Guideline for the Management of Oilseed Rape Volunteers\(^1\), including herbicide tolerant varieties (GT73, MS8/RF3 and T45)

Common guideline provided by Bayer Agriculture BVBA and BASF Agricultural Solutions Seed US LLC

A. Background

The import and use of genetically modified oilseed rape grain is authorised in the European Union according to Directive 2001/18/EC and Regulation (EC) N° 1829/2003 (Commission Decision 2005/635/EC of 31 August 2005, Commission Decision 2007/232/EC of 26 March 2007, Commission Decision 2009/184/EC of 10 March 2009 and Commission Implementing Decision 2013/327/EU of 25 June 2013, respectively). The authorisations refer to Roundup Ready® oilseed rape GT73 from Bayer Agriculture BVBA, where the genetic modification imparts tolerance to Roundup® herbicides containing glyphosate, to the InVigor® oilseed rape MS8xRF3 from BASF Agricultural Solutions Seed US LLC, which provides a pollination control system and tolerance to glufosinate-ammonium herbicides, and to the LibertyLink® oilseed rape T45 from BASF Agricultural Solutions Seed US LLC, which provides tolerance to glufosinate-ammonium herbicides. These authorisations are accompanied by recommendations of the EU Commission concerning the measures to be taken by the consent holders, BASF Agricultural Solutions Seed US LLC and Bayer Agriculture BVBA, to prevent any damage to health and the environment in the event of accidental spillage of oilseed rape grain, which may include GT73, MS8/RF3 and T45.

More specifically, these recommendations establish that operators who handle and process bulk mixtures of imported oilseed rape grain have to be alerted to the possibility that accidental spillage of imported oilseed rape grain in ports and crushing facilities may result in the germination and establishment of GT73, MS8/RF3 or T45 volunteers. In the event that these oilseed rape volunteers include GT73, MS8/RF3 and/or T45, the recommendations specify that the consent holders have to:

- Inform operators that these volunteer plants should be eradicated to minimize the potential for unanticipated adverse effects arising from GT73, MS8/RF3 and T45.
- Provide operators with appropriate plans for eradicating volunteer oilseed rape plants including GT73, MS8/RF3 and/or T45.

The scope of this guideline is to translate into practice the recommendations of the EU Commission accompanying the GT73, MS8/RF3 and T45 consents and to assist the operators importing oilseed rape grain in the EU by providing them the appropriate technical advice to eradicate oilseed rape volunteers which may include GT73, MS8/RF3 and/or T45.

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\(^1\) A volunteer is a crop plant growing from a self-sown or accidentally dropped seed, rather than being deliberately sown or planted.

\(^\circ\) Roundup and Roundup Ready are registered trademarks of Monsanto Technology LLC.
B. Accidental spillage of oilseed rape grain and eradication of volunteer plants that may include GT73, MS8/RF3 and/or T45

Most processors and ports have procedures in place to clean accidental grain spillages and to control unwanted vegetation. The following recommendations for controlling herbicide tolerant plants are, therefore, based on standard procedures for managing volunteers arising from spillages of conventional grain.

**Identification of oilseed rape plants**

Oilseed rape is easily recognized both as a small plant and when flowering. In case of doubts, please consult a trained agronomist or your agrochemical supplier.

Images: Oilseed rape plants growing in soil (left) and in a crevice (middle). A typical floral inflorescence is shown (right).

**Management tools in ports and crushing facilities**

- **Hygiene**
  The prevention of grain spills and the efficient clean up after spillages are the basis of all good management practices for handling grain.

- **Site maintenance**
  The unnecessary accumulation of detritus, particularly on hard surfaces and around buildings, should be avoided because it provides a substrate for seed germination. Good maintenance of hard surfaces and filling cracks, when they occur, reduces the opportunity for germination, as does regularly sweeping all surfaces. Regular sweeping or brushing will remove very small volunteer plants, soon after germination. Once they are established, these methods are inadequate and volunteer plants can be managed by mechanical means (*i.e.* mowing) or eradicated by hand pulling or by chemical control (*i.e.* herbicides).

- **Herbicide control**
  GT73, and MS8/RF3 and T45 are tolerant to the active ingredients glyphosate and glufosinate-ammonium, respectively. Therefore, applications based on these two active ingredients alone should be avoided. Control can be achieved using the herbicide active substances listed below (*see* lists A and B).
The herbicides available for use vary between Member States, depending on local registrations. There may also be different products allowed for use in different regions within Member States. It is essential to check what products can be used according to local legislation.

The best control of volunteers can be achieved by applying the herbicide when the volunteer plants are small and before stem extension occurs. The dose rate should be adjusted according to recommendations on the label.

A. Options for total vegetation control in combination with glyphosate or glufosinate-ammonium
2,4-D
MCPP
triclopyr (at higher doses)
flazasulfuron
thifensulfuron-methyl

B. Options for selective control of volunteers in grass areas
2,4-D
MCPP
thifensulfuron-methyl

For further advice on the use of herbicides:
- consult an accredited agronomist
- refer to product labels for local recommendations (including phone number for technical advice)
- contact a reputable contractor for herbicide application.

C. Contact points

In case of:
- clarifications on the content of this guideline
- need of additional information on the management of herbicide tolerant volunteers
- known or suspected spread of herbicide tolerant volunteers

please, contact BASF Agricultural Solutions Seed US LLC (gent.info.operators@basf.com) and/or Bayer Agriculture BVBA (http://www.monsanto.com/products/pages/product-stewardship-safety.aspx). National contact points for BASF Agricultural Solutions Seed US LLC for reporting of any unusual observation can be found in the accompanying “List of National Contact Points” document.