



Martin V Kemp MRICS

## Organic Farming

# SafeRock Mineral (SRM) Impact on Cotton Growth

*SME WORLD had earlier carried a series of article on a unique natural resource - Safe Rock Agri. It is 100% natural and has been certified for use in organic farming as a soil conditioner. Field trials carried out using Safe Rock mineral in crops in various countries in diverse climatic conditions have revealed astounding results.*

Encouraging observations have been made of cotton plants growing on two equal size areas of a sub-divided 0.4 ha (one acre) plot farmed by Mr. Pralad S. Sontakee at Jalkost, Latur district, in the Maharashtra state of India which is situated on the western coast north of Goa, and includes Mumbai. This region in Latur district is very well known as cotton belt in West India.

The climate is sub-tropical with a rainfall of 400-500mm, and temperatures in the range 30-38 Celsius. The soil type is medium to black.

The trial was carried out under the supervision of a Certified Crop Advisor, Ravindra Botve. Ravindra in consultation with Bill Avery, Chief Agronomist Safe Rock Minerals Ltd worked out the protocol for carrying out this trial. The quantity required of Safe Rock was delivered at site of trial.

Local farmers are aware of the apparent effect of SafeRock mineral, and have greeted that enthusiastically.

The area was sown with Ajeet Bt 155 seed at 625g per hectare on 28<sup>th</sup> May 2014 at spacings of 120x120cm, and 40:20:20 NPK fertilizer applied on 18<sup>th</sup> June 2014.

Resistance to sucking complex was achieved with Neem based bio-pesticide.



The soil in the second area received the same treatment with the exception that 50 kg of SafeRock mineral was added.

At mid-August the cotton plants in both areas were inspected. Data related to their growth was collected with particular regard to plant height, the number of fruiting branches and the total number of flowers on the plants.

Five plants in each row were selected for observation at random. This representative sample of plants in each area was studied in detail and data averaged for each area.

| Comparison of cotton plant growth |                           |                             |                              |                           |
|-----------------------------------|---------------------------|-----------------------------|------------------------------|---------------------------|
|                                   | Average plant height (cm) | Number of fruiting branches | Number of flowers per plants | Number of bolls per plant |
| Without Safe Rock                 | 83.40                     | 7.20                        | 52.00                        | 40.00                     |
| With Safe Rock                    | 108.00                    | 11.40                       | 74.00                        | 60.00                     |
| improvement %                     | 29.50%                    | 58.33%                      | 42.31%                       | 50.00%                    |

It is evident from the above table that a significant improvement of plant height, number of fruiting branches, number of flowers and flower conversion to boll on each plant has taken place.

This is also evident from the following images:

Without SRM treatment.(July 2014)



With SRM treatment. (July 2014)



With SRM (August 2014)



We will be continuing to monitor the relative progress of plants in the two areas up to the point we can collect and weigh cotton bolls to confirm that these results translate to increased yield of saleable cotton. We will also examine the economics of the addition and beneficial effect of SafeRock mineral at that time.

We will also report on the farmers meeting where the progress of this trial will be shared.

The news about results on cotton trials in India has been very well received in Philippines and the authorities there has marked 100,000 hectares of agriculture land for conducting trials on Palm Oil Plantation.

Like in case of India, application rate of Safe Rock shall also be 400 kgs per/acre or 1 tonne per/ha annually. Bill Avery has indicated 100,000 tonne for the trial would be a good starting point and considering there is excess of several million hectares of oil palm in Philippines and Indonesia one crop could take our total resource sales annually once trials are completed and proven.

For more details on this natural resource, visit [www.saferockminerals.com](http://www.saferockminerals.com)

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