

HOW DROUGHT AFFECTS WHEAT PRODUCTION IN SERBIA

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Drought is causing increasing damage in agricultural production in Serbia. Due to the continuous lack of soil moisture in the past few years the crop production in Serbia is expected to become more expensive due to have higher production costs, primarily due to lower productivity and more expensive fuel.

According to the percentage of irrigated field areas, Serbia is behind all neighboring countries and is at the bottom of the European scale.

In 2017 for example, 675 000 hectares were sown and more arable fields are planned under wheat in the future. However, all the cereals, including wheat, need a large amount of water, which is properly distributed through a certain period of development. In order to mitigate the negative effect of drought, all systems of modern agrotechnics should be applied, starting with the proper cultivation of drought resistant provencances, proper fertilization system, rational cultivation of soil, sowing of high-grade varieties, irrigation, efficacy of weed fighting and effective fight against pests and diseases.

Irrigation systems cover about 180000 hectares of arable land. It has been estimated that currently only 30000 hectares are irrigated. The reason for such a low degree of utilization of irrigation systems is the poorly equipped households and the lack of money for maintenance of the irrigation system devices.

In autumn 2018 all regions of Serbia reported about the water deficit. However, despite the land being dry the authorities recommended that framers should start sowing grain, arguing that it is better to put the seed in a dry arable land, so that it is waiting for rain in the land. Despite the prolonged dry period wheat has been seeded, not only to keep the crop rotation, but also because wheat brings the first money of the year to farmers. Based on the research at the institutes in Serbia over the past decades, it has been determined that it is the best to sow the grain in the second decade of October, from 10 to 20.

Recommendations

- ❑ The current functionality of irrigation systems in Serbia which is 16% should be increased.
- ❑ Farmers should take into account the quality of the soil, and depending on the fertility analysis, nutrients should be introduced, such as potassium and phosphorus



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Fig. 1 River Danube in 2018 (© Marijana Ačanski)