Nipah virus

Nipah virus (NiV) is a zoonotic virus, meaning that it can spread between animals and people.

Fruit bats, also called flying foxes, are the animal reservoir for NiV in nature.

Nipah virus is also known to cause illness in pigs and people.

Infection with NiV is associated with encephalitis (swelling of the brain) and can cause mild to severe illness and even death. Outbreaks occur almost annually in parts of Asia, primarily Bangladesh and India.

Nipah virus infection can be prevented by avoiding exposure to sick pigs and bats in areas where the virus is present, and not drinking raw date palm sap which can be contaminated by an infected bat.
Nipah virus (NiV) was first discovered in 1999 following an outbreak of disease in pigs and people in Malaysia and Singapore.

NiV is a member of the family *Paramyxoviridae*, genus *Henipavirus*. It is a zoonotic virus, meaning that it initially spreads between animals and people.

The animal host reservoir for NiV is the fruit bat (genus *Pteropus*), also known as the flying fox. Given that NiV is genetically related to Hendra virus, another henipavirus known to be carried by bats,

Currently there are no licensed treatments available for Nipah virus (NiV) infection.

Treatment is limited to supportive care, including rest, hydration, and treatment of symptoms as they occur.

The Hindu

Jal jeevan mission

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Every rural household has drinking water supply in adequate quantity of prescribed quality on regular and

long-term basis at affordable service delivery charges leading to improvement in living standards of rural communities.

The Hindu

PMCARES

Keeping in mind the need for having a dedicated fund with the primary objective of dealing with any kind of emergency or distress situation, like posed by the COVID-19 pandemic, and to provide relief to the affected, a public charitable trust under the name of 'Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)' has been set up.

PM CARES Fund has been registered as a Public Charitable Trust. The trust deed of PM CARES Fund has been registered under the Registration Act, 1908 at New Delhi on 27th March, 2020.

Objectives

To undertake and support relief or assistance of any kind relating to a public health emergency or any other kind of emergency, calamity or distress, either man-made or natural, including the creation or upgradation of healthcare or pharmaceutical facilities, other necessary infrastructure, funding relevant research or any other type of support.

To render financial assistance, provide grants of payments of money or take such other steps as may be deemed necessary by the Board of Trustees to the affected population.

To undertake any other activity, which is not inconsistent with the above Objects.

Prime Minister is the ex-officio Chairman of the PM CARES Fund and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.

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USCIRF

The United States Commission on International Religious Freedom (USCIRF) is an independent, bipartisan U.S. federal government agency created by the 1998 International Religious Freedom Act (IRFA), as amended.

USCIRF monitors the universal right to freedom of religion or belief (FoRB) abroad; makes policy recommendations to the President, Secretary of State, and Congress; and tracks the implementation of these recommendations.

USCIRF's nine Commissioners are appointed by either the President or Congressional leaders of each political party, supported by a non-partisan professional staff.

The Hindu

GM CROPS

In order to increase food production and become self reliant, we require superior crop varieties and hybrids that provide enhanced yields and wide adaptability across environments, and require fewer inputs of natural resource

Genetic modification of crops using the available and vast genetic diversity in conjunction with traditional farming has been well documented for increased productivity, contributing to global food, feed, and fibre security.

According to a report by the International Service for the Acquisition of Agri biotech Applications (ISAAA) 2020, a total of 72 countries have adopted GM crops either as human food or animal feed, as well as for commercial cultivation (56% of the global GM crop area is in developing countries compared to 44% in industrial countries).

GM crops have benefited more than 1.95 billion people in five countries (Argentina, Brazil, Canada, India and the United States) or 26% of the current world population of 7.6 billion

Globally, genetic modification has expanded its reach, beyond the major four crops, maize, soybean, cotton and canola, to other economically important food crops for various traits such as insect and herbicide resistance, climate resilience and nutritional quality improvement

In the edible oil deficit, a focus on mustard India faces a major deficit in edible oils, with 60% of its demand being met by imports.

Mustard is one of the most important edible oil crops in India; however, its per hectare yield is very low when compared to the global average.

Thus, increasing the productivity of mustard in the country is vital for the economic well-being of farmers and self-sufficiency in edible oil production.

Using genetic engineering, extensive research has been carried out at the Centre for Genetic Manipulation of Crop Plants (CGMCP), University of Delhi South Campus, to create a GM mustard hybrid, DMH11 with higher vigour and yield this will facilitate an increase in domestic production of edible oils as well as enhanced farm incomes

The GM mustard hybrid is based on the barnase/barstar system, which works on the principle of removing male fertility in one parent and restoring it in the offspring.

The herbicide tolerance gene has been deployed as a selection marker for developing the GM mustard.

While the use of herbicides in herbicide tolerant (HT) crops has an advantage in terms of saving soil moisture and nutrients, besides effective weed control, the herbicide tolerance gene in GM mustard is primarily used for selecting genetically transformed lines, and for hybrid seed production.

On October 25, 2022, the Genetic Engineering Appraisal Committee (GEAC) of the Ministry of Environment, Forest and Climate Change Government of India, made a landmark decision of approving the release of DMH11 and its parental line for cultivation.

This will help boost the vibrant genetic engineering research sector in the country and enable the generation of new crop varieties with improved traits.

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