

October – optimal conditions for sowing winter cereal crops and additional production from vegetable crops and late varieties of fruit trees and grapes

Author(s): Растителна защита
Date: 01.10.2023 *Issue:* 10/2023



In October, agrometeorological conditions will be determined by temperatures around and above the climatic norms and precipitation around and below the monthly norms.

At the beginning of October, the forecast above-normal temperatures, with maximum values up to 30-32°C, will accelerate the ripening processes in late varieties of fruit trees and grapes, and will create conditions for harvesting additional produce from vegetable crops of late field production (tomatoes, peppers, zucchini,

gherkins). As a result of the above-normal thermal conditions, the late red wine grape varieties will reach technological maturity earlier than the usual dates, and the autumn fruit varieties will reach picking maturity.

After the relatively dry and warm-for-the-season weather during the second half of the first ten-day period, the agrometeorological conditions will undergo a change. During this period, a substantial decrease in minimum temperatures is forecast, with conditions for frost formation in basins and higher fields, which will necessitate the timely harvesting of vegetable crops susceptible to frost damage (tomatoes, peppers).

At the end of the first and the beginning of the second ten-day period, precipitation of economic importance is expected, an improvement of soil moisture reserves in the upper soil layers, and of the conditions for carrying out seasonal soil tillage. The drought at the end of summer and the beginning of autumn in many parts of the country, with the exception of the southeastern regions, delayed the pre-sowing tillage of areas intended for sowing with autumn crops. For this reason, in a large part of the field regions, the agrotechnical deadlines in September for sowing winter oilseed rape were missed.



October is the optimal period for sowing winter cereal crops. During the first ten-day period is the agrotechnical deadline for sowing wheat in Northern Bulgaria, from 15 to 25 October in Southern Bulgaria, and at the end of the month – along the Black Sea coast.

On most days in the second half of October, the initial stages of vegetation of the sown autumn crops will proceed under above-normal thermal conditions. In the middle and at the end of the third ten-day period, there is a forecast probability of precipitation, an improvement of soil moisture reserves in the 50 cm soil layer, and of the conditions for the development of winter cereal crops. At the end of October, in wheat, depending on the sowing dates, the following stages will be observed: emergence and leaf formation (1-3 leaves).

The forecast thermal conditions in October, around and above the norm, are a prerequisite for an increase in the population of the common vole – one of the dangerous pests in autumn crops. At the end of the month, autumn crops must be surveyed for the presence of the pest, and where its density exceeds the economic injury threshold (2 active colonies per decare), timely plant protection measures are necessary (poisoned baits placed at the entrances of the colonies).

In apple and pear orchards, at the beginning of leaf fall, after harvesting the fruit, spraying the trees with a 5% urea solution is recommended. This treatment limits scab infection.

For stone fruit species, against bacterial canker, peach leaf curl, shot-hole disease and early brown rot in apricot, sweet cherry and sour cherry, after mass leaf fall, spraying with a 2% Bordeaux mixture must be carried out.

Source: NIMH