



Knowledge grows

Sugar Beet Technical Sheet

Spring 2024



Think of Sugar beet canopy as a solar panel:

- Primary function of transferring solar radiation energy into roots for optimum sugar yield
- Build the canopy quickly to utilise summer sunshine and ensure there is no nutrient deficiency.
- There are several nutrients that are important to root yield and sugar content and it is important to ensure they are in sufficient supply for the crop to achieve its potential.

B

Boron is very mobile in the soil but not in the plant. The prolonged wet weather prior to planting could have led to leaching of Boron through the soil profile. Rapid growth during the season will require sufficient availability as Boron is important for reducing "Heart Rot" and boosting root and sugar yield.

Mg

Magnesium is important for improved establishment, healthy foliage and is a key component of chlorophyll. The magnesium uptake of a 75 t/ha sugar beet crop is approximately 65 kg/ha, with 35 kg in the leaves and 30 kg in the roots.

Mn

Manganese is important for the promotion of healthy foliage and is made worse by organic soils, sandy soils, alkaline soils and fluffy seedbeds. Unlike magnesium deficiency, manganese shows on the youngest leaves.

YaraVita BRASSITREL PRO

YaraVita BRASSITREL PRO is a flowable liquid suspension fertiliser with a balanced combination of micronutrients including manganese, magnesium, boron and molybdenum for foliar application to Sugar Beet

Nutrient	Loading
B	60 g/l
CaO	125 g/l
MgO	118 g/l
Mn	70 g/l
Mo	4 g/l
N	69 g/l



- ✓ High loading of key nutrients for sugar beet
- ✓ Easy to use crop safe formulation
- ✓ Rapid crop uptake and sustained feeding
- ✓ Widely tank mixable with key sugar beet products (Check at tankmix.com)

Key recommendation on sugar beet:

YaraVita BRASSITREL PRO at 3.0 lt/ha applied at 4-6T. Repeat applications can be made at 10 to 14 day intervals.



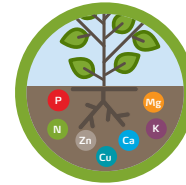
YaraAmplix OPTITRAC

Thanks to the unique combination of selected bioactive components and nutrients, YaraAmplix OPTITRAC activates the plant's metabolic processes to enhance nutrient use efficiency and tolerance to abiotic stress.

Trials have shown YaraAmplix OPTITRAC at 3.0 lt/ha twice can improve yields and tolerance to abiotic stress.



1 Improve tolerance to Abiotic Stress



2 Improve Nutrient use efficiency

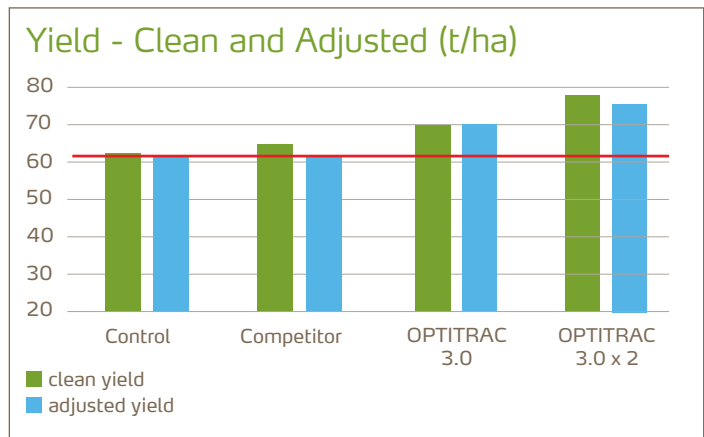
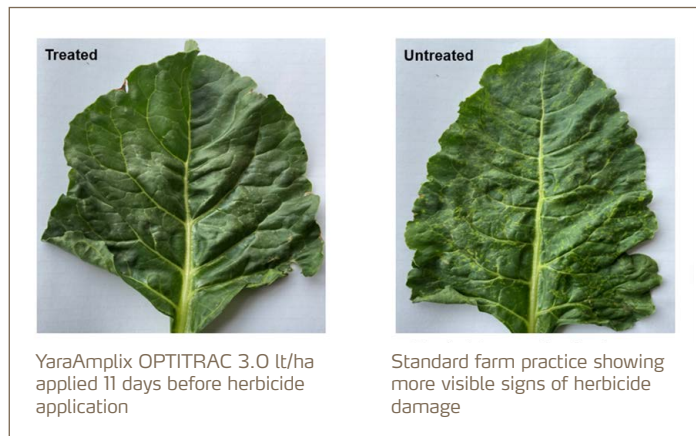


3 Improve Crop quality



- In a 2023 UK Split Field trial 3.0 lt/ha YaraAmplix OPTITRAC was applied 11 days prior to a herbicide and a second 3.0 lt/ha YaraAmplix OPTITRAC was applied 4 weeks later. The trial also compared the performance of a competitor biostimulant product.
- The OPTITRAC treatments increased adjusted yield giving a 12:1 R.O.I.

Treatment	Clean Yield (t/ha)	Sugar Content (%)	Adjusted Yield (t/ha)
Control – no biostimulant	62.49	15.94	62.10
Competitor Product – 20/6	64.89	15.72	63.67
OPTITRAC 3.0 lt/ha – 20/6	70.04	16.14	70.48
OPTITRAC 3.0 lt/ha x 2 – 20/6 and 2/8	79.31	15.62	77.33



YaraVita BRASSITREL PRO in combination with YaraAmplix OPTITRAC

When applied together to the crop, YaraAmplix OPTITRAC complements the nutritional effects of YaraVita BRASSITREL PRO. The two YaraVita products work in harmony to maximise root yield and sugar content.



3.0 lt/ha Brassitrel Pro at 4-6 TL stage



+ 3.0 lt/ha Optitrac repeat 16 leaf

