

# Kumara | Trial Sheet

## Increase kumara yield with Biostart products



### How it Works

**Biostart Mycorrcin** is a soil biostimulant that activates beneficial soil microbes, which stimulate healthy root growth and development leading to enhanced nutrient uptake, faster crop establishment and greater yield.

### Kumara Trials

Trials showed that **Mycorrcin**-treated kumara crops had a higher plant survival rate, higher kumara tuber weights and improved marketable kumara yield and profitability.

Trials were conducted in commercial Northland kumara crops located in Ruawai, Dargaville and Ahipara. In these trials, **Mycorrcin** was applied at 4–6 L/ha in two applications, one at planting and a second application four weeks after planting. The kumara from the treated and untreated areas were harvested separately into standard 525 kg field bins and then levelled. The bins were then transported into storage sheds. A few days after harvest, all the bins harvested from 5,000 m<sup>2</sup> of the treated and untreated area were sent for washing, grading and packing and then analysed

#### 1. Plant survival rate

The **Mycorrcin**-treated areas had 5% better plant survival rates.

#### 2. Increased kumara tuber weight and size

Individual kumara weights were higher and more kumara were in the bigger size ranges.

In the Ruawai trial, the **Mycorrcin**-treated yield showed an increase of 33% in Premium grade kumara harvested.

In the Dargaville trial, there were increases in **Mycorrcin**-treated yields of the Premium (by 31%), Number 1 (by 22%), Jumbo (by 23%) and SM grades (by 41%).

In the Ahipara trial, the **Mycorrcin**-treated yield showed an increase of the number of Number 1 and Number 2 kumara grades by 37% and 83%, respectively

#### 3. Increase Marketable Kumara Yield

Overall the application of **Mycorrcin** increased kumara yield in by 24–26% across the three trials (Table 1).

Marketable Yield (T/ha)	Ruawai	Dargaville	Ahipara
Standard	19.5	32	23
Mycorrcin-treated	24	40	29
Increase	4.6	8	6
	<b>24%</b>	<b>25%</b>	<b>26%</b>

#### 4. Profitability increase for kumara

The increased marketable yield led to increases in profit (Table 2).

Trial	Ruawai	Dargaville	Ahipara
Increase	<b>\$6,177</b>	<b>\$10,667</b>	<b>\$8,000</b>

**Mycorrcin** is available in standard and certified organic form.

Figure 1. Untreated vs Mycorrcin-treated Kumara

