

Agrometeorological forecast for the month of December

Author(s): Растителна защита
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In December, the forecast temperatures, around and below the climatic norms, will maintain the autumn crops in dormancy in most parts of the country. Exceptions are possible for the autumn-sown crops in some locations in the far southwestern parts of the country and along the southern Black Sea coast. During the relatively warmer periods, in the middle of the first and in the second half of the third ten-day period, in these regions conditions may arise for a short-term resumption of the vegetative processes in the winter cereal crops and rapeseed, but no change in the phenological phases of the crops is expected.

This year a significant part of the autumn crops ceased vegetation insufficiently hardened, at an initial stage of their development, which calls into question their successful overwintering. The prolonged drought delayed the

sowing and the course of the initial phases of vegetation of wheat, barley and winter rapeseed. As a result of the soil moisture deficit, in some places the autumn-sown crops failed to emerge (Agrometeorological Station Sofia). The differences in the phenological condition of the winter cereal crops are considerable. The wheat crops will enter the winter in different phases: emergence, three-leaf stage and beginning of tillering. A small part of them, mainly those in the central and northeastern regions of the country (Pavlikeni, Razgrad, Tsarev Brod, Silistra, Provadia, Dolen Chiflik) are at the tillering stage, in which the plants overwinter successfully.

In rapeseed, crops that have formed 3–5 leaves predominate. The share of rapeseed crops that have ceased vegetation at the rosette stage – the appropriate stage for overwintering – is small. In December, the forecast values of minimum temperatures, down to minus 15°C, in conditions without snow cover and with more prolonged persistence, are critical for the winter cereal crops at the emergence and three-leaf stages, and for rapeseed crops that have failed to form a rosette.

The expected precipitation in December, within the normal range, will increase the soil moisture reserves in the 50 and 100 cm soil layer. After the widespread precipitation in the second half of November, in many parts of the country exceeding 50–60 l/m², the acute water deficit in the upper soil layers in the autumn crops was overcome.

Source: NIMH