

# August – soil moisture deficit and above-normal thermal conditions

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During most of August, the agrometeorological conditions will be determined by relatively dry and hot weather. During the month, the deficit of soil moisture will be a limiting factor for the development of late agricultural crops.

At the end of July, as a result of below-normal precipitation, in most of the field regions the content of productive moisture in the 50 cm soil layer under spring crops was depleted, and in the 100 cm layer it was scarce, below 50% of field capacity. In some locations in the southern regions (agrometeorological stations Pazardzhik, Lyubimets, Sliven), productive moisture was absent even in the one-meter soil layer.

During the first ten-day period of August, precipitation of agronomic significance is not forecast, which will necessitate an increase in irrigation rates for the later maize hybrids that are in the stages of grain formation and grain filling. Higher irrigation rates will also be needed for vegetable crops and autumn varieties of fruit trees, which will undergo intensive fruit growth during the month.

The forecast above-normal thermal conditions during most days of August will lead to a shortening of the interphase periods in the development of late agricultural crops. During the month, various maturity stages will occur in maize. In the first ten-day period, the earlier hybrids will complete their development, while the medium-early ones will be in the milk maturity stage. At the end of the third ten-day period, wax maturity will predominate in the medium-late maize hybrids. In the field regions, the ripening stage in sunflower will be observed on a mass scale in the middle of the month.

In August, the forecast maximum temperatures, in the range of 35-40°C, will have a negative impact on flowering and fertilization in second crops from late production (cucumbers, green beans, zucchini).

The dry weather during most days of the month will limit the development of a number of fungal diseases, with the exception of powdery mildews in fruit and vegetable crops.

In August, the harmful activity of the last generation of fruit moths should not be underestimated in late varieties of fruit trees. The conditions during the month will be favorable for an increase in mite populations. In vineyards, it is necessary to monitor the occurrence and density of caterpillars of the third generation of the European grapevine moth. Plant protection treatments during the month should be carried out in the cooler hours of the day with products having an appropriate pre-harvest interval, in line with the ripening period of the crops.

*Source: NIMH*