To who support me to I be better in my life my sisters and brother

To the people who paved our way of science and knowledge

All our teachers distinguished

To whom I enjoyed with them the best and beautiful moments my friends

I guide this research

Acknowledgment

Firstly and lastly thanks to **ALLAH** who gave me persistence, and patience to complete this work. No words can adequately express my deep gratitude to my supervisor **Prof.Dr.Kamal Abdelbagi** for generously providing and for patience, constant support, advices and insight was invaluable to me. He is always available not only for consultation but also to solve any difficulties. Then I wish to express grateful thanks to administration of **Sudan University of Science and Technology**, college of **Agricultural Studies** for allowing me to conduct my research and providing any assistance requested. Gratitude also extended to **all people and friends** that assisted me in this research. For their excitement and willingness to provide feedback made the completion of this research and enjoyable experience.

ABSTRACT

This experiment was conducted to evaluate the response of broiler chicks fed on graded levels of mixture garlic and ginger essential oils as natural growth promoter alternative to antibiotic. Experimental parameters covered growth performance, carcass dressing percentage, subjective meat quality and economical appraisal. The experimental design used the complete randomized design (CRD). A total number of (84), 7days-old, 130gm initial weight unsexed *AborAcer* strain of broiler chicks were randomly divided into four experimental groups with three replicates, each of seven chicks. The first group (A) fed on basal diet without feed additives (control group), the other groups B,C and D were fed basal diets supplemented with different mixture of essential oils at levels of 200gm/ton(100gm ginger+100gm garlic), 400gm/ton(200gm ginger+200gm garlic) and 600gm/ton(300gm ginger +300gm garlic). The basal diet was formulated to meet the nutrients requirements of broiler chicks according to (NRC, 1994). Experimental diets were fed for 6weeks. The results indicated that there were no significant ($p>0.05$) differences among all treatment groups in the values of body weight gain, feed intake, feed conversion ratio, carcass dressing percentages and subjective meat quality attributes. No mortality was recorded throughout the experimental period. The economical evaluation showed that levels of dietary mixture garlic and ginger essential oils were economical feasible, but the values of profitability ratio(1.24) of group D (600gm/ton at mixture garlic and ginger essential oils) was the highest of the tested groups.

ملخص الدراسة

أجريت هذه الدراسة لتقييم مدي استجابة كتاكيث الدجاج اللاحم المغذاة علي مستويات متدرجة من خليط زيت الثوم والجنزبيل كمحفز طبيعي للنمو بديلا للمضادات الحيوية . شملت قياس التجربة الأداء الإنتاجي، نسبة تصافي الذبيحة، الصفات الانطباعية النوعية للحم والتقييم الاقتصادي. صممت هذه التجربة بإستخدام النظام العشوائي الكامل . تم استخدام 84 كتكوت عمر 7 أيام بوزن ابتدائي 130 جم غير مجنسة من سلالة الابرايكر ، تم تقسيمها عشوائياً إلي أربعة مجموعات تجريبية ، كل مجموعة ضمت ثلاثة مكررات ، بكل مكرر سبعة كتاكيث ، تمت تغذية المجموعة الأولى (A) علي عليقه أساسية بدون أي إضافة (عليقه قياسية) ، أما المجموعات الاخرى B ، C، D فقد تمت تغذيتها علي العليقه الأساسية مضافاً إليها خليط زيت الثوم والزنجيل بنسبة 200 ، 400 ، 600 جم اطن علي التوالي . تم تكوين العليقة القياسية لتقابل الاحتياجات الغذائية للدجاج اللاحم الصادر من (NRC ، 1994) تمت التغذية علي العلائق التجريبية لمدة 6 أسابيع اثبتت النتائج المتحصل عليها بأنه لا توجد فروقات معنوية ($P>0.05$) بين كل المجموعات التجريبية في قيم وزن الجسم المكتسب ، العليقة المستهلكة ، معدل التحويل الغذائي ، نسبة التصافي للذبيحة وصفات اللحم الانطباعية النوعية للدجاج اللاحم. لم تسجل اي حالات للنفوق خلال فترة التجربة . اظهر التقييم الاقتصادي بان كل المستويات الغذائية لخليط زيت الثوم والجنزبيل كانت مجدية اقتصاديا ولكن قيمة الربحية النسبية (1.24) في المجموعة D (600 جم اطن خليط زيت الثوم والجنزبيل) كانت الاعلي بين المجموعات المختبرة .