PREMIUM SEED TREATMENT OF RAPOOL

seed power
rapool

rapool
Der Raps

www.rapool.com

LUMIPOSA® is a systemic, insecticidal seed treatment for winter oilseed rape, registered in Germany (December 2020) among other EU-countries, with broad efficacy against feeding insect pests such as *Phyllotreta species* (crucifer flea beetles), *Psylliodes chrysocephala* (cabbage stem flea beetle), *Athalia rosae* (turnip sawfly larvae) or *Delia radicum* (cabbage root fly larvae). The active ingredient "Cyantraniliprole" belongs to the anthranil diamides and with current knowledge there is no cross-resistance to other classes of insecticides. This new seed treatment can therefore contribute to effective resistance management.

Phyllotreta species

Psylliodes chrysocephala

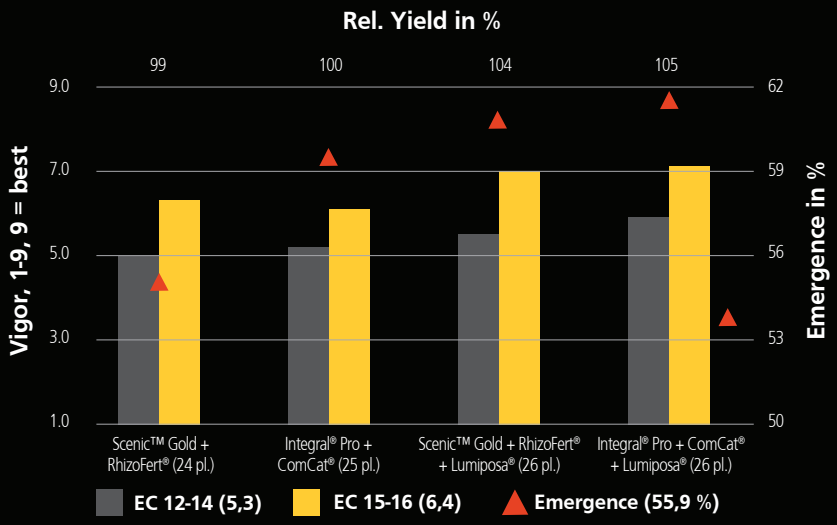
Athalia rosae

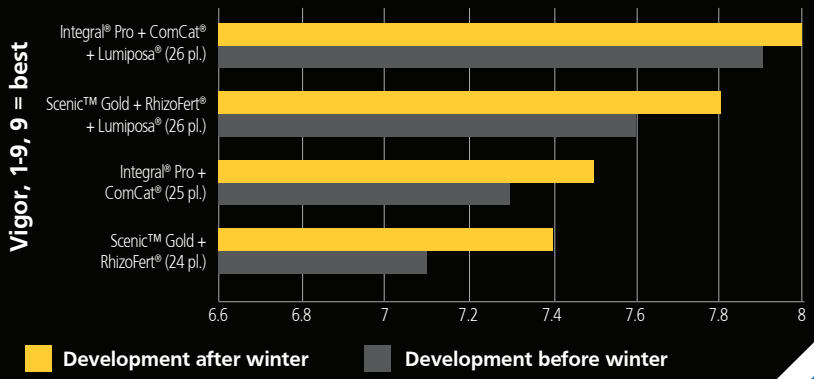
Delia radicum

Lumiposa® protects the seedling up to BBCH 13-14 against early-season insect pests. Plants are rapidly protected from feeding damage allowing them to grow more vigorously for a better crop establishment (Figure 1). The stronger biomass development in autumn leads to a higher stress tolerance and creates the base for a good start in spring (Figure 2), as well as higher yields at harvest.

Figure 1:

LUMIPOSA® BRINGS MORE FROM START TO HARVEST IN ALL COMBINATIONS

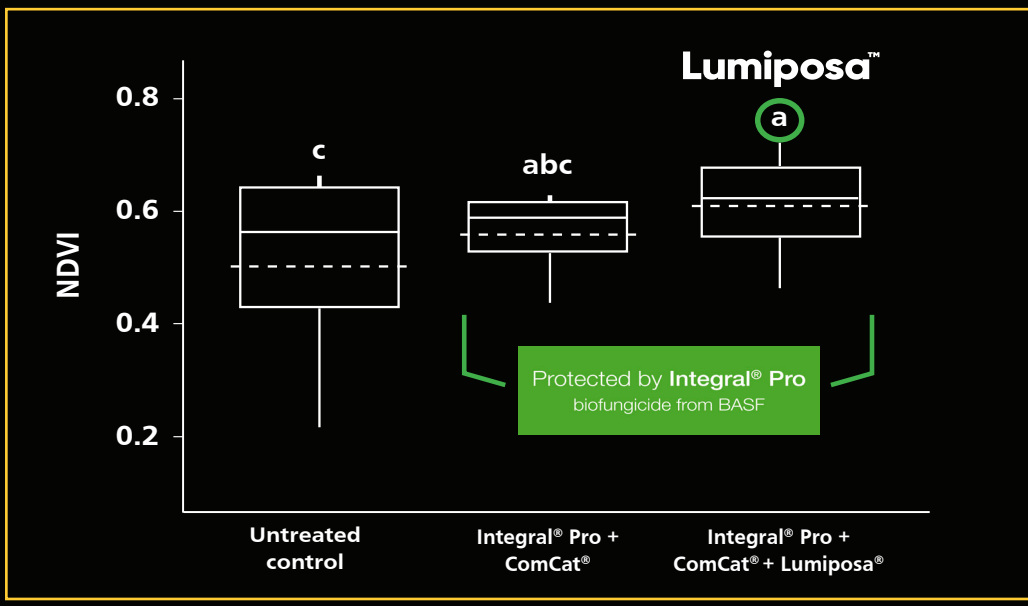




Untreated control

Integral® Pro + ComCat®

Lumiposa® + Integral® Pro + ComCat®



EFFICACY AGAINST CABBAGE ROOT FLY– **STRONGER ROOTS**

The root is the source for water- and nutrient uptake and therefore the most important organ for yield development. Lumiposa® has shown to actively protect it against to one of the major root feeding pests in rapeseed cultivation: cabbage root fly (*Delia radicum*). The outcome of grower trials at 52 sites of 5 years (2014 – 2018) conducted by RAPOOL and farmers in Germany has demonstrated the potential of Lumiposa® to drastically reduce the root feeding symptoms of cabbage root fly larvae (Figure 3):

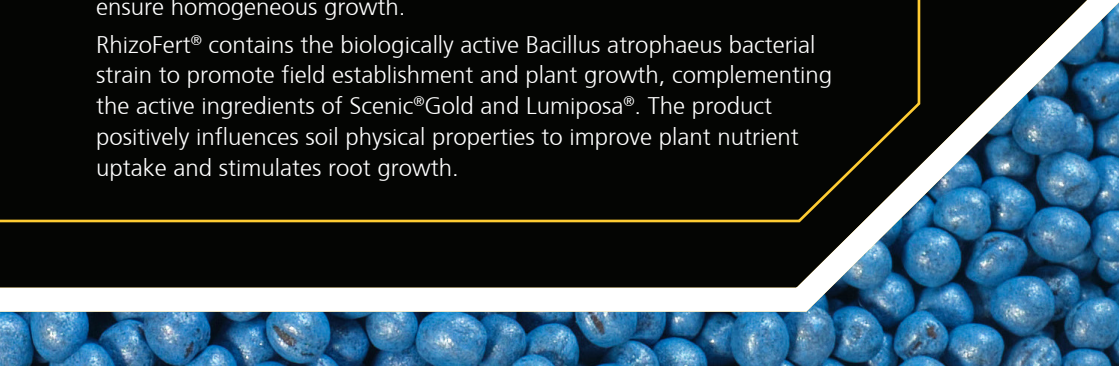
- Mean damage frequency **reduced by 30%**
- Mean root feeding **reduced by 48%**
- Mean heavy damage **reduced by 64%**

Figure 2: Soil cover NDVI before (Nov. 4th) and plant stand after winter (Mar. 28th) of Lumiposa® compared to untreated control and base fungicide.
Location Kujavy/Czech Republic 2022/23; variety DUPLO under early pressure of cabbage stem flea beetle. Source: RAPOOL 2023.

The biostimulants ComCat® and RhizoFert® are enhancing the RAPOOL offer of seed-applied insecticides and fungicides.

ComCat® is a natural plant extract that stimulates plant defence mechanisms against abiotic stresses that optimises plant development to ensure homogeneous growth.

RhizoFert® contains the biologically active Bacillus atrophaeus bacterial strain to promote field establishment and plant growth, complementing the active ingredients of Scenic®Gold and Lumiposa®. The product positively influences soil physical properties to improve plant nutrient uptake and stimulates root growth.



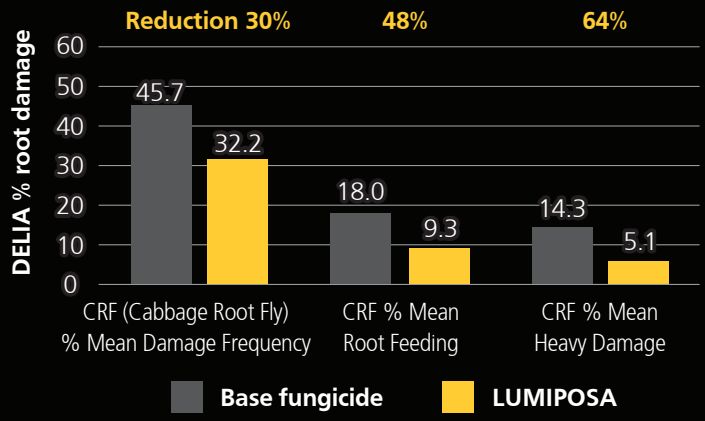
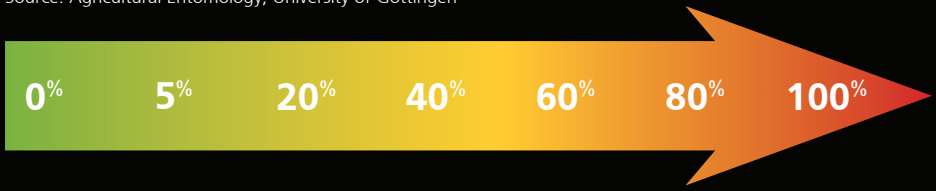


FIGURE 3: Efficacy of Lumiposa® compared to base fungicide. 52 locations of on-farm trials in Germany 2014/15 – 2018/19,
Source: RAPOOL 2021.

Classification of feeding damage in the soil in %

Source: Agricultural Entomology, University of Göttingen



Lumiposa® has shown to actively protect it against to one of the major root feeding pests in rapeseed cultivation: cabbage root fly (*Delia radicum*).

Lumiposa® is taken up via the fed plant material and leads to impairment of muscle function, reduced mobility and subsequent death of the insect. The active ingredient prevents the muscles from contracting and stops the insects from feeding rapidly. Lumiposa® therefore provides almost immediate protection against feeding damage (Table 1), even though pests still appear to be active. At the same time, Lumiposa® only has very little impact on beneficial insects (pollinators, arthropods), as they do not feed on plant tissue.

Table 1: Lumiposa® + Integral® Pro efficacy summary.
Based on German registration and own trials, Source: RAPOOL 2023.

Target pest	Latin name	Lumiposa®	Integral® Pro
Cabbage root fly (larvae)	*Delia radicum*	+++	-
Turnip saw fly (caterpillar)	*Athalia rosae*	+++	-
Crucifer flea beetle	*Phyllotreta sp.*	++	(+)
Cabbage stem flea beetle	*Psylliodes chrysocephala*	+	(+)
Biomass vigour		++	+
Phoma			++
Damping off			+

RAPOOL-RING GmbH
Eisenstraße 12
30916 Isernhagen HB
Germany
www.rapool.com

Lumiposa™

scenic gold

Protected by **Integral® Pro**
biofungicide from BASF

seed power
rapool

rapool
Der Raps

Lumiposa® by Corteva™, Integral® Pro by BASF & ComCat® are components of our Premium Treatment: best genetic + strong treatment