

CONVISO<sup>®</sup>  
SMART



# SMART BOOK

## CONVISO<sup>®</sup> SMART HANDLING

BETASEED. SIMPLY DIFFERENT.



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# Content

## CONVISO® SMART

Key facts about BTS SMART varieties	PAGE 4
Differentiation between BTS SMART and classic seed	PAGE 5
Sowing BTS SMART seed	PAGE 6
Key facts about CONVISO® ONE	PAGE 7
CONVISO® ONE application recommendation	PAGE 8
CONVISO® ONE application timing	PAGE 10
CONVISO® ONE in special condition	PAGE 11
CONVISO® ONE in resistant weed situations	PAGE 12

## HANDLING

Handling of CONVISO® ONE	PAGE 13
Preparing sprayer	PAGE 14
Spraying CONVISO® ONE	PAGE 15
First visible effects of CONVISO® ONE	PAGE 16

## RESISTANCE MANAGEMENT

Bolters	PAGE 17
Crop rotation – following crops	PAGE 18
Groundkeepers	PAGE 19
Weed resistance management	PAGE 20

## APPENDIX

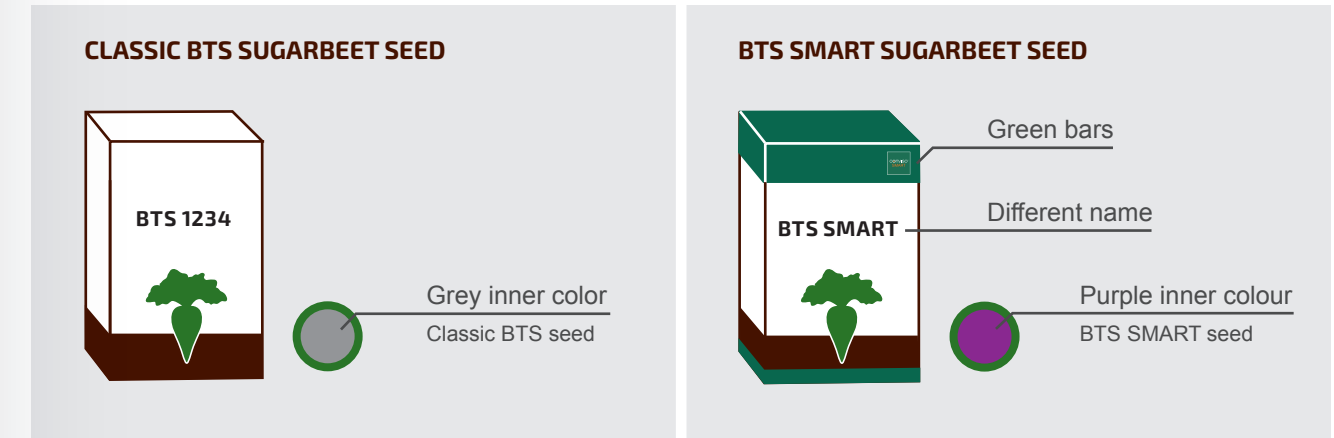
Contact	PAGE 22
Disclaimer	PAGE 23

## Key facts about BTS SMART varieties

- ✓ BTS SMART sugar beet varieties have a genetic tolerance to work successfully together with the CONVISO® ONE herbicide.
- ✓ CONVISO® ONE offers a combined efficacy against monocotyledonous and dicotyledonous weeds.
- ✓ CONVISO® SMART sugar beets do not show yield loss caused by phytotoxicity when using CONVISO® ONE.
- ✓ Effective elimination of conventional weed beets.



## Differentiation between BTS SMART and classic seed



## CAUTION

It is extremely important not to mix BTS SMART seed with classic sugarbeet seed at any time. Classic sugarbeets will die off if treated with CONVISO® ONE.

# Sowing BTS SMART seed

- Clean your sowing machine properly, if you intend to drill BTS SMART seed. If classic seed will stay in the machine it will not withstand the CONVISO® ONE herbicide.
- **Keep BTS SMART seed separate from classic sugarbeet seed to avoid any mixing!**

## TIPS

### ...FOR CLEANING THE SOWING MACHINE PROPERLY:

- use a vacuum cleaner to empty the planting unit
- rotate sowing disc until it is completely empty



# Key facts about CONVISO® ONE



## CONVISO® ONE

Time of application	Post-emergence
Mode of action	HRAC B (ALS-inhibitor group)
Active substances	50 g / l Foramsulfuron: mainly leaf activity 30 g / l Thien carbazon-methyl: leaf & soil activity
Plant absorbtion	Soil and leaf activity
Application	Single application (1 x 1 l / ha)
Tank mix	Clopyralid (400SC), Ethofumesate (500SC) and Metamitron (700SC)

**Keep in mind: Reduced dose rates are not supported on the label.**


A resistance management policy is essential to safeguard the performance of the CONVISO® SMART system for the long term.  
To support this objective, the respective amount of BTS SMART sugar beet seed units per hectare comes with 1 litre of CONVISO® ONE herbicide. The herbicide must be applied at the full recommended rate to maximise efficacy.


# CONVISO® ONE application recommendation

STANDARD CONDITIONS

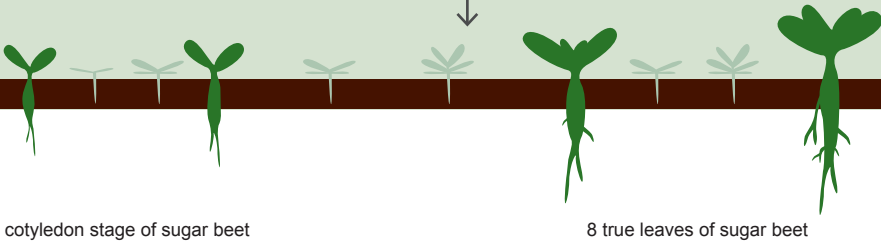
Application

1.0 l/ha  
CONVISO® ONE

max. 4 true leaves of fat hen (*Chenopodium album*)

cotyledon

Mixing Partner  
+ 1.0 l/ha Mero®



cotyledon stage of sugar beet

8 true leaves of sugar beet

## Notes

# CONVISO® ONE application timing

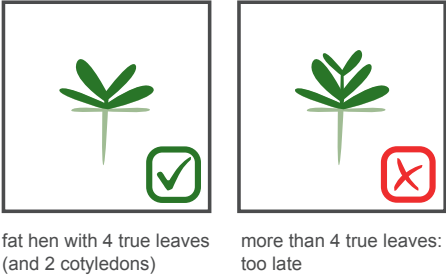
	<b>CONVISO® ONE</b> Single application
Indicator weed	Fat hen* ( <i>Chenopodium album</i> )
Timing	Max. 4 true leaf stage of fat hen
Number of applications	1 × 1.0 l/ha

\* if not present, apply when other (hard to fight) weeds reach the same true leaf stage

Always follow the growth stage of the indicator weed Fat hen (*Chenopodium album*).

In case there is no *Chenopodium* in the field, apply CONVISO® ONE when the first plants of other weed species reach their two true leaves stage.

## SINGLE APPLICATION:



# CONVISO® ONE effective weed control

- Can be used in a sequence with other registered sugar beet herbicides if required (based on growth stage of weeds present).
- Do not sequence CONVISO® ONE with any other ALS inhibitor herbicide, such as a sulfonylurea.
- Can be used in a tank mix with Clopyralid (400SC), Ethofumesate (500SC) and Metamitron (700SC).
- The optimum timing for CONVISO® ONE is when the trigger weed is at 2 to 4 true leaves, but it can control weeds up to 6 true leaves depending on the weed species.
- Methylated vegetable oil (1.0 l/ha Mero, per application) may increase the uptake of the herbicide especially in dry conditions.
- Adjust the oil application rate according to the maximum temperature on the day of spraying.
- For optimal efficacy, especially during dry weather, apply when humidity is above 60% (e.g., in the morning).
- In colder conditions (below 10°C), using traditional herbicides in sequence prior to CONVISO® ONE will effectively control the initial weed flush.
- Under extreme stress conditions, such as severe drought, heat, frost, waterlogging, runoff, plant diseases, or nutrient deficiencies, it is recommended to delay the application of CONVISO® ONE, just as you would with any other herbicide.





# CONVISO® ONE in weed resistance situations

Weed population determines the action:

No resistant weeds	Resistance(s) documented
<ul style="list-style-type: none"><li>• Use CONVISO® ONE as recommended</li><li>• Prescribed actions:<ul style="list-style-type: none"><li>• Add adjuvant</li></ul></li></ul>	<ul style="list-style-type: none"><li>• If a patch of weeds survive CONVISO ONE application and resistance is suspected, consider spraying off the area with a non-selective herbicide such as glyphosate.</li></ul>

If ALS resistance is documented in a field, consider the use of the CONVISO® SMART system carefully and always use other active ingredients in addition to ensure a proper weed control.

## TIPS

In case you have uncertainties about the weed resistance situation in your field, get in touch with your Betaseed consultant.

# Handling of CONVISO® ONE

- Always follow the instructions on the CONVISO® ONE label.
- Shake the CONVISO® ONE can well before use.
- In case of difficulties half empty the canister and shake again.
- Ensure full homogenization of deposit, as it may contain active ingredient.
- Do not add water into canister for emptying – only for final canister cleaning.



## Preparing sprayer

- ✓ Recommended water volume: 150–300 l/ha
- ✓ pH value of water: 5–7
- ✓ Optimal temperature for spraying: 10–20° C
- ✓ Rain fastness period: 4–6 hours
- ✓ Persistence and reactivation of the residual will vary depending on soil conditions, temperature and moisture.

## CAUTION

Never apply CONVISO® ONE to classic sugarbeet varieties. Even a small amount of CONVISO® ONE will harm classic sugarbeet as well as other sensitive crops.

## Handling of CONVISO® ONE

- Always use full recommended dose rate (1.0 l/ha per season)
- Recommendation is
  - add adjuvant oil (improve efficiency)
- Avoid drift onto adjacent fields: classic varieties are sensitive to CONVISO® ONE and will die off
- Follow good agricultural practice

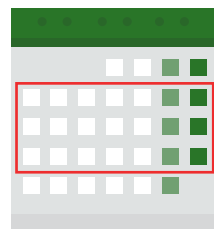
## TIPS

Thoroughly clean sprayer immediately after applying CONVISO® ONE. When cleaning your sprayer follow the standard procedures as with other ALS-herbicides.



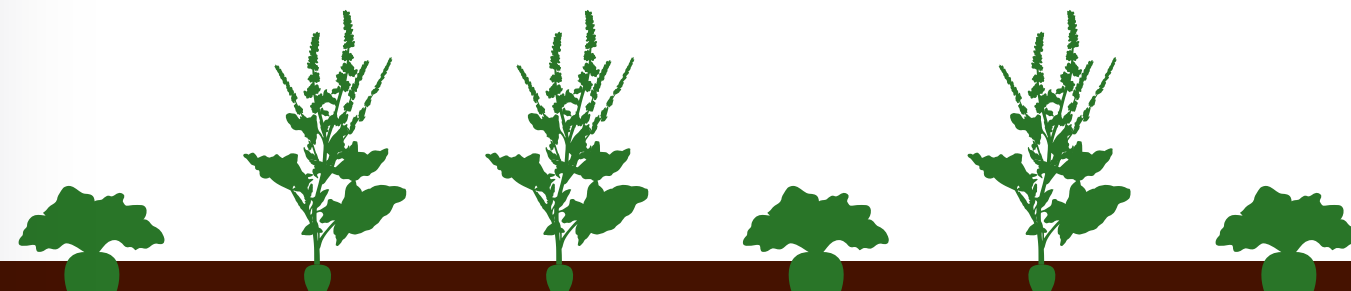
## First visible effects of CONVISO® ONE

- CONVISO® ONE is a systemic herbicide being absorbed and translocated through the plant.
- Weeds stop growing after treatment, symptoms take longer to be visible. Symptoms expressed can be in the form of yellowing and stunting.
- **Herbicidal effects** will be visible after approx. **5–7 days**.
- **Complete dying off** can take **up to 4 weeks** depending on the weather conditions.



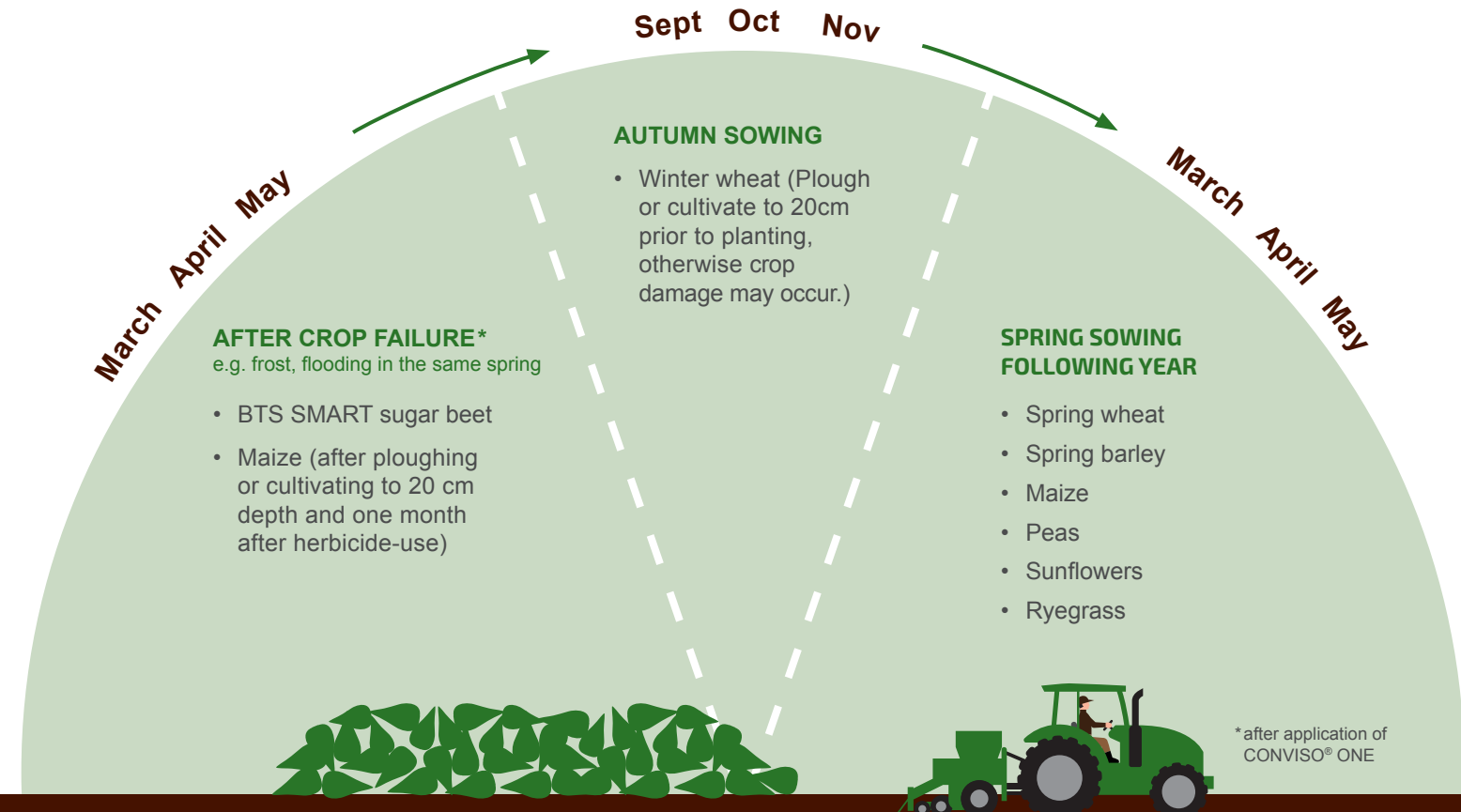
## Bolters

- **Every bolter needs to be conscientiously removed from CONVISO® SMART fields. Never allow any entrance to the soil.**
- Have in mind: weed beet of SMART varieties can neither be controlled with CONVISO® ONE nor classic sugarbeet herbicides.
- In following crops, SMART weed beets may only be controlled by non-ALS herbicides.
- Bolting is initiated when temperatures between 3 – 8° C affect the seedling for a longer time. Try to keep the risk of bolting low. Choose an appropriate drilling date.
- CONVISO® SMART is the unique opportunity to clean your fields from classic weed beet.
- To reduce the chance of bolters, do not sow too early.
- If bolters appear, it is most efficient to pull early before they start maturing and break the stem of the bolter.
- If you pull the bolters late in the season, remove from the field the whole root to prevent regrowth.
- Strictly avoid building up ALS-tolerant weed beet.



# Crop rotation – following crops

Avoid growing CONVISO® SMART sugarbeet in rotation with other ALS-tolerant crops.



# Groundkeepers

Groundkeepers are volunteers that emerge from whole sugarbeets or parts of sugarbeets remaining on the field after harvest. It is important to prevent groundkeeper appearance:

Sugarbeet sowing	Sugarbeet harvest	After harvest
<ul style="list-style-type: none"><li>• prepare an ideal seedbed to achieve homogenous emergence</li></ul>	<ul style="list-style-type: none"><li>• Maximize harvest quality by reducing losses during the process</li></ul>	<ul style="list-style-type: none"><li>• If frost is expected, only use shallow soil cultivation to expose leftovers beets to frost and natural predation</li><li>• In case of mild winters, use intensive tillage (ploughing)</li></ul>

## Thoroughly inspect your fields where CONVISO® SMART was cultivated!

- Herbicide recommendations for the next crop:
- Cereals: Active ingredients from the HRAC family 4 (synthetic auxins): MCPA, MCPP, 2.4-D, dichlorprop, dicamba, fluroxypyr.
  - Corn: Active ingredients from HRAC family 27 (triketones): mesotrione, tembotrione or HRAC family 4 (syntetic auxins): dicamba, fluroxypyr or from HRAC family 5.
  - A competitive crop supports efficient control by suppressing the groundkeepers.

- General application recommendation:
- Apply combinations of this active ingredients if registered.
  - Apply when groundkeepers have sufficient leaf area (BBCH 18).
  - Follow the label and apply the full dose rates.
  - Auxins need favorable growing conditions (warm temperatures and humidity) for optimal effectiveness.
  - Check the efficacy of your application. If it was not sufficient pull the bolters by hand.

**Prevent seed return from groundkeepers! Control with ALS herbicides is not possible!**

# Weed resistance management

- ✓ Use CONVISO® ONE according to the weed resistance management guidelines.

✓ Use the recommended full dose rate.

✓ Add an adjuvant to strengthen the efficacy if required.

✓ Respect the appropriate recommended growth stage of weeds for application.

✓ Sequence CONVISO® ONE application with non-ALS herbicides when required.

✓ Consider a non-selective herbicide as a preceeding treatment after allowing emergence of weeds.

✓ Always investigate the reasons for lower levels of efficacy control.

✓ Make use of good agricultural practice to ensure good weed resistance management.

✓ Use measures of integrated weed management (cultural, mechanical and chemical control).
- ✓ Use cover crops if possible to reduce weed pressure.

✓ Respect the crop rotation by integrating winter and spring crops.

✓ Rotate different herbicide mode of action in the crop rotation.

✓ Use at least once in a 3-year crop rotation a pre-emergence / early post-emergence non-ALS inhibiting herbicide.

✓ If resistance is suspected, consult with a BASIS qualified advisor and use alternative herbicides.

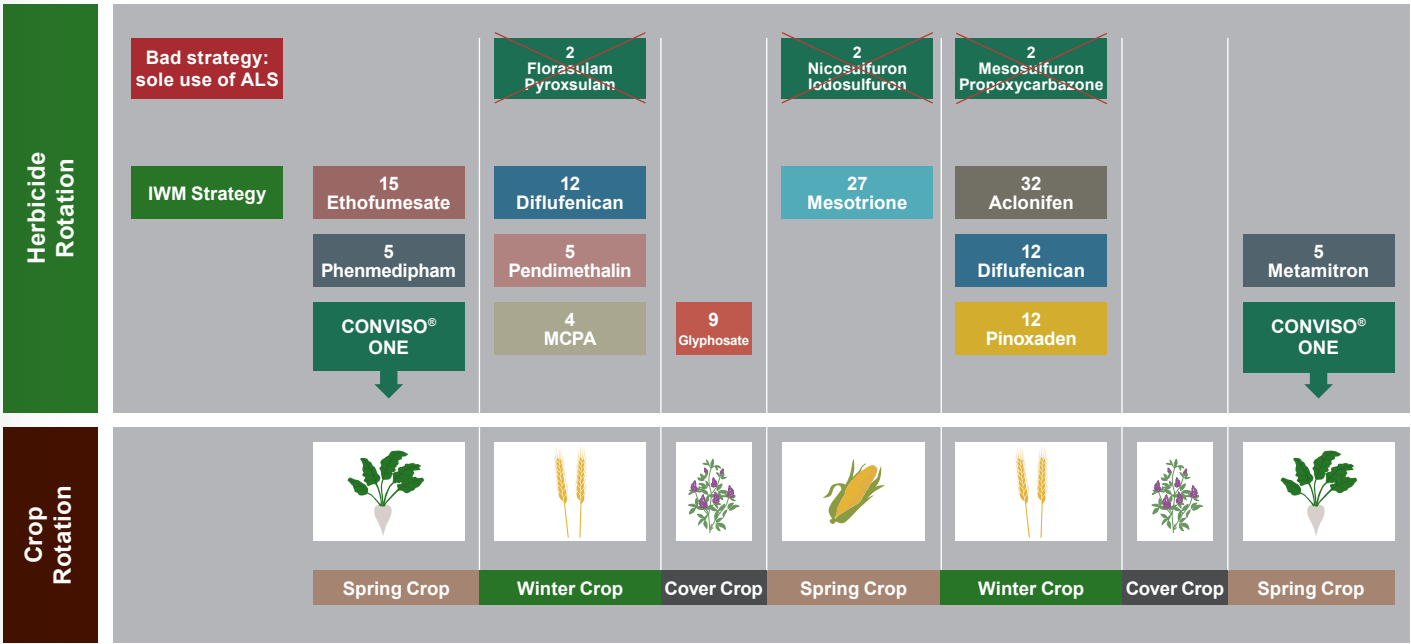
✓ Ensure your crop remains competitive through good crop establishment.

✓ Deep soil cultivation over 10 cm (e.g. ploughing) can reduce weed populations.

✓ Effective stubble management stimulates weed germination while minimizing contributions to the soil seedbank.

✓ Use mechanical weed control methods, such as hoeing, as much as possible in your crop rotation.

# Example of an IWM strategy in a crop rotation example



This rotation and the mentioned active ingredients are just an example, please consider your crop rotation in use. Always consider a pre-planting application of glyphosate as an important tool in weed management. Cultivation (eg. rotational ploughing) is also an important tool for weed management.

# Contact overview

In case of any questions related to our CONVISO® SMART varieties or regarding the use of CONVISO® ONE with our BTS SMART varieties, please don't hesitate to contact us.

## LIMAGRAIN UK Ltd

Rothwell-Market Rasen Lincolnshire  
LN7 6DT

Contact:  
Ron Granger  
ron.granger@limagrain.co.uk

## Bayer CropScience Ltd

230 Cambridge Science Park Milton Road  
Cambridge CB4 0WB

Phone: +44 1223 226500  
Fax: +44 1223 426240

Or alternatively for technical enquiries call us: +44 808 1969522 (to be put in touch with your local advisor)



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CONVISO®  
SMART

**Betaseed GmbH**

Friedrich-Ebert-Anlage 36  
60325 Frankfurt am Main  
Germany  
Tel: +49 69 244 333 150  
[infodesk@betaseed.com](mailto:infodesk@betaseed.com)



[www.betaseed.com](http://www.betaseed.com)