1940]

# A SYNOPSIS OF THE GENUS ACERATASPIS (HYMENOPTERA, ICHNEUMONIDÆ)

## BY CHARLES D. MICHENER

### University of California, Berkeley

The genus *Acerataspis* was originally described from Japan. A second species has been found in Formosa, and in this paper a third is described from southern China. A redescription of the genus is here given, since the original characterization proves to be inadequate in the light of the species discovered since its publication.

### Acerataspis Uchida

## Acerataspis Uchida, 1934, Ins. Matsumurana, 9: 23 Cushman, 1937, Arb. u. morph. u. tax. Ent. Berlin-Dahlem, 4: 290

Cerataspis Uchida (nec Gray), 1934, Trans. Sapporo Nat. Hist. Soc., 13: 275

Moderate sized, coarsely punctate, black, with yellow facial markings and abdominal fasciæ. Head not broader than thorax: face longer than broad, evenly convex below the antennæ, without a facial shield; epistomal suture absent; antennal sockets close together, separated by a strong longitudinal keel, the lower end of which is continuous with the elevated, convex, lower part of the face; mandibles bidentate at apices: hypostomal carinæ not very high; no palpal segments swollen as in *Metopius*; eyes seen from the side broadest below the middle (at least in *sinensis*). Thorax short and high: sides of pronotum shining and impunctate. with longitudinal grooves; mesoscutum without parapsidal furrows: mesoscutellum with a basal, median, impunctate, longitudinally carinate, transverse, depressed area, behind which is an elevated area, the sides of which are margined. and the posterior lateral angles of which are produced posteriorly, as in *Metopius*. Propodeum short, its spiracles short oval, its surface incompletely but strongly areolated. Wings with numerous, rather long hairs (at least in *sinensis*); areolet of fore wing large, briefly petiolate or costal margin short; recurrent vein with a single fenestra, which is near its costal end. Legs rather slender, claws strongly pectinate, middle tibiæ with two apical spurs. *Abdomen* not petiolate, apical segments swollen and turned downward; spiracles of first segment round, slightly anterior to the middle of the segment, the dorsal profile of which is strongly angulate about the middle; first three or four abdominal terga with two or three conspicuous, longitudinal, middorsal, parallel or nearly parallel carinæ; segments two, three, and four broader than long; sixth tergite very large, bulbous, forming the rounded apex of the abdomen; ovipositor slightly exerted.

Genotype: *Cerataspis clavata* Uchida, by original designation.

#### Key to the species of Acerataspis

### Acerataspis clavata (Uchida)

Cerataspis clavata Uchida, 1934, Trans. Sapporo Nat. Hist. Soc., 13: 276

Acerataspis clavata Uchida, 1934, Ins. Matsumurana, 9: 23

Type from Hikosan, Kiushu, Japan, in the Entomological Institute of the Hokkaido Imperial University. The species is also known from Tosa, Shikoku, Japan.

### Acerataspis formosana Cushman

Acerataspis formosana Cushman, 1937, Arb. u. morph. u. tax. Ent. Berlin-Dahlem, 4: 291

1940]

Type from Suisharyo, Formosa, in the Deutsches Entomologisches Institut.

### Acerataspis sinensis Michener, n.sp.

Female: Length 9 mm. (with the apex of the abdomen *Head* rather small, black, pubescence dull turned down). white, upper three-fourths of area between anterior margin of clypeus and antennal sockets vellow, lower margin of this vellow area arcuate concave, inner ocular orbits narrowly brown, more broadly black toward upper part of vellow area. so that vellow does not reach ocular margins: keel between antennal sockets vellow. Face below antennal sockets coarsely and confluently punctured: rest of head with smaller punctures, for the most part separated by less than their diameters; ocelli large, distance between posterior pair greater than an ocellar diameter, slightly less than distance to eve margin: genæ convex, about one-half as wide as eve. Antennæ dark brown, lighter beneath than above; mandibles dark brown medially; palpi dark brown. Thorax black, pubescence dull white, a minute dull vellow spot below each tegula. inner margins of scutellar processes brown, tegulæ dark brown Thorax largely coarsely and closely punctate. lower lateral portions of pronotum impunctate, with about six longitudinal ridges: sternauli with punctures sparser than elsewhere on mesepisterna: posterior margins of mesepisterna and entire metapleura shining and nearly impunctate, the latter sclerite with a few small, scattered punctures above: basal depression of scutellum with three longitudinal carinæ: posterior processes of scutellum connected by a carina, the short median section of which is along the posterior margin of the scutellum: metanotum with a small, elevated. median area, margined on each side by an angulate carina: propodeum with a rather small basal median area, posterior to which is a broad area (see figure), completely separated from lateral apical areas. Fore legs dark brown, apices and anterior surfaces of femora vellow, and bases and anterior surfaces of tibiæ yellow; middle legs dark brown; hind legs black. Wings gravish as a result of numerous long hairs inserted on the nearly hyaline membrane; wing veins and stigma very dark brown; areolet not petiolate, but costally directed side very short. *Abdomen* with sterna yellow; terga one to three black, four orange yellow, the base black, the apical margin dark brown, five black with a subapical transverse, orange yellow band, six black. Pubescence of tergites one to four dull white, of following tergites black. Punctures of first three abdominal tergites coarse and approximate, of following tergites finer and more widely separated; third tergite nearly twice as broad as long, fourth slightly more than twice as broad as long; first three abdominal tergites with a pair of longitudinal, dorsal carinæ, parallel on first two tergites, slightly converging posteriorly on the third.



Fig. 1. Posterior dorsal view of propodeum of *Acerataspis sinensis* Michener.

Holotype female: Yim Na San, east Kwantung, south China, June 14, 1936 collected by Mr. J. Linsley Gressitt, on loan deposit to the California Academy of Sciences.

This species is easily distinguished from both of the previously described species of the genus by the presence of two instead of three longitudinal carinæ on the first three abdominal tergites. It differs further from *A. formosana* by the acarinate fourth tergite, the entirely black first three abdominal tergites, the largely yellow fourth, and the primarily black fifth tergite, and the black scutellum. It differs from *A. clavata*, in addition to the first character given, by the markedly different areolation of the propodeum and the nonpetiolate areolet. The color pattern is remarkably similar to that of *clavata*. The basal median portion of the propodeum is asymetrical in the holotype, as shown in the figure.



**The Scientific** World Journal











Anatomy Research International



Advances in Bioinformatics



Submit your manuscripts at www.hindawi.com



Biochemistry Research International



Genetics



International Journal of Genomics







Parasitology Research











Stem Cells International



Journal of Marine Biology



BioMed **Research International** 

