

Department of Biological Sciences
Seminar Announcement
(Biodiversity and Ecology Journal Club)



Nutritional Ecology of Generalist Predators



Wednesday, 19th May 2004
4.00pm - 5.00pm
DBS Conference Room

ALL ARE WELCOME!

Visitors may park at Carpark 10

See map <http://rmbn.nus.edu.sg/RMBR.JPG>

Host: Li Daiqin

About the Talk

The talk will summarize the results of research on the nutritional quality of insect prey for a suite of generalist insectivores. The latter include primarily spiders and carabid beetles, but comparative results are also available for harvestmen, staphylinid beetles and partridge chicks. Two insect prey groups have been studied in most detail: aphids and springtails (Collembola). So far all aphids studied have been low-quality food, whereas Collembola contains both high-quality and low-quality, even toxic species. Experiments have evaluated the effects of aphid and collembolan diets on predator life history parameters and behavioural means to avoid overeating of potentially toxic food. They have also addressed the question of genetic variation in tolerance to low-quality food and the possibility of predator adaptation to prey toxicity. The results are relevant for understanding the mechanisms of natural control of aphids by generalist predators in agricultural fields.

About the speaker

Dr. Søren Toft is an associate professor with the Department of Ecology and Genetics in Aarhus University, Denmark. He received his masters and PhD degrees from Aarhus University and his main line of research is focussed on the nutritional ecology of generalist arthropod predators. He is also interested in the ecology, life history and behaviour of spiders and conducts courses on basic invertebrate zoology and entomology, animal ecology and behaviour.