

AN ISOLATION STUDY OF MICROORGANISM FROM DIFFERENT STAGE OF IN VITRO PROPAGATION

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Abstract: Fungi and bacteria contaminants were found associated with the cultured plant materials. The bacterial isolates include *staphylococcus aureus*, Gram positive, *staphylococcus epidermis*, *staphylococcus aureus*, Gram positive. And fungal contaminants include *Fusarium sp.*, *Aspergillus niger*, *chaetomium sp.*, *Acremonium sp.*, *Aspergillus sp.* Microbes are living, biological contaminants that can be transmitted by infected people, animals and indoor air, and they can also travel through the air and get inside homes and buildings. It was discovered that the microbial population is higher in the preparatory room than the incubating rooms. This might be unconnected with the fact that more people frequent the preparatory room. Flanigan and Morey (1996), reported that presence of bacteria in a room indicate the presence of people and their levels may get high when the building is heavily populated. Consequently, adequately training of operators and high standards laboratory cleanliness is a vital pre-requisite to successful plant tissue culture. Most of these bacteria contaminants have been reported to increase culture mortality and the presence of latent infections can result in variable growth, tissue necrosis, reduced shoot proliferation and reduced rooting (Kane, 2003) The fungi were identified on the bases of morphological characteristic such as colony form and color, type of mycelium, fruiting bodies and spores (Commonwealth Mycological Institute Descriptions of Pathogenic Fungi and Bacteria. The present research study aims to a) examine the possible bacterial contamination of plant tissue cultures initiated from medicinal plants of Sinai, b) identify the bacterial species contaminating those plant cultures, c) determine the antibiotic sensitivity of those covert bacteria and d) suggest the best strategy to minimize loss of plant materials during short- and long-term cultures.

Keyword: Contamination, Culture, Fungi, Bacteria

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