KOTA KINABALU: Sabah is one of the regions most vulnerable to the infection of malaria.

"A malaria parasite called Plasmodium knowlesi is the commonest cause of severe malaria on Northeast Sabah," said the Vice Chancellor of the Universiti Malaysia Sabah (UMS), Professor Datuk Mohd Harun Abdullah at the International Malaria Symposium at a hotel here, yesterday.

He added that for the period 2007-2008, knowlesi infections accounted for 78 per cent of all malaria in Kudat, a total of 172 cases.

The speech was read by the UMS Deputy Vice Chancellor, Professor Dr Shahril Yusof when launching the symposium.

"This malaria parasite has the shortest replication period of 24 hours in the red blood cells, and when the parasite load is high, it can lead to severe malaria and malaria death in knowlesi infections," he said.

He also said that in the year 2010, World Malaria Report stated that malaria affects approximately half of the world’s population, with an estimated 216 million cases and 655,000 deaths worldwide.

Additionally, in 2012, it has been reported that knowlesi infection has caused five deaths in Sabah.

"Indeed the health problem caused by malaria is one that is both grave and urgent. Without doubt, there are still hurdles to overcome in the control of malaria in the road ahead," he said.

Speaking in the Malaysian context, he added that there are four species of malaria are commonly found and Sabah has the highest infection rate by the parasite namely Plasmodium knowlesi.

Thus, he hopes that the conference will result in a wider dissemination of the existing knowledge, tools and materials that will create better understanding of the problem of malaria control.

Meanwhile Infections Disease Physician in Queen Elizabeth Infection Disease Unit, Dr Timothy William said that the knowlesi notifications have increased markedly from 2007.

He said one of the main challenges is the presence of knowlesi in the region especially in Sabah and Sarawak.

"The Plasmodium knowlesi notifications increased more than 10 fold between 2004 which are 59 cases and 2011, 703 cases," he said.

The increased in the particular parasite notifications has occurred statewide, appearing to have begun in the southwest and progressed north-easterly.

From his research, he pointed out that one of the factors resulting to this event was due to the extensive encroachment of humans into previously forested areas has increased interaction with mosquito vectors and simian hosts.

Besides, Dr Timothy also said that further research is required to determine risk factors for knowlesi malaria in order that control programmes can address the increasing incidence of this species.

The convention themed New Challenges and Strategies in Malaria Control has attracted about 160 delegates from various countries such as Singapore, China, Japan, Indonesia, Pakistan, Brazil, England, Papua and Myanmar.

Also present were the Dean of School of Medicine; Professor Dr D Kamarudin D Mudin and Chairman of the International Malaria Symposium, Associate Professor Dr Chua Tock Hing.