No evidence of coronaviruses in Sunda pangolins entering wildlife trade

KOTA KINABALU: There is no evidence of coronaviruses in Sunda pangolins entering the wildlife trade through Malaysia.

Although scientists detected SARS-CoV-2, the virus that causes Covid-19, in pangolins which were captive animals confiscated from the wildlife trade in China, no one knew if wild pangolins carried the virus, read a joint statement from Universiti Malaysia Sabah (UMS), Sabah Wildlife Department (SWD) and EcoHealth Alliance.

Nevertheless, it was concluded after researches conducted that the detection of SARS-CoV-2-related viruses in pangolins are likely due to their exposure to infected people, wildlife, or other animals after they entered the illegal wildlife trade, said EcoHealth Alliance Field Manager Jimmy Lee in the statement.

It was mentioned that over the past 10 years through the Predict project, EcoHealth Alliance, Perhilitan, and Sabah Wildlife Department have worked closely to analyse wild, rescued, and seized illegally-trafficked pangolins for viruses that could potentially cause the next pandemic sampling 334 pangolins in Malaysia.

These pangolin samples collected from animals before or just after they entered the illegal wildlife trade were screened for the viral families most associated with recent disease emergence and re-emergence events in the last two decades: paramyxoviridae like Nipah virus, filoviridae like Ebola, orthomyxoviridae like Avian influenza, coronaviridae like SARS-CoV-2, and flaviviridae like Dengue.

Samples collected from the 334 pangolins yielded no positive results for viruses from the five families deemed of particular threat to humans.

A staff from the Sabah Wildlife Rescue Unit carries a pangolin.

"SWD's collaborative efforts with EcoHealth Alliance through the Predict Project and other programs have netted some interesting results, identifying novel viruses within Sabah's Wildlife, and improving our understanding of zoonotic viruses in general.

Further collaborative efforts with EcoHealth Alliance and other local stakeholders help enhance Sabah's readiness to respond to disease emergence events and build capacity for disease surveillance of novel viruses," said Dr Sen Nathan, Assistant Director of SWD.

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 where animals are 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.

"These findings suggest that wild pangolins pose no threat to human health, they highlight the importance of carefully ending the trade of wildlife and improving biosecurity at wet markets to avoid having wild animals co-mingling with farmed animals and humans," said Tom Hughes EcoHealth Alliance Project Coordinator in Malaysia and Director of Conservation Medicine.

Sunda 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.