

## Efficacy of different herbicides on common ragweed in oil pumpkins (*Cucurbita pepo*)

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Oil pumpkins are economically important crop in Austria, Slovenia and Hungary. Limited choice of available herbicides and poor control of ragweed in areas infested with this species, represent a great problem for oil pumpkins growers.

The experiment produced ragweed efficacy data for 6 herbicides, which are used in oil pumpkins in Slovenia and in some other EU countries.

The experimental design was a randomized complete block with four replicates with plot size 25 m<sup>2</sup>. Following herbicides were tested:

Table 1. List of herbicide treatments for ragweed control in oil pumpkins

No	Herbicide	Test/ refer.	Active ingredients	Formul.	Rate	
					g, ml, a.s./ha	kg, l/ha
1	Centium 36 CS	R	clomazone 360 g/L	CS	90	0,25
2	Successor 600	R	pethoxamid 600 g/L	EC	1200	2,0
3	Flexidor	T	isoxaben 500 g/L	SC	375	0,25
4	Flexidor	T	isoxaben 500 g/L	SC	375	0,75
5	Centium 36 CS + Successor 600	R	clomazone 360 g/L	CS	90	0,25
			pethoxamid 600 g/L	EC	1200	2,0
6	Centium 36 CS + Dual gold 960	R	clomazone 360 g/L	CS	90	0,25
			S - metolachlor 960 g/L	EC	1200	1,25
7	Flexidor + Dual gold 960 + Centium 36 CS	T	isoxaben 500 g/L	SC	375	0,25
			S - metolachlor 960 g/L	EC	1200	1,25
			clomazone 360 g/L	CS	90	0,25
8	untreated	-	-	-	-	-

Table2. Efficacy of selected herbicides for ragweed control in oil pumpkins

No	Herbicide	Active ingredients	Rate: L, kg/ha:	Efficacy (%)	Average (%)
1	Centium 36 CS	clomazone	0,25	0 - 0	0,0 a
2	Successor 600	pethoxamid	2,0	0 - 0	0,0 a
3	Flexidor	isoxaben	0,25	15 – 20	17,5 c *
4	Flexidor	isoxaben	0,75	50 – 90	75,0 d *
5	Centium 36 CS + Successor 600	clomazone pethoxa- mid	0,25 2,0	0 – 5	1,25 b *
6	Centium 36 CS + Dual gold 960	clomazone S-metolachlor	0,25 1,25	0 - 0	0,0 a
7	Flexidor + Dual gold 960 + Centium 36 CS	isoxaben S-metolachlor clom- azone	0,25 1,25 0,25	20 – 30	25 c *
8	untreated	/	/	/	/

\* Different letters indicate significant differences between treatments with Tukey HSD test ( $P < 0,05$ ).

### Conclusions

Common ragweed in oil pumpkins was controlled only by application of higher rate of Flexidor (isoxaben) however its efficacy varied greatly.

Common ragweed cannot be sufficiently controlled with available herbicides in oil pumpkins, therefore mechanical measures have to be implemented in order to achieve sufficient ragweed control.