

December – increased dynamics in agrometeorological conditions

Author(s): Растителна защита
Date: 09.12.2021 *Issue:* 12/2021



The above-normal November temperatures and the presence of good soil moisture reserves maintained active vegetative processes in the autumn-sown crops and provided conditions for progress in the development of the late-sown stands.

During the first ten-day period of December, agrometeorological conditions will be highly dynamic, with alternating short periods of below- and above-normal average daily temperatures, but remaining below the biological minimum required for the development of winter cereal crops. At the beginning of the month, a slowing down of growth will be observed in wheat and barley, and during the second half of the first ten-day period, when precipitation, including snow, is forecast, vegetation in the stands will cease in most parts of the country.

Exceptions will occur in isolated locations in the extreme southern regions and along the Black Sea coast, where weakly expressed vegetative processes will continue in the autumn-sown crops, but these will not lead to a change in their phenological stage.

During the second and third ten-day periods, the forecast temperatures, close to the climatic norms, will maintain winter cereal crops in dormancy.

At the beginning of winter, the predominant stage in wheat will be the third leaf stage. A small share of the stands sown within the agrotechnical time frame in parts of the Danubian Plain and in the northeastern regions of the country will be in the tillering stage, which is the appropriate stage for overwintering. The late-sown winter cereal crops, sown in mid-November, are in the emergence stage and the initial stage of leaf formation. The objective reason for the substantial differences in the phenological state of the stands are the late sowings due to the unfavourable conditions at the beginning of autumn (drought and the subsequent above-normal October precipitation).

In December, the forecast minimum temperatures down to minus 12°C, in conditions without snow cover and with longer-lasting duration, will be critical for the un-hardened winter cereal crops in the emergence and initial leaf formation stages.

The expected above-normal precipitation during the month will increase the soil moisture reserves in the 100 cm soil layer, and in many places in the southern regions they will reach levels close to field capacity.

Source: NIMH