No evidence of Covid-19: Study

KOTA KINABALU: There is no evidence of coronavirus in Sunda pangolins entering the wildlife trade via Malaysia, a study revealed.

Disease emergence and re-emergence events, such as Nipah, SARS, Ebola, MERS and now Covid-19, over the past two decades have impacted human health, domestic animal health and the global economy.

The USAID-funded Predict programme, a component of the Emerging Pandemic Threats programme, was established in 2009 to discover novel zoonotic viruses in wildlife before they become human epidemics and identify the factors that drive their emergence, amplification, and spread.

In Malaysia this important work has been carried out through a long-term collaboration between EcoHealth Alliance and Conservation Medicine, the Department of Wildlife and National Parks (Perhilitan), the Ministry of Health, the Department of Veterinary Service, Sabah Wildlife Department (SWD), Sabah State Health Department, Danau Girang Field Centre (DGFC), Universiti Malaysia Sabah (UMS) and Universiti Putra Malaysia to help develop personnel and laboratory capacity and establish sustainable disease surveillance systems for wildlife, and livestock and people with high levels of exposure to wildlife.

As part of this ongoing collaboration, in 2016 EcoHealth Alliance’s Malaysian Field Manager Jimmy Lee, started a Master's programme at UMS, tracking the origins of confiscated pangolins through DNA analysis, as well as looking to find zoonotic pathogens these animals may carry with them as they’re smuggled around the world, to assess the risk the illegal pangolin trade poses to human health and to better inform both conservation planning and efforts to tackle wildlife trafficking.

“UMS is pleased to be actively involved in this global effort, working together with local and international researchers to carry out this important work,” said Dr. Lizaldine Gozalio, Assistant Director of Research and Graduate Studies, UMS.

A paper published in the EcoHealth journal on 23/11/20 from this collaboration argues that this contrast to the findings in China is a result of the point in the supply chain at which samples were taken.

The wildlife trade transports pangolins from Malaysia up through Southeast Asia were often housed together in groups from different geographic regions, and often with other species, creating plenty of opportunity for viral transmission among and within species.

“We concluded that the detections of SARS-CoV-2-related viruses in pangolins are most likely a result of their exposure to infected people, wildlife, or other animals after they entered the illegal wildlife trade,” said Jimmy Lee, EcoHealth Alliance Field Manager in Malaysia.

“Pangolins are considered a totally protected species under the Sabah Wildlife Conservation Enactment 1997 and Wildlife Conservation Act 2010. It is illegal to kill, hunt, or sell them. The exact number of Sunda pangolins in Malaysia remains unknown. The species faces significant threats to its survival in nature and requires active conservation efforts to ensure its enduring existence for future generations.”

Wildlife rescue ranger releasing a confiscated pangolin back into the wild.

Wildlife Health Unit ranger sampling a confiscated pangolin before it is released back into the wild.

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“This work shows us how scientists working with government agencies can add real value to law enforcement operations. Pangolins are endangered globally, so each animal is precious. By testing seized pangolins for viruses we’ve been able to expand our understanding of the origins of the most significant pandemic of this century, and also we hope benefit pangolin conservation” Dr. Peter Daszak, President of EcoHealth Alliance.

Work for this study was jointly funded by USAid’s Emerging Pandemic Threats Predict programme and the USAid’s Infectious Disease Emergence and Economics of Altered Landscapes Project.