

December – from above-average seasonal temperatures to restoration of relative dormancy in autumn crops

Author(s): Растителна защита
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After the sharp drop in temperatures at the end of November, which led to a slowdown and cessation of vegetation in autumn crops in most of the field areas, at the beginning of December the agrometeorological conditions will undergo a substantial change.

During the first days of the month an increase in temperatures is forecast and average daily values in the southern regions and along the Black Sea coast will rise above the biological minimum required for the vegetation of winter cereal crops.

At the beginning of December the agrometeorological conditions in Eastern Bulgaria will differ significantly from those in the rest of the country. In the eastern regions, temperatures higher than usual for the season are forecast, with maximum values of around 17°C-18°C and average daily values significantly above the biological minimum required for the vegetation of winter cereal crops.

A drop in temperatures and the restoration of relative dormancy in the autumn crops is expected during the second half of the first ten-day period.

During most days of the second and third ten-day periods the agrometeorological conditions will be dynamic, with alternating short periods of average daily temperatures around and above the climatic norms, but within ranges that will maintain winter cereal crops in dormancy in most of the field areas of the country. Exceptions are once again expected in the southernmost regions, where during the relatively warmer periods conditions will be created for short-term, delayed vegetation in the autumn-sown crops, but this will not lead to a substantial change in the phenological state of the stands.



This year the prolonged autumn drought delayed the sowing of wheat and a large part of the stands were sown in November, after the agrotechnical deadlines. For this reason the November stands will enter the winter at the emergence and 1–2 leaf stage. In the winter cereal crops sown in October, stands at the three-leaf stage will prevail at the beginning of winter.

In December the forecast values of minimum temperatures, down to minus 9-10°C, in conditions without snow cover and with a more prolonged duration, will pose a risk to the emerged, not yet hardened, late-sown November stands.

The forecast precipitation during the month will be close to the climatic norms and will increase the levels of soil moisture reserves even in the deeper soil layers. After the widespread rainfall of rain and snow during the third ten-day period of November, which in many parts of the country exceeded 50-60 //m², and in part of the Danube Plain 80–90 //m², an increase in soil moisture reserves in the 100 cm layer occurred and the moisture deficit in the autumn crops was overcome.

The expected precipitation during the period will maintain high moisture content in the upper soil layers and unfavourable conditions for carrying out seasonal soil tillage and phytosanitary activities in orchards.

Source: NIMH