

RESEARCH ON CONSERVATIVE AGRICULTURE AND THE MANIFESTATION OF CLIMATE CHANGE IN THE NORTH OF THE REPUBLIC OF MOLDOVA

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If we analyze the specialized and literal sources, we find that, globally, the conservative system was introduced six decades ago. This would mean that the Republic of Moldova is approximately 60 years behind the rest of the world. Based on some results obtained in the territory of the country, conservative agriculture is considered a measure to increase competitiveness by reducing production costs and adapting to climate change. In this context, a current example of research presented by the authors evokes the purpose of this paper, which consists in evaluating the use of conservative agriculture by the peasant household. "Agro-Panfil" farm annually grows cereals and industrial crops on over 1.000 hectares of agricultural fields. The monitoring of agroecosystems was carried out practically from sowing to harvest and post-harvest throughout the agricultural year through the "HOBO-01102025" Station for the years 2018–2021. The scientific study on the key polygon, regarding the implementation of No-till agriculture, has been active for 15 years, and the Mini-till technology has been working for 20 years. The competitiveness of this peasant household is a notorious example for our country – being a classic business model of a successful family from the North of the Republic of Moldova. Price instability, but also climate change taking place on the territory of the Republic of Moldova, using "No-Till" technology, production costs are reduced and crops increase by 1.5 times. This farm records revenues of 400 thousand Euros per year as a result of the rational use of soil resources and the application of efficient technologies in agricultural production. In order to achieve the objectives proposed this year, the following research methods will be monitored on 5 research polygons with agroecosystems – variants. A significant benefit in the respective locality, even in the current conditions, is expressed by the provision of irrigation on some lands, increasing the harvests by 1.5–2 times or more, compared to the harvests obtained on the lands without irrigation.

Key words: *agroecosystem, conservative agriculture, climate change, North of the Republic of Moldova.*