

ВЛИЯНИЕ РАЗЛИЧНЫХ МЕТОДОВ ОБРАБОТКИ ПОЧВЫ НА РОСТ И РАЗВИТИЕ ПОВТОРНЫХ ПОСЕВОВ

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THE IMPACT OF DIFFERENT TILLAGE METHODS ON THE GROWTH AND DEVELOPMENT OF REPEATED CROPS.

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Аннотация: В статье приводятся сведения о совершенствовании методов и технических средств обработки почвы, улучшении качества пахоты и, как следствие, своевременном проведении мероприятий по борьбе с ними, оказывая некоторую помощь в подготовке почвы к посеву повторных культур и росту и развитию.

Ключевые слова: Аэрация, компост, мульч, интенсивный, системный золото, капельное орошение.

Annotation: The article provides information on improving the quality of plowing by improving soil cultivation methods and technical means, and as a result, providing some assistance in preparing the soil for repeated sowing, as well as timely implementation of measures to combat them, contributing to growth and development.

Keywords: Aeration, compost, mulch, intensive, systemic gold, drip irrigation.

Introduction. The issue of the effects of various soil cultivation methods on the growth and development of repeated crops holds significant importance in agriculture. Different cultivation methods improve the physical and chemical properties of the soil, create favorable conditions for plants, and promote effective crop growth. Loosening the soil, such as with systematic tilling, disking, or other mechanical methods, creates a supportive environment for plant root systems. This approach enhances soil granulation and improves aeration. Additionally, such practices help the soil effectively absorb precipitation and irrigation water, retaining it within the layers for extended periods. For repeated crops, this method prevents excessive soil compaction, optimizing plant growth.

Watering or moisture management is crucial for crops, as plants thrive in moist soil, but excessive moisture can lead to root rot. For repeated crops, various irrigation methods, such as drip irrigation, help maintain soil moisture at an optimal level. Proper soil aeration is also vital for plant roots. Soil aeration, which improves soil structure, facilitates the free exchange of oxygen and carbon dioxide. Aeration through cultivation prevents soil compaction and creates favorable conditions for root system development.

In modern intensive farming systems, cultivating repeated crops plays a vital role in agriculture. On irrigated farmlands, repeated crops such as legumes (mung beans, beans, peas, soybeans, peanuts), sunflower, maize, vegetables, and

melons allow for harvesting twice in a season from the same area. This, in turn, contributes to increased economic efficiency in farming operations.

Cultivating legumes as repeated crops helps maintain and enhance soil fertility, improves microbial activity, and optimizes the soil's water, air, thermal, and nutrient balance. Furthermore, it contributes to improving the ameliorative condition of the soil.

Applying various agronomic methods in a stratified manner for repeated crops yields better results. The primary crops, during their vegetative period, deplete the soil of nutrients, causing fertility to decline compared to the condition in early spring. Autumn and spring rains, along with frequent irrigation during the season, result in soil compaction in the layers. Therefore, before planting repeated crops, it is essential to thoroughly cultivate the soil to improve its altered water-physical, agro-physical, and agro-chemical properties. This method ensures healthy crop growth while maintaining the soil's fertility and ameliorative condition. Enriching the soil with organic fertilizers enhances its biological activity. Compost or organic matter improves soil composition, increases its water retention capacity, and enhances air exchange.

Conclusion

Various soil cultivation methods have a direct impact on the growth of repeated crops. By implementing proper soil management practices, including cultivation, fertilization, irrigation, and agronomic measures, healthy crop growth and development can be achieved. Regular monitoring of the soil's ecological condition, fertility, and moisture balance is essential. Utilizing repeated crops allows for better use of land and improves agricultural profitability.

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