

Toxin Useful For Health

Friday, 28 October 2016 WIB, By: Marwati




The toxin is known as a harmful compound to the health, because toxin can cause organ malfunction and metabolic process impairment in the body. However, on the other hand toxin can benefit human body.

"Toxin can be used as medical diagnosis and medicines," said Professor of the Department of Biological Sciences, National University of Singapore (NUS), Prof. R. Manjunatha Kini, in a public lecture at the Faculty of Biology UGM, Wednesday (26/10)

On that occasion, he delivered a presentation on the structure-function relationship of proteins: toxins in snake venom, a family of proteins phospholipase A2 (PLA2), serine proteases, waprin and vesprin. Kini said that in previous studies were mostly focusing on the level of toxicity, pathological symptoms, and antivenom. Therefore, he conducted research to assess the usefulness of toxins from the side. Research on the toxin can include the structure-function relationship of proteins and their mechanism of action for the benefit known as therapeutics agent.

"I started with the isolation, purification, sequencing and characterization of compounds in snake venom," he said.



There are several examples of novel toxins that have been successfully characterized by Kini. One of them is Ohanin compound isolated from King Cobra snake that attacks the central nervous system. Moreover, Candoxin which is derived from isolation of Weling snake that can cause the neuromuscular blockade, can return to normal conditions by the addition of neostigmine Anticholinesterase.

On the same occasion, Kini also informed an opportunity for students of the Faculty of Biology UGM to undertake further studies at NUS. He hopes that there will be more of UGM students who continue their studies and research in the Department of Biological Sciences NUS.

Related News

- [UGM Food Expert Earns Awards](#)
- [Indonesian Health Security System Not Yet Integrated](#)
- [Faculty of Biology UGM Welcomes Back Lecturers from Doctoral Studies](#)
- [GMC Health Center](#)
- [Health Affairs Decentralisation of Region Needs to be Optimised](#)