
Poster Presentation

[PS02] ポスター発表(学生 B:コアタイム2)

Sat. Mar 30, 2024 12:30 PM - 1:30 PM Sakura (Student) (Sakura)

[PS02-36]Preliminary report of mating behavior and sex pheromone
of *Heterolocha aristonaria* (Lepidoptera: Geometridae)

○Tareq A. S. Abubaker¹, Hideshi Naka² (1. UGSAS, Tottori Univ., 2. FATU, Tottori Univ.)

Heterolocha aristonaria (Lepidoptera: Geometridae) is a widely distributed species throughout East Asia including Japan, China, and Korea. The larva feeds on Honeysuckle family leaves like *Lonicera japonica*. *H. aristonaria* females started calling on the 2nd day after emergence, and the maximum number of calls was observed on the 3rd day. The beginning of calls started at 9 hr after the start of the scotophase with a peak in 10 hr. On GC-EAD analysis, male antennae showed a weak and a strong peak against the crude extract of female sex pheromone. However, no compounds related to the two antennal responses were found in the following GC/MS analysis. To identify those two EAD-active compounds, the crude extract was fractionated on a florisil column, and then laboratory bioassay and GC-EAD analysis were performed on each fraction. Males were well attracted to the 0.3 female equivalent (FE) of crude extract in a wind tunnel, so we gave males a mixture of 0.3 FE of each fraction. When the Hx:EtOAc = 100:0 fraction was removed, the males' responses were significantly reduced. In addition, in GC-EAD analysis, male antennae showed a reproducible response only to the Hx:EtOAc = 100:0 fraction, which was in good agreement with that of the crude extract.