



Preliminary analysis of the result of monitoring agrometeorological conditions in West Pomerania

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The Institute of Technology and Life Sciences pursues the Multiannual Programme: “Standardisation and monitoring of environmental undertakings, agricultural technology and infrastructural solutions in aid of safety and sustainable agricultural and rural development” for the period 2011-2015. Among many environmental issues, the programme emphasises monitoring, forecasting and preventing effects of drought as well as risk assessment of deficit and excess of water in rural areas.

Monitoring of agrometeorological conditions is conducted with the use of the monitoring network of the Institute and comprises the automatic measuring stations located throughout Poland which measure meteorological conditions (radiation, temperature and humidity of air, precipitation, wind speed and measurements of soil temperature and humidity), as well as hydrological conditions (water level and flow in rivers). Agricultural cultivation is mainly threatened by the extreme weather conditions which cause heavy loss in crops and decrease the income of agricultural holdings. The main unfavourable weather factors include excessive and deficient precipitation as well as intense snowfall, long-lasting snow cover, strong winds as well as spring and autumn frost.

The aim of this paper is to present the results of meteorological and hydrological measurements recorded in the agrometeorological station located in the north-western part of Poland, in Odra Basin, on the area of the lowland agricultural catchment – Gowienica Miedwiańska. The area of the catchment can be characterised as typically agricultural area with intensive crop and industrial crop cultivation, and having the most fertile and rich soil in Western Pomerania. The length of main watercourse is amounts to 15.6 km., the area of the catchment is 63.65 km² and SNQ in the depositional zone amounts to 0.15m³/s.