

Abstract:

In order to produce vermicomposting from pomegranate pulp and its chemical characteristics, two separate experiments were carried out in 1393. In the first experiment with pulp of pomegranate in which tannins had not been scum and in the second experiment with pomegranate pulp in which tannins had been scum, mixed with cow manure that each of these separate factorial experiment in a completely randomized design with three replications were conducted at 80 days in Soil and Water Department, University of Zabol. The first experiment consists of two factors a and b, the factor a includes neutralized pulp pomegranate with lime and non-neutralized pulp Pomegranate and factor b includes 9 levels pulp pomegranate mixed with cow dung so that the non- tannins-making pulp of pomegranate has not been measured by percentage of zero (control), 5, 10, 15, 20, 25, 30, 35, 40 which is a total of 54 experimental units. The second experiment consists of two factors a and b, the factor a comprises neutralized pulp pomegranate with lime and non-neutralized pulp Pomegranate and factor b includes 11 levels of tannins making pulp pomegranate mixed with cow dung so that the pulp of pomegranate tannins has been measured by percentage of zero (control), 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, which is a total of 66 experimental units. Analysis of variance showed that the weight variables of adult worms, the number of mature worms, the number of Kocon, C / N, TN, P, K, Fe, Zn, Cu, pH and Ec at probability level of one percent ($P \leq 0.01$), Mn variable at the level of five percent ($P \leq 0.05$) and other TOC variable were non-significant in factor a. There was a statistically significant difference in all measured variables of factor b in the probability of one percent ($P \leq 0.01$). The first test NP25 (25% bed of pomegranate pulp) in terms of weight and number of adult worms was the best treatment and NP0 (manure) in terms of rich macro and micro elements was the best treatment. In the second experiment, NP40 (40% bed of pomegranate pulp) in terms of weight and number of adult worms was the best treatment and NP0 (manure) in terms of rich macro and micro elements was the best treatment. According to survey, making tannins of pomegranate pulp increased efficiency of 15% by weight, the number of adult worms and rich macro and micro elements.

Key words: pomegranate pulp, manure, vermicomposting, *Eisenia fetida*



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