

December – pay attention to the phytosanitary activities in perennial crops

Author(s): Растителна заштита
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On most days in December, agrometeorological conditions will be determined by dynamic weather, with alternating short periods of average daily temperatures around, below, and above the climatic norms.

At the beginning of the month, the increased moisture content in the upper soil layers will limit the implementation of seasonal soil tillage. In the middle of the period, no precipitation is expected, which will provide an opportunity for carrying out phytosanitary activities in the permanent crops.

The cooling that occurred at the end of November led to a slowdown, and in the higher fields and the Fore-Balkan, where a snow cover formed, to a cessation of vegetative processes in the autumn-sown crops.

At the beginning of December, an increase in temperatures is forecast, but their average daily values, with the exception of some locations in Southern Bulgaria and along the Black Sea coast, will not exceed the biological minimum required for the vegetation of winter cereal crops.

During the month, in most parts of the country, the autumn-sown crops will remain in a state of relative dormancy. Exceptions will once again be observed in the crops in the southern and southeastern regions at the end of the first and during the first half of the second ten-day period. During this time, above-normal temperatures are forecast, with maximum values above 10–12°C and conditions for delayed vegetation in winter cereal crops, but a change in the phenological state of the crops is unlikely.

This year, a significant part of the wheat crops will overwinter at an initial stage of their development. The drought during the first half of autumn in most of the country restricted and delayed the vegetation of the winter cereal crops. For this objective reason, the crops will enter the winter in different phenological phases: emergence, 1–2–3 leaves, and the beginning of tillering. Only a small part of the wheat crops in certain locations in the Danube Plain – the Novachene agrometeorological station and the region of Ruse – are in the tillering phase, in which the crops withstand winter conditions best.

In December, the forecast minimum temperatures, down to minus 9–10°C, in conditions without snow cover and with more prolonged persistence, will pose a risk to the emerged but not yet hardened winter cereal crops.

The expected precipitation during the month, around and above the norm, will increase the level of moisture reserves in the 50 and 100 cm soil layer. After the widespread precipitation in the second half of November, which in many parts of the country exceeded 40–50 l/m², the moisture deficit in the autumn-sown crops was overcome.

Source: NIMH