1-18. The Clearwing Moth Synanthedon bicingulata (Staudinger, 1887) (Lepidoptera, Sesiidae) in Korea

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Genus Synanthedon Hübner is one of the most large genus of Sesiidae and belongs to the tribe Synanthedonini Niculescu. More than 51 species of the genus are distributed from the Palearctic region at present. Of which four species, S. Hector (Butler), S. quercus (Butler), S. romanovi (Leech), and S. tenuis (Butler) are reported from Korea (Checklist, 1994) and it is very similar in the superficial appearance. The genus is characterized by the combination of the following characters: transparent areas of forewing(ATA, PTA, ETA) usually present; PTA extending to under discal spot (up to Cu₁); veins R₁ and R₂ of forewing very close, parallel or convergent; hindwing transparent; abdomen with large anal tuft in male. Male genitalia: crista sacculi straight, convex ventrally or absent; saccus usually shorter than one third of length of valva; scopula long, ratio of tegumen-uncus/scopula: 1.1-2.2; aedeagus with internal and often also external sclerites (cornuti) apically, usually shorter than three-quarters of length of valve.

In the present study, we have compared with the materials of Chinese species Synanthedon bicingulata (Staudinger) and Korean to Japanese species S. Hector (Butler). In the result of Korean species S. Hector (sensu Park, 1983) is considered to be a misidentification of S. bicingulata (Staudinger, 1887). S. bicingulata differs from S. hector by the following characters: anal rhomboid tuft; labial palpus black dorsally; hind tarsus black; sternites 6 and 7 black; apex of valve rounded; crista medialis of gnathos smaller, almost overlapping the elongate crista lateralis; crista sacculi very short, hook-shaped at tip.