



# EFFECT OF ADDING POMEGRANATE (*PUNICA GRANATUM*) HUSKS AND HARMALA (*PEGANUM HARMALA*) AT FIXED RATES TO FEED ON THE PRODUCTIVE QUALITIES AND TREATMENT OF DIARRHEA FOR CHICKEN MEAT

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## Abstract

The current study was conducted to investigate the effect of the powder of the harmala (*Peganum harmala*) plant and the pomegranate (*Punica granatum*) peel powder on the treatment of the chicken meat with diarrhea and on the increase of the weight of the chicken when used in the feed. The study was conducted on a sample of 100 meat chicken, five weeks old, divided into four equal groups, each of which included 25 chicken for the purpose of studying the effect of the use of the above powders, with the feed on the weight increase, where the feeding of the chicken in the first group on the diet does not contain any addition, while the second group was fed on a diet containing camel powder of 10 g for 10 kg of the feed for the same kind of feed for the treatment Guardian. The third treatment was fed with pomegranate husk powder 10 g / 10 kg feed of the same feed quality for the first and second treatments. The fourth treatment was fed on a diet containing pomegranate husk powder and harmala powder 5 g / 5 g / 10 kg feed of the same feed type provided for the first, second and third treatments. While four groups of chickens with diarrhea were used at the age of five weeks and each group consisted of ten chickens. The first group was considered control and the second treatment was used for the second group, the third treatment for the third group and the fourth treatment for the fourth group for one week. The results showed that the use of camel powder with the diet achieved the best increase in weight of the chicken followed by the use of pomegranate husk powder in the bush individually, while the use of a mixture of above powders in the blackberry ranked last in the weight increase of chickens. The results showed that all the chickens were killed in the first group, while 30% of the chickens were cured when using the harmala powder alone and 50% when the pomegranate powder was used individually in the diet and 60% when using a mixture of both the harmala and pomegranate peel powders together.

**Key words :** Weight gain, Pomegranate peel, Pomegranate powder, Chicken meat, Diarrheal disease.

## Introduction

The poultry industry is one of the main pillars of the economy of many countries of the world because it contributes effectively to agricultural production and the production of high-quality food such as meat and eggs, which are one of the main sources of animal protein, which enters the human diet as well as the speed of the cycle of capital. The studies have indicated that the natural products of plant extracts, which can be used for the duration of breeding and the need to estimate their residues in poultry products and their effect on public health, are considered to be the most important plant products. It contains essential and non-essential amino

acids, fatty acids, proteins, vitamins and minerals (Zarfeshany *et al.*, 2014). The round pomegranate fruit and many seeds are delicious fruits consumed and consumed all over the world and are exported to Iran, Afghanistan, China and India, then moved from Iran to the Mediterranean countries and the Turkish borders of Europe and the Southwest of the US, California and Mexico (Ismail *et al.*, 2012). Pomegranate (*Punica granatum*) contains many antioxidants (Al-muammar and Khan, 2012). Pomegranate peel, which accounts for 26% to 30% of the weight of the fruit, contains large amounts of antioxidants, such as bitter Phenolic compounds such as flavonoids (anthocyanins, catechins and other