

In February, temperatures will be above climatic norms, but below the biological minimum

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Date: 12.02.2018 *Issue:* 2/2018



During most days of the first ten-day period of February, the agrometeorological conditions will be determined by temperatures above the climatic norms, but below the biological minimum required for the resumption of vegetation processes in autumn-sown crops. Exceptions will occur in Eastern Bulgaria, where higher temperatures are forecast. At the beginning of the month, in some places in the eastern regions, conditions will be created for weakly expressed vegetation in wheat and barley, but this will not lead to a change in the phenological state of the crops.

During the second and third ten-day periods, the forecast temperatures, close to the monthly norms, will maintain overwintering agricultural crops in dormancy in most parts of the country. Exceptions will be observed

during the third ten-day period of February in the southern regions, where conditions will be created for activation of vital processes in part of the winter cereal crops and for disruption of forced dormancy in some fruit crops. At the end of February, in early-flowering species (almond, apricot, peach), bud swelling will be observed, and in some places in Southwestern Bulgaria – the beginning of bud burst of the fruit buds.

In February, the forecast minimum temperatures, down to minus 14°C, are above the critical thresholds for winter cereal crops that have entered the tillering stage and for rapeseed in the rosette stage. These values, under conditions without snow cover and with more prolonged persistence, will pose a risk only to late-sown crops overwintering in the third-leaf stage.

The expected precipitation, around and above the monthly norm, will increase the autumn-winter soil moisture reserves also in the two-metre soil layer. In January, soil moisture reserves in the one-metre layer in wheat fields in most parts of the country were above 90% of field capacity.

More favourable conditions for pruning in vineyards and orchards, for winter plant protection treatments in fruit crops, and for top-dressing of autumn-sown crops with nitrogen mineral fertilizers will occur at the beginning of the first and during the first half of the second ten-day period of February.

In Northern Bulgaria, snowfall, formation of snow cover and improvement of the conditions for overwintering of autumn-sown crops are expected. This year, despite the snowless winter, the overall condition of most winter cereal crops is assessed as good. In wheat, the prevailing stage is tillering, and in the small proportion of late-sown, non-tillered winter cereal crops, no frost damage has been established so far.

The precipitation during the first week of February and the expected precipitation in the following period will maintain waterlogged upper soil layers and unfavourable conditions for top-dressing of autumn-sown crops with nitrogen mineral fertilizers.

In mid-February, conditions will allow pruning operations in vineyards and orchards.

In vineyards, it is advisable to carry out a survey for early diagnosis of the occurrence of excoriose disease (*Phomopsis viticola*) and timely cutting out and destruction of the shoots affected by the pathogen, followed by disinfection of the tools after the operations. The symptoms of the disease are observed during the non-vegetative period on mature shoots – the bark at the base of the first and second internodes is whitened and covered with small black dots.

Source: NIMH-BAS