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Isolation of Micro-Organism from Currency from Various Sources

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commentary Article

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ABSTRACT

As we all know that we cannot see microorganism like bacteria, fungi etc., with our naked eye will be transmitted from one and other from various sources, it may be food, water, work place, relationships, business.

In today's generation money has the most important place in their life, through which many of the micro-organisms have transmitted from one other, in many of the places the mostly like tea stalls, street food, buses, railways, etc., the bacteria, fungi rods, round there which will be transferred from one place to other.

For the laboratory research, the currency was collected from various sources, where like bus conductor, tea stall person, railway staff, and some of the street food -store people into a sterilized polythene bags and stored at room temperature.

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In today's generation money has the most important place in their life, through which many of the micro-organisms have transmitted from one other, in many of the places the mostly like tea stalls, street food, buses, railways, etc., the bacteria ^[1-5], fungi rods, round there which will be transferred from one place to other. For the laboratory research, the currency was collected from various sources, where like bus conductor, tea stall person, railway staff, and some of the street food -store people into a sterilized polythene bags and stored at room temperature.

The cultivation for all microorganisms mostly grow in blood agar ^[6-13] media, we have used blood agar media for cultivation of microorganisms which we have collected from various sources.

The currency which we have collected from various sources was first inoculated into the distilled water and kept for incubation at 40 degree centigrade, were all the micro-organisms associated with it gets separated into water. Now the blood agar media has been prepared and allowed to solidify at room temperature under the UV light in the laminar air flow, by which it can be prevented from other micro-organisms growth in the media.

After the solidification of media, the inoculation of microorganism culture in the media was done using streak plating method. And is kept for incubation for 48hrs in the incubator at 40°C, After 48hrs, the growth of several microorganisms with pathogenic bacteria and fungi ^[14-20] were identified using the various techniques for identifying the bacteria. In dairy cattle, the inflammation of the mammary gland in response to bacterial attachment and growth is an important cause of milk contamination.

Contaminated milking equipment and the hands of the milkers are also common sources of transmission of pathogenic bacteria in the dairy farm environment, leading to potential health risks ^[21-25]. Apart from genes, the human genome also consists of a large number of nucleotide repeat units of size 1-6 bp repeated tandemly called Micro satellites ^[26-34] or Simple Sequence Repeats (SSRs) or Short Tandem Repeats (STRs) (Schlotterer, C, 2000) Micro satellites are found in all the known genomes, spanning from prokaryotes, eukaryotes and viruses and are widely distributed both in coding and non-coding

regions. Blood samples [35-43] showed severe metabolic acidosis with an increased anion gap and, deranged Urea, Creatinine and Creatine phosphoKinase (CpK). The patient was then admitted to the high-dependency unit, while simultaneously receiving intravenous hydration. Hydrogen is generally considered to be a key electron donor to stimulate the reductive dechlorination of chlorinated ethylene. Our previous work, *Clostridium bifermentans* strain DPH-1 has been found to reductively dechlorinate PCE to cDCE (*cis*-1,2-dichloroethylene) using hydrogen as an electron donor [44-49]. It is important to recognize contaminants in cytologic specimens. These contaminants can be environmental exogenous materials, as well as food contaminants. In particular, Bronchiolealveolar Lavage (BAL) and anal Papanicolaou (PAP) smears may contain food contaminants that resemble pathogens. The vegetable and fruit contaminants can pose a diagnostic challenge by mimicking microorganisms, viral changes, or malignant cells [50-52]. However, these studies on bacterial community responses tend to focus on relatively short time periods (i.e., 200 days in Vinas et al., six months in Lors et al. and 88 days in Margesin et al, and on soils in which PAHs are still detectable. The long term effects of PAH contamination, after PAHs are degraded, are less studied [53-58]. Increased human population and increased demands on water, pose a risk in maintaining acceptable water quality. Government agencies oversee environmental management to maintain water quality, assure the public health and preserve the environment.

Groundwater represents an important source of drinking water and its quality is currently threatened by a combination of over-abstraction and microbiological and chemical contamination [59-62]. *Mycoplasma hyopneumoniae* is the causative agent of porcine enzootic pneumonia (PEP) that reduces growth rate. Colonization also predisposes the host to more severe infections from secondary pathogens. Vaccines of whole-cell and subunit *M. hyopneumoniae* have only a partial protective effect against primary or secondary infection. Additionally, the cost of producing the vaccines is very high. Therefore development of an improved vaccine is desirable [63-72]. The progenitor cells that leave bone marrow migrate to the thymus where they differentiate into mature T lymphocytes [73-77]. In their sequence of differentiation those that are potentially auto reactive are deleted in the medulla by dendritic cells against major histocompatibility complex antigens and by medullary thymic epithelial cells against tissue-restricted antigens. The current case presentation describes a case of incidentally detected splenic lymphangioma in a 56-year-old male presenting with constitutional symptoms including low-grade fever and night sweat. The patient concurrently had abdominal pain and a splenic mass identified by ultrasonography done prior to hospitalization. The constellation of B-symptoms along with a splenic mass necessitated ruling out the differential diagnosis of a lympho proliferative disease [78-84]. In spite of all the efforts to suppress the spread of infectious diseases and cancer by the biomedical sector, they still represent the major cause of death. According to world health organisation [WHO], cancer is responsible for one third of lost years of life. Most cancers are treated by combination of standard therapies like surgery and chemotherapy. Conventional therapies not only target tumors cells but also healthy cells as the drug does not discriminate the cell types. To overcome these obstacles, targeted nanomedicine is designed for the delivery of drugs selectively to tumor cells. Therapeutic vaccination against tumors proved far more stringent than prevention [85-94]. Mounting concern over energy independence, reducing carbon emissions, and government mandates and incentives have led to a significant increase in the use of fuels derived from renewable sources, including biofuels, alternative fuels (drop-in fuels) and petroleumbio fuel blends. Biodiesel, which is one of the most popular and commonly used biofuels, is composed of mono alkyl esters of fatty acids, these fatty acid methyl esters (FAMES) are produced through transesterification of fats or oils with alcohols and are most commonly catalyzed with base [92-95]. Like other bacteria, the initial step for establishment of streptococcal infection is bacterial adherence and colonization to host tissue for which *Streptococcus pyogenes* genome encodes multiple adhesin genes for various adherence determinants, out of which fibronectin binding proteins (FBP) are the most important contributors. In the present scenario of changing epidemiology and emergence of new *emm* types during different seasons and years, it becomes necessary to look into regional prevalence of *emm* types in a community along with their virulence credentials. However, such data is lacking in Indian context. Apart from this, another challenge being encountered with GAS isolates is increasing resistance towards commonly prescribed antibiotics [96-104]. The most commonly used laboratory diagnostic procedures involve the analysis of cellular and chemical constituents of blood. Other biological fluids are utilized for the diagnosis of disease. Saliva offers some distinctive advantages. Whole saliva can be collected non-invasively and by individuals with limited training [105-113]. For

sterilization validation, in general, Soybean Casein Digest (SCD) agar (SCDA) is so often used. However, depending on supplier or difference lot of SCDA, cultivation performance significantly differed for injured spores. So, in order to attain reproducible cultivation performance and sterilization validation, we studied for what constitute of culture medium may cause differ to the injured spores in SCDA. Different pathogenic isolates of *F. udum* including four reference cultures from different geographical origin infective on three different alternate hosts viz, *Cicer arietinum* (241426), *Crotalaria verrucosa* (170431), *Cajanus indicus* (193652) and *Cajanus cajan* (1708) were obtained from the Centre for Agriculture and Biosciences International (CABI), U.K and National Agriculturally Important Microorganism Culture Collection (NAIMCC), India [114-123]. The number of novel fungi isolated from marine habitats is still low as compared to their estimated high biodiversity. Very little is known about the global diversity and distribution of marine fungi. The probability of isolating fungal strains belonging to new taxonomic groups from selected marine habitats and from marine samples in general remains high. Enzymes are highly selective catalytic proteins which control and regulate all biochemical processes in the body. They are produced by living cells in order to accelerate both the rate and specificity of metabolic reactions. Enzymes are highly specific in their function because each enzyme is programmed to carry out one special task. Several million enzymes mediate chemical reactions occurring in a living system [124-132]. Quantification of TNF α is routinely carried out in cell culture supernatants by *in vitro* enzyme-linked immunosorbent spectrophotometric assays. Thus assays have served as a primary tool for *in vitro* evaluation of cytokine-mediated anti-inflammatory and immunomodulatory properties of biomolecules. Saskatoon berries (*Amelanchier alnifolia* Nutt.) (Family: Rosaceae) are deeply pigmented berries that grow on deciduous shrubs in Canadian Prairie Provinces, and Western and North Central United States. They are a rich source of bioactive compounds with physiological benefits [133-142].

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