

## B15

### Screening and purification of insect crude drugs on blood coagulation and fibrinolytic activity

Mi Young Ahn, Kang Sun Ryu, Jin Won Kim and Yeong Shik Kim<sup>1</sup>

Dept. of Sericulture and Entomology, NIAST, Suwon, 441-100, Korea

<sup>1</sup>Natural Products Research Institute, Seoul National University, Seoul 151-747, Korea

The *in vitro* anticoagulant and fibrinolytic activities of crude extracts from insects were evaluated in order to find effective therapeutic drugs for the treatment of myocardial and cerebral thrombosis. We prepared three types of extracts (water, methanol and ethylacetate) from 28 insects for use as raw material for the activity assays. The fibrinolytic activity was tested using the fibrin plate method and the activated partial thromboplastin time and thrombin time were measured for blood clotting activity. In regards to the fibrinolytic system, water extracts of six kinds of insects displayed a remarkable level of activity with a plasmin-like action. The water extracts of Eupolyphaga, *Formica rufa*, Huechys, Praying mantis and etc. exhibited the activity.

These results suggest that crude drugs from insects are useful sources for the development of new drugs in blood coagulation and fibrinolysis. We are now studying to characterize the biologically active constituents of the extracts.