

RESEARCH REGARDING THE PROTECTION OF WHEAT CROPS AGAINST WEEDS ON A HISTOSOL FROM BERVENI COMMUNE, SATU MARE COUNTY

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Abstract. Romania is a specific country in terms of weeding. The results show that in 2010, out of the 14 million hectares officially designated for agriculture, the amount of biomass provided by weeds is about 1.21 times higher than the useful biomass. In the last thirty years there have been very few experiments in the country on weed control on different types of soil. The researches in Romania has shown that herbicide treatments should be done depending on soil type, clay content, humus and pH of the soil. Integrated Weed Management (IWM) is a complex notion that means the management of monitoring, knowing and mastering the relationships between weeds and crops through a variety of methods, including the balanced use of herbicides. The new concepts do not involve the elimination of herbicides but their use after the depletion of all alternative variants. This research aims to determine the herbicides or combinations of herbicides in rates with the best efficacy depending on each type of soil. The present paper presents the efficiency of herbicide treatments on wheat yield on a histosol from Bervenii, Satu Mare county and implicitly the control strategies. Satu Mare county has an area of 4,418 km² (1.9% of the national territory), agricultural land being 72% of this area.

Keywords: soil, weeds, wheat, herbicides, yield

1. Introduction

Despite all the progress made in agriculture in the last century, weeds are still present in cultivated lands. The technical and financial effort to reduce weed infestation is high, but it is justified through the higher level of yield and its quality. In the moment when the costs exceed the difference value of the obtained yield, weed control is no longer profitable.

The floristic composition of weeds has changed due to human intervention through the soil tillage, applied crop rotation, fertilization and herbicide treatments. Once entered the process of agricultural yield at the action of natural

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