

## METHODS OF REDUCING ENVIRONMENTAL POLLUTION WHEN GROWING ARTICHOKE PRICKLY.

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*The researchers found that the artichoke prickly, which is grown in Tashkent region with the addition of full fertilizer, especially with semipreshing manure contribute more seed formation and greater accumulation of biomass. At the same time, the biomass (leaves) is larger on the typical serozem of the Tashkent region than on the light sierozem of the Syrdarya region. The authors note that the methods done by them for the effective use of nitrogen fertilizers for artichoke prickly hasn't only scientific, but also practical value, as it provides artichoke prickly crops of high quality, as well as a reduction in the level of environmental pollution.*

**Keywords:** artichoke prickly, biomass, leaves, typical serozem, vegetation, budding, nitrogen, light serozem, microorganisms, environment.

**Purpose of the research:** in this connection, we set the goal, to develop methods of application of nitrogen fertilizers that contribute to reducing environmental pollution and obtaining environmentally pure raw materials from artichoke prickly.

**Methods of research:** as noted above by us in 2011-2016 both vegetative and field experiments were carried out on light serosal soils of the Syrdarya and sierozem soils of the Tashkent region of the Republic of Uzbekistan. The area of each plot is 480 m<sup>2</sup>. The arrangement of plants 60 x 50 x 1 with a density of standing 36680 bushes per ha. The repeatability of the vegetative experiments is 10 times, and the field experiments are 4 times. The vials were filled in autumn with soil which were taken from the field experiment (horizon 0-50 sm), taking into account its genetic horizons. The soil humidity in the vessels was maintained at 75% capillary moisture capacity.

**The results of the research:** based on the results of our studies on the balance and conversion of fertilizer nitrogen in the soil-plant system, it can be asserted that on a typical sierozem with a high content of organic substances and a broad C: N ratio, in the initial period of plant development, is more demanding to carrying in nitrogen than on light serosal soils. As research has shown, with the onset of seed ripening, the supply of nitrogen to plants has been grown on typical serozem in the Tashkent region is higher than in the light serozem of the Syrdarya region, which is explained by the release of previously absorbed nitrogen by soil microorganisms. The results of the research have been established, that the content of fertilizer nitrogen compounds in plant tissues depends on soil differences. From the starting of vegetation to mass budding, the amount of nitrogen immobilization from fertilizers adding on a typical sierozem (or at the Tashkent region, the transfer of inorganic nitrogen to the organic form in the body of microorganisms) occurs more intensively than the light serozem of the Syrdarya region. With the carrying in of manure, the content of inorganic nitrogen fertilizer, is even more reduced unused fertilizer nitrogen (at the end of its vegetation) on the typical serozem of the Tashkent region, especially when manure is applied more than in the light gray soils of the Syrdarya region than in the soils of the

Tashkent region, which is associated with different contents in These soils are the masses of organic residues, as well as the C: N ratio. What with the immobilization of nitrogen, the content of inorganic compounds available for plants in the early stages of development and plant budding is reduced, especially in the conditions of the Tashkent region. It necessitate to study the effectiveness of introducing nitrogen fertilizers, inclusive of the biological characteristics of the transformation of nitrogen and soil conditions.

**Conclusions:** The results of our studies revealed that *Cynara scolymus* L which was grown in the Tashkent region with the carrying of full fertilizer, especially with manure, promotes more seed formation and the formation of great biomass. The bulk of biomass is larger in the typical sierozem of the Tashkent region than in the light serozem of the Syrdarya region.