



The remanent effect of merlin duo and Gardoprim Plus Gold 500 sc herbicides applied to soybean crops

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The remanent effect of herbicides was studied by many foreign researchers: Hurle 1980, Hime and coll. 1991, Wuerzer 1985. In Romania, the largest number of experiments regarding the remanent effect of herbicides based on atrazin and simazin upon various crops have been made by dr. Țarpe and his collaborators. During the past 10 years, studies have been also made regarding the remanent effect of dicamba and 2,4-D herbicides upon various crops, namely maize, sunflower, sugar beet and flax for linseed and linen.

The experiments regarding the remanent effect of Merlin Duo and Gardoprim Plus Gold 500 SC are the first ones of this type and unique in Romania Ț being carried out in the Flood Plain of the Danube river. In the years 2007-2008, experiments were performed at the Agrofam-Holding Agricultural Company from Fetesti, Ialomita County, situated in an area with alluvial soil specific to the aforementioned Flood Plain, the aim being to study the remanent effect of the herbicides Merlin Duo, which contains 37,5 g/l isoxaflutol + 375 g/l terbuthylazin, Gardoprim Plus Gold 500 SC, which contains 312,5 g/l S-metalochlor + 187,5 g /l terbuthylazin.

The Merlin Duo herbicide was applied in doses of 3 and 6 litres per hectare, and the Gardoprim Plus Gold 500 SC was applied in doses of 5 and 10 litres per hectare. Both herbicides were applied in July, after the wheat was harvested. After application, the herbicides were incorporated by disking 15-18 cm deep into the ground. In the spring of 2008, before sunflower was sowed, the land was laboured 10 cm deep by the disk and the combinator.

Based on the observations made every month during the vegetation stage and on the yield obtained, the authors have reached the conclusion that the Merlin Duo and Gardoprim Plus Gold 500 SC did not present any remanent effects on the alluvial soil from the Flood Plain of the Danube river.