

# Field Trapping of *Chrysopa cognata* (Neuroptera: Chrysopidae) with Some Synthetic Chemicals in Korea

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*Chrysopa cognata* is known as an important source in aphid biological control. *C. cognata* adults have been reported to be attracted, mainly through laboratory experiments, to (-)-(1*R*,4*aS*,7*S*,7*aR*)-nepetalactol and (+)-(4*aS*,7*S*,7*aR*)-nepetalactone, sex pheromone components of aphids. Here we summarize field trapping data of the chrysopid to the two chemicals and their synthetic analogues.

Nepetalactol was found to be much more attractive to the insect in field tests than nepetalactone, although nepetalactone was also attractive in Y-tube olfactometer tests and elicited high response in EAG tests, as in the case of nepetalactol. And the neomatatabiol isomers synthesized, which are similar to nepetalactol in structure, also attracted male *C. cognata* in fields. *C. cognata* were caught in traps mainly during nights, especially from 7.30PM to 1.00AM in July and August in Suwon (a little south of 30 degree north in latitude), Korea. Female chrysopids were also reported to respond to the chemicals, but, surprisingly, only males were caught in traps throughout the trap experiment. Males showed behavior which seemed to chew the rubber septum impregnated with the chemicals. Besides this species a few individuals of two other species of *C. formosa* and *C. phyllochroma* were also caught in the traps baited with nepetalactol or nepetalactone and all of them were also males only.