

Agrometeorological forecast for May – conditions for the development of a number of fungal diseases in agricultural crops

Author(s): Растителна защита

Date: 08.05.2023 *Issue:* 5/2023



At the beginning of May, the agrometeorological conditions will be determined by below-normal temperatures and very good soil moisture reserves, as a result of the significant precipitation in April in Veliko Tarnovo – 112 l/m², Shumen – 108 l/m², Razgrad – 111 l/m², Silistra – 83 l/m², Dobrich – 87 l/m², Elhovo – 121 l/m², Stara Zagora – 99 l/m², Karnobat – 85 l/m², which in places in Central and Eastern Bulgaria exceeded twice the monthly norm.

The forecast precipitation during the first ten-day period of May will maintain the high level of soil moisture reserves in the 50cm and 100cm soil layers above 85% of the field capacity (FC). This will have a beneficial effect on the winter cereal crops that have entered the reproductive stage of their development, which at this stage have increased requirements for soil moisture. During this period, the phases of stem elongation, beginning of heading and heading will take place in wheat and barley crops in individual locations in the Danube Plain.

At the beginning of the second ten-day period, an increase in temperatures is forecast, normalization of thermal conditions and acceleration of vegetative processes in the autumn-sown crops and the sown spring crops.

The development of agricultural crops during the second half of May will proceed at temperatures close to the climatic norms. During this period, flowering, fertilization, grain formation and grain filling in winter cereal crops will occur under a favorable combination of heat and moisture. At the end of the third ten-day period, in part of the wheat and barley crops in the southeastern regions and in places in the Danube Plain, the beginning of the milk ripeness stage will be observed.

During the month, leaf formation will take place in maize and sunflower.

At the end of May, in sunflower sown within the agrotechnical period, the formation of the inflorescence will be observed.

The frequent precipitation in May will create conditions for the development of a number of fungal diseases: rusts (brown, yellow), septoria leaf blotch and fusarium in wheat; downy mildews in vegetable crops and vines; shot-hole disease and scab in fruit trees, grey mould in strawberries, brown rot in the ripening fruits of early cherry cultivars.

During the month, more favourable conditions for carrying out plant protection spraying will occur in the second half of the first ten-day period, in the middle and at the end of the second ten-day period, and during the last days of the month.

In May, hailstorms are a common phenomenon. In case of hail damage, it is advisable that the affected fruit and vegetable crops be treated at the first opportunity with copper-containing fungicides to reduce the risk of secondary infections by pathogens and to promote faster healing of the wounds.

Source: NIMH