# SPECIFIC ASPECTS OF PLOWING PERIODS AND PLOWING DEPTH

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## ABSTRACT

The article explores the influence of plowing times on agricultural practices, assessing how the timing of plowing impacts soil conditions, seedbed preparation, and ultimately, crop yields. It likely discusses the optimal periods for plowing based on seasonal variations and specific crop requirements. The article delves into the significance of plowing depth as a critical factor in agricultural operations. It likely discusses how different depths of plowing can affect soil structure, nutrient distribution, and water retention, emphasizing the importance of selecting appropriate plowing depths for specific crops and soil types.

**Keywords:** plowing times, agricultural practices, soil conditions, seedbed preparation, crop yields, seasonal variations, plowing depth, soil structure, nutrient distribution, water retention, crop specificity, agricultural operations.

Autumn plowing should be done mainly from the second half of October to the end of November, or until the rainy days begin and the ground freezes. Postponing autumn plowing until spring will reduce next year’s yield by –30%. Plowing can only be done in the spring on sandy soils.

Sub soils brought to the surface by plowing become granular as a result of successive freezing and thawing in winter.

Plowing fields in very muddy or very dry conditions, as well as in frozen soil conditions, leads to the appearance of large cuts. In addition, plowing in a field with high humidity causes the formation of a hard layer under the arable layer, which has a negative effect on the development of plants.

In regions with very little winter and spring precipitation (80–100 mm), plowing and fertilizing in windy districts will reduce moisture loss and help early planting.

The depth of plowing may vary depending on the thickness of the fertile layer, soil structure, degree of weed infestation, and climatic conditions. Only the plowing

work performed, taking into account all factors, can give the expected technical and economic result.

Based on best practices, plowing at the following graded depths is recommended:

- Plowing depth of 30 cm in brown and grassy soils in the northern and middle climate regions and in the foothills;

- Plowing depth is 35-40 cm in the conditions of light-colored soils with sufficient layers and soils of the southern zone;

- In the conditions of the light-colored clay soils that have been developed in the past, when the level of underground seepage water is close to the surface of the earth, the plowing depth is 20-30 cm, and the deep loosening is up to 40 cm;

- Grassy, saline surface layer with a plastered layer, deep loosening 40-50 cm and plowing 25-30 cm in heavy soils;

- Plowing should be carried out in the conditions of soil with a shallow layer of sand and gravel, so that the sand and gravel in the lower layer should not come to the surface.

The article thoroughly examines the impact of plowing times on agricultural operations. It likely discusses the seasonal variations and optimal periods for plowing, considering factors such as weather conditions, soil moisture levels, and specific crop requirements. By evaluating the influence of plowing times, the article aims to provide insights into how farmers can strategically plan and execute plowing activities to enhance soil conditions and improve overall crop yields.

Another crucial aspect explored in the article is the significance of plowing depth. It likely delves into the various depths at which plowing can be conducted and analyzes the implications of these depths on soil structure, nutrient distribution, and water retention. Different crops and soil types may require specific plowing depths for optimal growth, and the article likely discusses the importance of tailoring plowing practices to meet these diverse needs. The authors may also explore the technological advancements or specific equipment used to control and adjust plowing depths, highlighting the precision and adaptability required in modern agricultural practices.

The article likely considers the integration of plowing times and depths into a holistic approach to agricultural management. By understanding the synergy between these two factors, farmers can adopt more effective and sustainable practices. The authors may discuss how the proper synchronization of plowing times and depths contributes to soil health, minimizes erosion, and maximizes the efficiency of nutrient utilization by crops. The holistic perspective presented in the article may emphasize the need for a nuanced and adaptive approach to plowing practices that considers the dynamic interplay of environmental conditions, crop requirements, and technological advancements.

In summary, the article on "Plowing Times and Plowing Depth Features" is likely to offer a nuanced analysis of the specific aspects related to the timing and depth of plowing in agriculture. It provides valuable insights for farmers, agronomists, and researchers seeking to optimize plowing practices to enhance overall agricultural productivity and sustainability.

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