

Enhancing Root Mass - Case study



What we wanted to achieve in this case study was to show the effectiveness of EM Foundation and EM Plant Stimulant at improving root density compared to a control.

Trial details:

Crop: Ryegrass (Winfield)

Treatments:

1. Control
2. EM Foundation
3. EM Plant Stimulant

Project Duration: 24th November (sown) – Feb (harvest)

Medium: Soil & Peat (1:1)

Sowing Rate: 50 kg/ha (1.8 g/tub)

Application details: Apply treatment (A) at sowing stage on November 24th 2021.



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Results

The trial was completed in February. Below is a comparison picture of the root systems. Figure 1 clearly illustrates the impact of the EM products (Foundation & Plant Stimulant) on the root structure and density of the ryegrass. The roots of both look much thicker and there appears to be more mass and a better structure when compared to the control.



Table 1. Weights of the washed and dried roots from the ryegrass

As shown in the Table below, the roots from the EM Plant Stimulant treated grass have a dry weight of 12.92 grams, which is the largest weight and 34% above the control. EM Foundation also had a great impact on the root mass with a dry weight of 10.92 grams, 13% over the control which had the lowest dry weight at 9.63 grams. This case study showed that applications of both EM Foundation and EM Plant Stimulant can significantly improve root mass in pasture.

Treatment	Weight (g)	% Change
Control	9.63	
EM Foundation	10.92	13%
EM Plant Stimulant	12.92	34%