

The herbicide Clearfield®-Vantiga® is used with 2.0 l/ha + 1.0 l/ha of the adjuvant Dash®. In this dose 750 g/ha Metazachlor, 250 g/ha Quinmerac, and 12.5 g/ha Imazamox are included (Tab.). The ALS-inhibitor Imazamox is the active ingredient with the special activity against cruciferous plants. Clearfield species are resistant about Imazamox, conventional varieties would be killed by the herbicide.

Advantages of the Clearfield-system: The key benefit is the possibility of a save control of cruciferous weeds in a cruciferous crop in post emergence stage.

Disadvantages: Oil-seed-rape is also a weed. The available Clearfield-rape is also resistant or partly resistant against other ALS-Inhibitors. This herbicide group is widely used in other crops. The control of volunteer Clearfield-rape plants will cause additional herbicide expenses.

Therefore that oil-seed-kernels keep their germination capacity in the soil over a period of about ten years, the drilling of Clearfield-varieties is a long term decision. So a farmer should take some time to prove the advantages against the disadvantages.

Tab. Metazachlor products in comparison to Clearfield®-Vantiga®.

Product	Max. application rate (l/ha)	Ingredient content by max. application rate per ha			
		Metazachlor	Quinmerac	Dimethenamid	Imazamox
Butisan®	1,5	750			
Butisan Top®	2,0	750	250		
Butisan Kombi®	2,5	500		500	
Butisan Gold®	2,5	500	250	500	
Clearfield-Vantiga®	2,0	750	250		12,5

The key issue: Due to alien-pollination, harvest- and transport equipment the ALS-resistance attribute of the Clearfield-rape will be distributed on fields of other farmers. Farmers, that may be have made their decision against Clearfield-rape, farmers that may be don't grow any rape, farmers that are not informed about the system and its impact on production at all.

The problem is not the launching of a herbicide system which is based on a particular resistant variety, something similar is available for maize for several years. The problem, it is done for rape. The selling of a plant, that is highly competitive, winter-hardy, partly alien pollinated, dormant over a period up to 10 years, resistant/partly resistant against the most used herbicide group and not to control in its further distribution is legal, but is it wise?

Herbicide resistant rape is difficult to manage in the production process. Even more if further herbicide constructs come to market. For example rape, that is resistant to auxin-inhibitors.

Because of the severe chance of weed control that herbicide resistant rape will cause in the neighbourhood, we composed information around the Clearfield-System in the so called „Clearfield-rape brochure“ („Clearfield-Raps“ Broschüre).

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Bekämpfung von Clearfield-Raps mit Getreide-Herbiziden

Control of Clearfield rape with various grain herbicides

In einem Gewächshausversuch wurde der Frage nachgegangen, inwieweit Imazamox-toleranter Clearfield-Raps (OSR_CL) mit Herbiziden aus unterschiedlichen Wirkstoffgruppen bekämpfbar ist (Vergleich: Standard-Sorte 'Visby'). Insgesamt 24 Herbizidvarianten wurden an zwei Standorten im BBCH-Stadium 10 angewendet und die Wirkung im wöchentlichen Abstand 4-mal bonitiert. Die wesentlichen, auf dem Poster darzustellenden Ergebnisse sind: Mittel der Wirkstoffgruppe B (Sulfonylharnstoffe, Triazolopyrimidine) zeigten mehr oder weniger deutliche Minderwirkung auf den CL-Raps; bei Mischpräparaten war die Wirkung höher bis ohne Unterschied zum Standard, 2/3 aller geprüften Varianten zeigten keinen Wirkungsabfall.