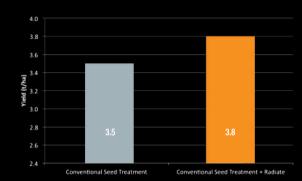
## **Oilseed Rape**

In oilseed rape trials Radiate has produced similar results with increased root weight delivering an increase in yield over the untreated crops. In a three-year trial using the variety Castille<sup>®</sup>, Radiate treated crops yielded between 8.5 and 22% more than the control crop treated with a conventional seed treatment only.

Fig 3. The effect of Radiate on winter oilseed rape performance



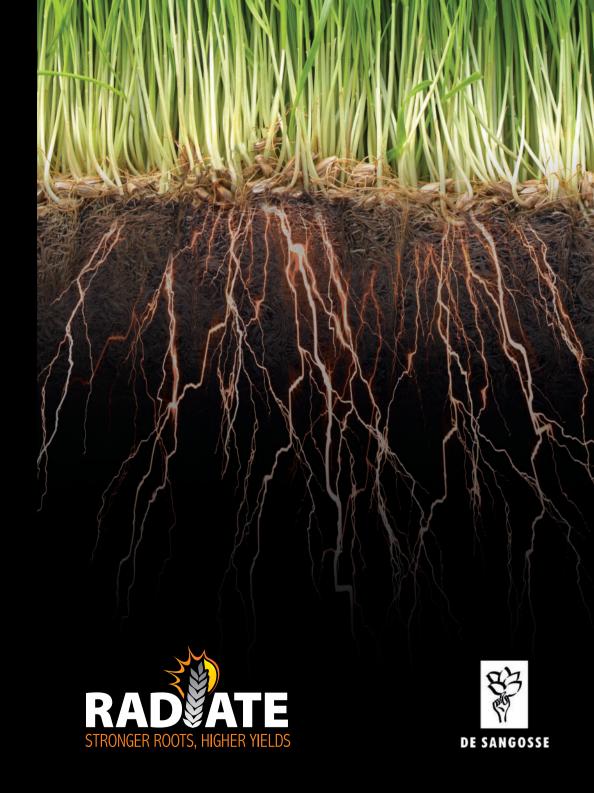
Cv: Castille Source: SACC

## What's the payback?

Radiate offers excellent value for money. Based on the average response seen in trials the payback is more than £50 per hectare, equivalent to a 7:1 return on investment. In winter cereals returns of more than £100 per hectare have been consistently achievable where canopies were controlled with the use of a plant growth regulator.

It is compatible for simultaneous co-application with a wide range of commonly used seed treatments, and in trials performed by NIAB showed no deleterious effects on germination or seed vigour when used alone or in combination with other treatments. Radiate is recommended on all cereal and oilseed rape varieties.

For further information email radiate@desangosse.co.uk or visit www.desangosse.co.uk



# SEEDS DO BETTER WITH THE RADIATE ADVANTAGE.

Radiate seed treatment improves plant establishment by providing the seedling with a blend of nutrients known to stimulate root development.

Across 54 independent trials in winter wheat Radiate has been found to boost yields by an average 0.4 tonnes per hectare.

In winter wheat trials where canopies were managed through the use of a plant growth regulator the average yield response to Radiate was 0.8 tonnes per hectare.

### What is Radiate?

Radiate is a pH neutral, patented Zinc Complex (ZC) formulation. Available as a seed treatment for small grains and oilseed rape. It is a true liquid solution which applies evenly, to provide maximum absorption through the seed coat. It will not dust and has no effect on the drilling characteristics of the treated seed.

#### What does it do?

Plants treated with Radiate produce more auxin which enhances root development. By creating stronger roots, plants are better able to search for moisture and nutrients leading to reduced stress and enhanced yield potential. The effects of Radiate can be seen across all soil types, but the greatest benefit has been seen on light soils where the effects of drought are more visible.

### Soil type interaction

Soil	Response (t/ha)
Loam	0.35
Sandy Silt	0.41
Sand	0.51

Source: De Sangosse. Average of 17 independent trials

Independent trials have shown that Radiate increases root mass by 19% at the early stages of tillering (Growth Stage 22-23).

Plants with stronger roots demonstrate more vigorous early growth and reduced stress, especially in drought prone soils and produce greater green leaf area. In independent trials, winter wheat plants treated with Radiate in addition to a conventional single purpose dressing (SPD) were found to have roots more than 12% longer than those treated with a SPD only. Leaf length was also significantly enhanced in Radiate treated crops with leaves typically 5% longer than in crops treated with a SPD only.

# WHAT ARE THE RESULTS?

#### Winter Wheat

The benefits of greater root and leaf mass result in higher yields as stronger plants are able to produce bigger flag leaves which enable increased photosynthetic activity. Independent trials performed using the variety Oakley® showed a 12% yield improvement from using Radiate compared with a SPD seed treatment.

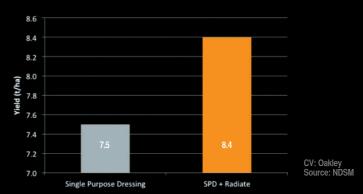


Fig 1. The effect of Radiate on winter wheat performance compared with a Single Purpose Dressing (SPD)

## Winter Barley

The Radiate treated winter barley crops in the same trial also outperformed the control crop treated with a conventional SPD.



