

# life scientific

ENGINEERED BENEFITS

Cintac®



## Cintac

Cintac contains 30 g/kg mesosulfuron-methyl + 10 g/kg iodosulfuron-methyl-sodium, two highly active sulfonylurea herbicides for the control of black-grass, wild oats, ryegrasses, bromes, meadow grasses, common chickweed, mayweeds, charlock and volunteer oilseed rape in winter wheat.

For more information including product label, safety data sheet and compatible tank mixes see the Life Scientific website <https://lifescientific.com/products/uk/cintac/> or download the App to get product information direct to your phone.

## Product Support

Spray applications expert Tom Robinson has been trialling Cintac for the past two years to understand how to get the maximum weed control by using different application techniques.

A number of replicated field scale trials have been completed both at Thurlow Estates and on a site near Peterborough using self propelled application equipment. A range of nozzles used in the trials were also put through a patternator to reinforce the consistency of the results.

The trials looked at levels of black-grass control using four mainstream nozzles and three different boom heights.

Using headcount and yield loss data from Dr. Stephen Moss (formerly Rothamsted Research) we were able to determine the financial cost of treatments too.



# Boom Height

For all trials Cintac was used at a rate of 0.5kg/ha in 200l/ha of water. The sprayer was travelling at 12km/hr

The boom heights tested were 40, 50 and 100cm above the crop.

Water sensitive paper targets which were placed in the crop in order to determine spray coverage.



For all four nozzle types tested, the boom height was important, although the Guardian Air was the least sensitive to the different heights.

From 50 to 100cm the most consistent performing nozzle decreased coverage of the water sensitive paper by 10% and none of the nozzles tested had more than 8% coverage of the front vertical side of the targets when the boom height was set to 100cm above the crop.

Combined coverage on all surfaces from the 4 nozzles fell from 26% at 50 cm nozzle height, to 19% at 100 cm, a drop of 35%. The figures illustrate the importance of keeping the nozzle at a height no greater than 50 cm above the crop. to get the best kill of blackgrass.



## About Life Scientific

We specialise in bringing high quality off-patent crop protection products to market. Our goal is to give our customers better options to meet their plant protection needs.

So if it's under the Life Scientific brand you can be confident it's as effective as the current leading standards in the market.

**For product queries in the UK, call our new free phone helpline 0800 044 5025 or email [infoUK@lifescientific.com](mailto:infoUK@lifescientific.com)**

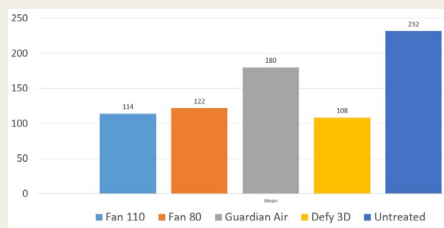
# Nozzles

Four different nozzle types were tested to see how they influenced efficacy of Cintac against black-grass.

The Guardian Air 110° reduced drift, Traditional Flat Fan 110° with medium spray quality, a Flat Fan 80°, giving a higher energy output and a Defy 3D set to alternate forwards and backwards along the boom.

The best black-grass control was achieved with the nozzle which gave the greatest spray deposition on all four surface areas of the water sensitive targets. The Defy 3D nozzle gave the best all-round coverage at both 50 and 100cm above the crop.

The following graph shows the assessment of black-grass headcounts 3 months after application at the trial near Peterborough.



Using headcount and yield loss data from Dr Stephen Moss, (formerly Rothamsted Research), using the Defy 3D nozzle over the Guardian Air would give an increase in yield of 0.7 tons/ha.

Observations from two years of trials have shown that boom height is critical to maximising spray performance and heights should be kept to 50cm above the crop.

The Guardian Air had a similar performance at all boom heights but was the least effective nozzle overall for black-grass control. However, the Guardian Air and the Defy 3D nozzles were the only two of the four tested to meet the patterning criteria at all three boom heights tested.

The best levels of crop penetration were achieved by the Flat Fan 80° and the best vertical coverage was achieved by the angled nozzles of the Defy 3D.

The 'Best Application' is the one which will give top performance under the widest range of conditions, while also managing drift. The Defy 3D is the top performer for Cintac over the 2 seasons of trials

**Best Practise:** Apply Cintac in 200l/ha at not more than 12km/hr using a Defy 3D (05 or 06), nozzle height should not be more than 50cm above the crop.

Cintac is a registered trademark of Life Scientific. Cintac contains mesosulfuron-methyl and iodosulfuron-methyl-sodium.

All other products are those of other manufacturers where proprietary rights may exist. Use plant protection products safely. Always read the label and product information before use. For further product information including warning phrases and symbols refer to [www.lifescientific.com](http://www.lifescientific.com)