

The effects of herbicides formulated of IMIDAZOLINONE

on *Lotus corniculatus* L. (c.v. G keskenylevelű)

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There are number of problems for farmers grown birds'foot trefoil in Hungary. One of them, emerges when they choice the field with optimal ecological factors, another is the quetion of herbicides to sowing period and for the time of cultivation. Recently there are a few effective herbicides to these purposes. But the condition of purchase fodder and grain yield in the country or in Europe are very rigides.

The cultivar G keskenylevelű (*Lotus corniculatus* L.) is one of most popular short in Hungáry. Our purpose by the mean of developing agrotechnical methods for cultivar in question help the farmers in successive fodder and grain production. To reach this end we made a field test with PIVOT 100 LC (100 g/l imazetapir) certificated in (*Glycine soja*, *Medicago sativa*, *Trifolium pratense*, *Pisum sativum*, *Lens culinaris*) and SCEPTER 150 LC (150 g/l imazaquin) certificated in *Glycine soja*. Among the herbicide treatments there are some another one's known as special pesticides for papillionateaes (1st. table.).

All the herbicides tested by observing seven factors but no 100 grain mass. We declared that PIVOT 100 LC in the preemergens or postemergens treatment give the best results combined. In the situation pf SCEPTER 150 LC should be proposed the postemergence treatment of birds'foot trefoil *Lotus corniculatus* (c.v. G keskenylevelű). By the screening of two tested herbicides, seven factors ovserved and three types of treatment the most convenient is the PIVOT 100 LC by preemergens' mode expecially in wiew pont of fodder and grain yield. After the treatment in question we got good result in connection with second year's weed controlling and seedling percentage too, 1st table.

The effect of different herbicides formulated of IMIDASOLINONE active ingredient on the population of cultivar Lotus corniculatus G keskeny-levelű (1990-1992 Szarvas)

Herbicide	Active ingredient	The mode of herbicide treatment	1990th. year		1991st. year		1992			
			Actual dosage g/ha	Relative yield %	Relative yield %	Relative yield %	Grain yield kg/ha	100 grain mass (mg)	Seedling percentage	Plant number per meter
∅	-	-	100,0	100,0	100,0	100,0	174,6	137	69,0	55,5
Flubalex	benefin	presowing	71,4	80,0	137,8	120,0	292,1	133	64,7	35,5
Dual 720 EC	metolaktor	preemergens	285,7	56,0	157,1	108,0	222,2	137	29,0	12,5
PIVOT 100 LC	imazetapir	presowing	57,1	72,0	98,9	120,0	120,6	137	69,0	49,0
PIVOT 100 LC	imazetapir	preemergens	371,4	22,7	150,0	124,0	250,7	133	72,0	37,5
SCEPTER 150 LC	imazaquin	presowing	71,4	93,3	113,3	128,0	206,3	133	60,0	64,5
SCEPTER 150 LC	imazaquin	preemergens	100,0	34,7	83,7	108,0	180,9	133	65,7	11,0
SZD 5 %	-	-	-	-	-	-	98,4	NSZ	2,0	10,0
∅	-	-	100,0	100,0	100,0	100,0	174,6	137	69,0	55,5
SYS 67 B	2,4 DB	postemergens	57,1	93,3	75,5	108,0	117,5	130	66,0	49,5
SYS 67 Omnidel	dalapon	postemergens	171,4	66,7	145,9	140,0	196,8	130	68,0	49,5
PIVOT 100 LC	imazetapir	postemergens	342,9	16,0	137,8	100,0	184,1	130	63,0	45,0
SCEPTER 150 LC	imazaquin	postemergens	571,4	10,7	134,7	36,0	152,4	137	72,0	50,5
SZD 5 %	-	-	-	-	-	-	NSZ	NSZ	3,0	NSZ

Note: x in 25 °C, on 7<sup>th</sup> day, hard seed no counted.  
 xx calendar date of observation: 9-13 march 1992.