Environment

Rungnapa Tagun- Acceptance Speech

Title: The Effects of mixtures of pesticides, in use in Thailand, on the aquatic macrophyte *Lemna minor*

"First of all, I would to thank the Anglo-Thai Society and judging panel sponsor for selecting me as the winner of this award. Next, I would like to thank Prof. Alistair Boxall supervisor for the excellent supervision and support of my Ph.D study during four years, for his patience, motivation, enthusiasm, and immense knowledge. Also thank the Thai government for financial support. My research area is to assess the effects of four herbicides commonly used and imported in Thailand (atrazine, 2,4-D, alachlor, paraquat) to the aquatic plant *Lemna minor* under differing patterns of exposure (single-, mixture-, and sequential- exposure). The endpoint of interest was the growth rate of plants over time. This work has provided an understanding of how some of the major use pesticides in Thailand interact and how the effects of combinations of pesticides can be predicted. This work is very pioneering as most work to date on pesticide impacts have tended to explore effects of single substances and continuous exposures. By looking at mixtures and pulses.

Award presented by KhunYing Narisa Chakrabongse CEO of River Books

The results indicate that the use of the IA model could provide a conservative estimate of the risks of herbicide mixtures in the aquatic environment.
In term of sequential exposure, the model can be used to predict the effect of herbicides in low concentration, which is reasonable for the realistic aquatic environment that normally will be detected in low concentration to aquatic system. Thank you again for honouring me with this prestigious award".

Rungnapa Tagun