Rock Nutrients Resinator Testing Review

Response of Spearmint to Rock Resinator Heavy Yields® 0-7-8 Fertilizer Supplement

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The objective of this study was to demonstrate the efficacy of Rock Resinator Heavy Yields 0-7-8 fertilizer to increase the production of essential oil within plants as compared to a control group which received only a maintenance fertilizer on the same schedule.

The species studied was Scotch Spearmint, Mentha x gracilis.

30 Scotch Spearmint plants were transplanted into individual 5 inch pots on December 9, 2013 with Pro-Mix, soil less potting medium. Plants were grown under grow lights at a level of 1200 - 1600 lumens for 16 hours per day. The temperature was maintained at 75 deg. F during the light period and 60 deg. F during the dark period. Relative humidity was maintained at 65 to 80%. Soil moisture was maintained at field capacity with condensate water on alternate days for this growing period

The first application of a maintenance fertilizer was made 10 days after transplanting with ½ strength Rock Nutrients Fusion Grow® 6-2-6 (2 mls/L) and Rock Nutrients Supercharge® 0-10-12 (0.5 mls/L).

As the plants grew, the light level was increased to 3500 – 4000 lumens.

The fertigation treatment was repeated after 25 days.

The plants grew for 32 days in the 5 inch pots and appeared to be healthy with a robust root system and exhibiting active growth. On January 9, the plants were separated into control and test plants. They were repotted into larger containers, either a 5 gallon "Top Hat" nursery pot or a 10 gallon Grow Tub with Pro-Mix soil less mix. Pots were randomized in their position to control for environmental factors. The pots for the test products were marked with a stake.

A minor insect problem with thrips was treated with a pyrethroid insecticide.

Treatments began with the Control group receiving Rock Nutrients Fusion Bloom 4-2-9 (4 mls/L) only and the Test groups receiving Rock Nutrients Fusion Bloom 4-2-9 (4 mls/L) plus Rock Resinator Heavy Yields® 0-7-8 (2 mls/L). Fertilizer strength was calculated to be 1200 ppm.

Plants were watered every third day and a regimen of feed, feed, water was followed to maintain moisture at field capacity. The Test groups received the Rock Resinator Heavy Yields in addition to the Rock Nutrients Fusion Bloom that all of the plants received.

Peak flowering occurred by January 26th as the plants were maturing.

Plants were harvested on February 11, 2014. Plants were cut one inch above ground and segregated into either the control group or the test group. They were stored in a plastic freezer bag and frozen until they were dried and cured.

In early April, all of the plants were dried. Direct steam extraction was used to determine the concentration of oil in each sample.

RESULTS>>>

Resin Extraction: The Results

2.35 grams of *water soluble essential oils and resins* were extracted from 210 grams of the **CONTROL PLANTS.**

3.47 grams of *water soluble essential oils and resins* were extracted from 210 grams of the **TEST PLANTS.**

There was enough plant material to run two separate tests rather than three. However, the treated plants did yield 47% more essential oils and resins than the controls. It is evident that the application of Rock Nutrients Resinator Heavy Yield 0-7-8 had a positive influence on the increased production of essential oil and resins.

California Department of Food & Agriculture Reviewed

FULL REPORT with Photos is available at:
http://www.grozine.com/2015/01/27/rock-nutrients-resinator-test-review/

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