

## **Abstract**

Proper nutrition plant is one of the basic principles of achieving sustainable agriculture And the identification of the fertilizers Compatible with nature and suitable for the plant Can have beneficial effects on quantitative and qualitative plant. In order to evaluate the effect of fertilizers on quantitative and qualitative characteristics of wheat and soil physical and chemical properties, The trial randomized complete block design, with 3 replications during 1392, The Institute of Zabol University, located in the city Zehak (well half), was carried out. The treatments were: control (no fertilizer), manure, vermicompost fertilizer, chemical fertilizer NPK, vermicompost fertilizer with nitroxin fertilizer, manure with nitroxin fertilizer, manure with chemical fertilizer NPK, respectively. Results showed that Different systems of feeding significantly increased grain yield, harvest index, biological yield and quality traits is growing at 1%. Treatment of chemical fertilizers increased the 16/20 percent Plant height, and integrated crop 11/60 percent weight increase Seed, and manure increases soil moisture in two stages of 89 and 61/34 is sent to the control. Chemical fertilizers and manure to retain more water. With increasing soil porosity, soil bulk density decreased as a result of the greater humidity. Compare the average yield nutritional treatments suggests that integrated systems of organic manure and chemical fertilizers and chemical systems have been more individually The combined application of organic and chemical fertilizers, the production yield, reduced use of chemical fertilizers. Chemical fertilizers with manure rather than chemical fertilizers has been a net increase in harvest index And may this increase was the result of increased grain yield per unit area, the increase in yield and number of grains per spike can be attributed square meters, An important component of their performance. Biological fertilizer treatment compared to no fertilizer, phosphorus, potassium and other micronutrients has increased. Due to the large amount of nitrogen fertilizer use and has been compared to other treatments increased plant nitrogen. Manure compared to other treatments to increase micro and potassium soil nutrients and make them more available to the plants, So to improve the nutrition of the plant through optimal use of fertilizers, micronutrient fertilizers, bio-organic farm, In addition to increasing the quality and quantity of agricultural production and the nutritional status of the population and make up for the lack of balance due to the improved functioning of the body and the need to supplement the reduced.

**Keywords:** wheat, fertilizer, quality, quantity, chemical and physical properties of soil