



# Classification of Pathogenic Microbes and their Nature

Pierre Gressens\*

Department of Agriculture, University of Tokyo, Tokyo, Japan

## INTRODUCTION

Microorganisms are microscopic organisms. The study of microorganisms is called microbiology. Microorganisms are bacteria, fungi, archaea, or protists. The term microorganism does not include viruses or prions, which are generally classified as non-living. Pathogens are organisms that cause disease. Your body is naturally full of microbes. However, these microbes only cause problems when the immune system is weakened or when they invade a normally sterile part of the body. Pathogens are different and can cause disease once they enter the body. A host is all that a pathogen needs to survive. Once established within a host, pathogens evade the body's immune response and use the body's resources to replicate before spreading to new hosts. Pathogens can be transmitted in different ways depending on the type. They can be spread by skin contact, body fluids, airborne particles, face contact, and touching surfaces touched by an infected person. A comprehensive understanding of the complex interactions between hosts and pathogens will improve our ability to develop new preventive and therapeutic measures against infections.

## DESCRIPTION

A precise taxonomy of infectious agents with respect to their infectious lifestyle and the corresponding virulence implications within the host is necessary, as clear concepts are essential to designing fruitful studies. Classically, pathogenic bacteria are divided into extracellular, facultative intracellular and obligate intracellular. This classification is inadequate. It is based on discrepancies and exaggerates the ability of infectious agents to replicate *in-vitro* in cell-free media. or extracellular which is relevant to life and virulence *in-vivo*. When living as pathogens in

association with a host, what is microbiologically relevant is not the ability to grow in an artificial cellular bacterial medium or environmental niche, but rather that an intracellular infectious agent is added to the stage of intracellular growth. , behind its label, can also live extracellular in the natural environment of the host's extracellular region.

Pathogens can cause a wide variety of diseases with varying degrees of severity and modes of transmission. Let's take a look at some of the diseases caused by different types of pathogens. Pathogens have the ability to make us sick, but if our bodies are healthy, they can fight against pathogens and the diseases they cause. It can be used for many diseases that can be There are also symptom relief for those who are difficult to treat, such as: Some viral infections. Bacterial species can be classified into different pathogenic categories. Biohazard classes 1-4 are typically catalogued, ranging from "generally recognized as safe" to highly invasive species. However, current international lists do not always match.

## CONCLUSION

Here we present a meta-analysis of nine such rankings. It contains pathogenicity assessments of approximately 2500 bacterial species, mostly based on consensus among different lists. Ambiguities between the lists were identified in 260 species, which were resolved through a literature survey and interviews with prominent experts in the field. Here, we present a consensus list of 2575 species and genera along with their associated biosafety classifications. This list should be an important resource for future risk assessment of experimental procedures involving one or more of the listed species or genera.

**Correspondence to:** Pierre Gressens, Department of Agriculture, University of Tokyo, Tokyo, Japan; E-mail: pierre@gresen.jp

**Received:** 17-Mar-2023, Manuscript No. JPPM-23-20181; **Editor assigned:** 22-Mar-2023, PreQC No. JPPM-23-20181 (PQ); **Reviewed:** 05-Apr-2023, QC No. JPPM-23-20181; **Revised:** 25-Apr-2023, Manuscript No. JPPM-23-20181 (R); **Published:** 23-May-2023, DOI: 10.35248/2157-7471.23.14.683

**Citation:** Gressens P (2023) Classification of Pathogenic Microbes and their Nature. J Plant Pathol Microbiol. 14:683.

**Copyright:** © 2023 Gressens P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.