

## Research Progress: February 2008 – July 2008

### 1. $^1\text{H}$ NMR-based Metabolites Screening of Insect Pathogenic Fungi.

With  $^1\text{H}$  NMR spectra of >100 extracts from *Aschersonia* and *Hypocrella* species, we have analyzed the relation between species and secondary metabolites (chemotaxonomy). The result described below has been currently submitted for publication in *Mycological Research*.

### Hopane triterpenes as chemotaxonomic markers for the scale insect pathogens *Aschersonia* and *Hypocrella*

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#### ABSTRACT

The scale insect pathogens *Hypocrella* species and their *Aschersonia* anamorphs, collected at various locations in Thailand, were found to frequently produce hopane triterpenes zeorin ( $6\alpha,22$ -dihydroxyhopane), dustanin ( $15\alpha,22$ -dihydroxyhopane), and  $3\beta$ -acetoxy- $15\alpha,22$ -dihydroxyhopane, when cultured in a liquid medium under static conditions.