

**SCREENING OF SELECTED MEDICINAL PLANTS
AGAINST PATHOGENIC BACTERIA OF *IN VITRO*
CULTURED MAKAPUNO SEEDLINGS**

**A Research Study
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**Ria Clarisse L. Mojica
Charris Eden E. Sidamon
Agatha Christie S. Yonaha**

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ABSTRACT

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Adviser: Dr. Amornita C. Sanchez

The study "Screening of Selected Medicinal Plants against Pathogenic Bacteria of *In vitro* Cultured Makapuno Seedlings" was conducted at the Makapuno Tissue Culture and Crop Protection Laboratories at the Department of Crop Sciences, College of Agriculture, Forestry, Environment and Natural Resources from September to November 2004. It aimed to identify the medicinal plants with bactericidal property against bacteria infecting *in vitro* cultured makapuno seedlings and identify which medicinal plant extracts is the most effective against pathogenic bacteria of *in vitro* cultured makapuno seedlings

Ten medicinal plants such as oregano, pepper, garlic, neem, sweet basil, akapulko, parsley, ginger, chives, and lemon were evaluated. Streptomycin was used as positive control while distilled water was used as negative control.

Streptomycin, being a tested antibiotic in the treatment of bacterial diseases, exhibited the biggest zone of inhibition of 3.08 cm. Of the ten medicinal plants tested, garlic, which exhibited the zones of inhibition of 2.36 cm and 2.3 cm two and four days after culture respectively, was found to be the most effective in controlling bacteria infecting the *in vitro* cultured makapuno seedlings. Chive was also found to control bacteria, though lesser in effectivity. The other medicinal plants used had little bactericidal properties but their effects in controlling bacteria were insignificant.

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