

Above-normal temperatures at the beginning of March will ensure active progress of vegetative processes in agricultural crops

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The above-normal average daily temperatures and the recorded unusually high maximum values around and above 20°C, reaching in some places 23°-24°C (Vidin, Montana, Knezha, Lovech, Veliko Tarnovo, Ruse, Plovdiv, Pazardzhik, Stara Zagora, Haskovo, Elhovo, Sliven) in February led to the resumption of vegetation processes in the autumn-sown crops and to premature development and bud swelling in stone fruit trees and some pome species – apple, agrometeorological stations Nikolaevo and Novachene. The below-normal precipitation during the month did not allow full saturation to be reached in the one-metre soil layer (field

capacity) in some areas of North-Central and Eastern Bulgaria and in isolated locations of the Upper Thracian Lowland.

During the first days of the first ten-day period of March, temperatures above the climatic norms and conditions for the course of vegetation in agricultural crops are forecast. By the end of the period, a decrease in temperatures to values close to the climatic norms is expected, close to the biological minimum required for the course of vegetative processes in winter cereal crops.

During the period, vegetative processes in winter cereal crops will proceed at a slowed pace at average daily temperatures close to the climatic norms for the first ten-day period of the month. In wheat and barley, the tillering stage will take place – beginning and full tillering. In stone fruit species, the stages of bud burst, green cluster and beginning of flowering will occur in the most advanced trees. In pome fruit trees, bud swelling will be observed. In the vine, sap flow will occur – agrometeorological station Bazovets. During the period, critical minimum temperatures for the early developed stone fruit species are not forecast.

The frequent precipitation during the period will limit the possibilities for carrying out seasonal agrotechnical activities – performing pre-sowing soil tillage on the areas intended for sunflower sowing, completion of top-dressing of autumn-sown crops with nitrogen fertilizers, completion of pruning in orchards and vineyards, and carrying out pre-bloom treatments in fruit trees.

During the second and third ten-day periods of March, the agrometeorological conditions will be determined by dynamic weather. The forecast above-normal temperatures will ensure active progression of vegetative processes in agricultural crops. During the month, in wheat and barley the tillering stage will be observed, and in the most advanced crops in the Danubian Plain, by the end of March the beginning of stem elongation will occur. In fruit crops, different stages will be observed, from bud swelling and bud burst to green cluster and beginning of flowering in early-flowering stone fruit species – apricot, peach, cherry.

In March, the forecast minimum temperatures down to minus 5°C, depending on the duration of their persistence, will pose a risk to fruit crops advanced in their development in the stages of bud formation and flowering.

The expected precipitation at the end of the first, in the middle of the second ten-day period and at the end of the month will increase the soil moisture reserves in the one-metre soil layer.

The forecast unstable weather during the month will limit the possibilities for carrying out seasonal agrotechnical activities. More suitable conditions for conducting pre-bloom plant protection spraying in orchards against blossom blight (early brown rot), shot-hole disease, peach leaf curl, and scab in pome fruit trees will occur during the first half of the first ten-day period, at the beginning and at the end of the second ten-day period. In March, the optimal agrotechnical periods for sunflower sowing begin – from 15 March for Southern Bulgaria and from 25 March for Northern Bulgaria.

Source: NIMH