

DORMANT CALCIUM SOIL COMPACTION TRIAL (SOUTH AFRICA 2016)

- The treatments were done using 225g/ha applied through drip irrigation and the aim was purely to see if the Dormant Calcium would break soil compaction. (1 pound bag / 2 HA)
- Soil compaction / aerobic zones were measured before & after treatment approx 1 month apart using a penetrometer on a variety of crops as detailed in the following slides....



Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.

Farm: Umbhaba Estates

Area: Hectorspruit Mpumulanga

Crop: Banana

Before

Date	Rep	Depth of aerobic zone
15/04/2016	1	90mm
15/04/2016	2	120mm
15/04/2016	3	100mm
15/04/2016	4	90mm
15/04/2016	5	130mm
15/04/2016	6	120mm

AVERAGES

108mm

After

Date	Rep	Depth of aerobic zone
20/05/2016	1	200mm
20/05/2016	2	90mm
20/05/2016	3	650mm
20/05/2016	4	320mm
20/05/2016	5	50mm
20/05/2016	6	390mm

AVERAGES

283mm

% Improvement

162%

Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.
 Farm: Joubert & Seuns
 Area: Schoemanskloof Mpumalanga
 Crop: Citrus

Before

Date	Rep	Depth of aerobic zone
11/06/2016	1	150mm
11/06/2016	2	120mm
11/06/2016	3	150mm
11/06/2016	4	130mm
11/06/2016	5	130mm
11/06/2016	6	120mm

AVERAGES

133mm

After

Date	Rep	Depth of aerobic zone
05/07/2016	1	320mm
05/07/2016	2	340mm
05/07/2016	3	340mm
05/07/2016	4	350mm
05/07/2016	5	380mm
05/07/2016	6	380mm

AVERAGES

352mm

% Improvement

164%



Trial: GSR Ca trials 2017
 Farm: J.F Steyn Boerdery
 Area: Strijdom Block Komatipoort Mpumulanga
 Crop: Mango

Before

Date	Rep	Depth of aerobic zone
02/06/2016	1	100mm
02/06/2016	2	90mm
02/06/2016	3	90mm
02/06/2016	4	110mm
02/06/2016	5	100mm
02/06/2016	6	120mm

AVERAGES

102mm

After

Date	Rep	Depth of aerobic zone
04/07/2016	1	210mm
04/07/2016	2	200mm
04/07/2016	3	210mm
04/07/2016	4	190mm
04/07/2016	5	230mm
04/07/2016	6	230mm

AVERAGES

212mm

% Improvement

108%



Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.

Farm: Cavalla Boerdery

Area: Nelspruit Mpumulanga

Crop: Macadamia Nuts

Before

Date	Rep	Depth of aerobic zone
19/05/2016	1	60mm
19/05/2016	2	70mm
19/05/2016	3	60mm
19/05/2016	4	110mm
19/05/2016	5	100mm
19/05/2016	6	90mm

AVERAGES

82mm

After

Date	Rep	Depth of aerobic zone
23/06/2016	1	210mm
23/06/2016	2	240mm
23/06/2016	3	300mm
23/06/2016	4	280mm
23/06/2016	5	340mm
23/06/2016	6	280mm

AVERAGES

275mm

% Improvement

235%



Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.

Farm: Costa Farms

Area: Rondebult

Crop: Spinach

Before

Date	Rep	Depth of aerobic zone
21-Apr	1	150mm
21-Apr	2	150mm
21-Apr	3	120mm

AVERAGES

140mm

After

Date	Rep	Depth of aerobic zone
2-May	1	275mm
2-May	2	300mm
2-May	3	250mm

AVERAGES

275mm

% Improvement

96%



Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.
 Farm: R Cooper Estates
 Area: Letsitele Valley
 Crop: Paw Paw

Before

Date	Rep	Depth of aerobic zone
10-May	1	80mm
10-May	2	100mm
10-May	3	50mm

AVERAGES

65mm

After

Date	Rep	Depth of aerobic zone
13-Jun	1	200mm
13-May	2	250mm
13-May	3	150mm

AVERAGES

200mm

% Improvement

215%



Trial: GSR Ca trials 2017
 Farm: CP Minaar Boerdery
 Area: Letsitele
 Crop: Maize

Before

Date	Rep	Depth of aerobic zone
18-May	1	20mm
18-May	2	20mm
18-May	3	50mm

AVERAGES

30mm

After

Date	Rep	Depth of aerobic zone
16-Jun	1	100mm
16-Jun	2	120mm
16-Jun	3	80mm

AVERAGES

100mm

% Improvement

233%



Trial: Use of GSR Ca to remediate soil compaction and deepen the aerobic zone of soils.

Farm: Gonsalves Farms

Area: Rondebult

Crop: Open Land (Mix Veg)

Before

Date	Rep	Depth of aerobic zone
4-Apr	1	110 mm
4-Apr	2	80 mm
4-Apr	3	80 mm

AVERAGES

90 mm

After

Date	Rep	Depth of aerobic zone
23-Apr	1	350 mm
23-Apr	2	330 mm
23-Apr	3	350 mm

AVERAGES

343 mm

% Improvement

381%

