



Virus - An Ultimate Mysterious

Sanjay Dey*

Assistant Professor, Department of Zoology, Ananda Mohan College, 102/1, Raja Rammohan Sarani, Kolkata, 700009, India

***Corresponding Author:** Sanjay Dey, Assistant Professor, Department of Zoology, Ananda Mohan College, 102/1, Raja Rammohan Sarani, Kolkata, 700009, India.

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Microscopic agent will lead the future world. The word virus consists of five words but its impact is high for the whole world. This submicroscopic microbe cannot see with empty eye, but they replicate quickly. A great example is COVID 19 outbreak. More or less all over the country seriously affected due to unknown/known mutation by this COVID 19 pandemic. We see how human life style was changed due to this pandemic. One of the interesting things is that, strong virus genome attacks the host cell immune systems and cytotoxic T cell, B cell cannot understand whether they are foreign particle or not. The infectious part of virus is either DNA or RNA. The main function of virion capsid is to protect virus from nuclease enzyme (digested enzyme).

Generally, insects are the medium of plant virus transmission while animal virus vary (either protozoan, invertebrate animal, vertebrate) their transmission pattern. Genomic DNA and rod-shaped fibers are present in the polygonal head of bacteriophage, that are the predominate characters of phage virus. Tobacco Mosaic virus (TMV) is the example of ss RNA virus that contain 2130 single protein molecules.

The basic difference between plant and animal virus are,

- Plant virus contain envelope while animal virus has
- Plant virus is linear while animal virus is linear or circular.
- In plant virus, they create a hole and thus way they enter into the host cell. But in the animal virus, they enter into the host cell by the process of phagocytosis.

As number of viruses is too high, none of the scientists cannot classify it properly. Some terminology likes virion, prion, viroid are also associated with virus. Shortly viral reproduction has four

steps; Infection phase, Eclipse phase and Maturation phase, Lysis phase.

Repeated mutation in the genome of virus can increase the higher survivability rate. Some virus structure and transmission (specially zoonotic disease) are totally unknown and they are still mysterious.