

Certificate of Analysis

Product: Mesosilver[®]

Project: Phase II: *Trichophyton rubrum*

EMSL Reference: 030321865

Experimental Design Summary:

Test ability of two (20 and 75 ppm) Mesosilver products to suppress growth of *Trichophyton rubrum* American Type Culture Collection Strain No. 11900. Spores of *T. rubrum* were spread onto Malt Extract Agar (MEA) medium and subjected to a total of 28 sprays (3.64 ml) of Mesosilver product as supplied over a three day period. A negative control (no product) was included for comparison. All tests were performed in triplicate.

Experimental Results Summary:

Trichophyton rubrum ATCC 11900 at 5.1×10^4 spores ml^{-1} was used to determine the effect of Mesosilver on fungal growth. The results show that both Mesosilver products have a negative impact on the growth of *T. rubrum* (Figures 1 and 2), however only the 75 ppm product was able to successfully inhibit fungal growth in the concentrated spray zone. The 20 ppm product reduced growth approximately 5-10% as compared to the no product control plates.

Analyst _____
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Purest Colloids, Inc. Product Efficacy Phase II –reference no. 030321865 p. 2 of 3

Figure 1: Effect of 20 and 75 ppm Mesosilver on growth of 2.6×10^4 *Trichophyton rubrum* ATCC 11900 spores inoculated onto Malt Extract Agar medium. The plates were inoculated with spores and following a one-hour drying period the plates were subjected to a total of 3.6 ml of Mesosilver product as supplied over a three-day period.



All treatments performed in triplicate and incubated at $24 \pm 2^\circ\text{C}$.

Purest Colloids, Inc. Product Efficacy Phase II – reference no. 030321865 p. 3 of 3

Figure 2: Close-up of three representative plates from Figure 1. Note that 75 ppm successfully inhibited fungal growth in the concentrated spray zone while 20 ppm inhibited approximately 5-10% growth as compared to the no product control.

