

MICROBIOLOGICAL STUDY FOR EVALUATION OF
SPENT-WASH AS SOIL ENRICHMENT AGENT

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In the coconut arrack industry the waste product spent-wash was found to contain primary nutrients required for plant growth. Experiments done on Amaranthus tricolor L. (Thampala) showed that plants treated with spent-wash were taller than the controls (Fernando and Thenabadu, 1989). We now report results of further studies.

Soil suspended in sterile water was plated on nutrient agar and incubated for counting. Soil treated with spent-wash did not show a change in the bacterial count.

Antibacterial activity was measured by a tube dilution technique with subsequent sub-culture on semi-solid medium to determine the minimum bactericidal concentration (MIC) against standard strains of Escherichia coli, Staphylococcus aureus and Mycobacterium fortuitum. The results indicate that spent-wash did not inhibit the bacterial growth.

Antifungal activity was studied with Cladosporium cladosporoides in saphodex medium. Spent-wash did not show antifungal activity.

The results of this study show that spent-wash when utilized as a fertilizer does not effect any change to the soil microbial population.

References: Fernando, H.A.M.C., Thenabadu M.W. (1989),
Proc. Sri Lanka Assoc. Adv. Sci. 45, 35.