

**Some Ephialtinae, Xoridinae, Cremastinae, Metopiinae,  
Anomalinae, and Acaenitinae of Formosa,  
with Description of a New Species**

(Hymenoptera: Ichneumonidae)

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**Introduction**

The present article treats materials from Formosa, collected in 1986, 1987 and 1989 by Dr. K. Baba. It includes description of a new taxon, *viz.* 1 species of *Agrypon*, and notes on some other species.

All specimens, including type specimens of the new species described herein, are preserved in the collection of the Laboratory of Plant Pathology and Entomology, Kagoshima University, Kagoshima, Japan.

**Subfamily Ephialtinae**

***Xanthopimpla conica* Cushman**

*Xanthopimpla conica* Cushman, Ent. Mitt. 14: 45, 1925.

Specimen examined. 1♂, 14-viii-1987, Palin, Taoyuan Hsien, K. Baba leg.

Distribution: Formosa, Southeastern Asia, Sri Lanka, Java, and Borneo.

The present specimen agrees well with the Townes and Chiu's redescription<sup>6)</sup>, but it differs in having the following features: —

♂. Propodeum with median longitudinal carina absent on basal 1/2 of areola; lateral longitudinal carina absent on 1st and 2nd lateral areas. Ocellar area yellowish brown. Dark markings of body brown to dark brown. Markings of hind leg light brown.

***Xanthopimpla lepcha* Cameron**

*Xanthopimpla lepcha* Cameron, Mem. & Proc. Manchester Lit. Phil. Soc., 43(3), 163, 1899.

Specimen examined. 1♀, 12-viii-1987, Shunyangspa near Wushe, Kaohsiung Hsien, K. Baba leg.

Distribution. Formosa, China, Southeast Asia, Indonesia (Java; Sumatra), and India.

***Xanthopimpla punctata*** (Fabricius)

*Ichneumon punctatus* Fabricius, Species Insectum 1: 437, 1781.

Specimens examined. 4♂♂, 3-iv-1987, Lanyu Is. (Kotosho), Taitung Hsien, K. Baba leg.

Distribution. Formosa, China, Sri Lanka, Afghanistan to Molucca Is., Japan, Ryukyus, Mauritius, Philippines, and Sarawak.

***Theronia (Theronia) brachyura*** Gupta

*Theronia (Theronia) brachyura* Gupta, Pacific Ins. Monogr., 4: 36, 1962.

Specimen examined. 1♂, 1-viii-1989, Mt. Payunshan near Liukuei, South Formosa, K. Baba leg.

Distribution. Formosa and Hong Kong.

***Theronia (Theronia) zebra diluta*** Gupta

*Theronia (Theronia) zebra diluta* Gupta, Pacific Ins. Monogr., 4: 18, 1962.

Specimens examined. 1♀, 12-vi-1987, Mt. Kuantoushan, Nantou Hsien, K. Baba leg.; 1♀, 4-vi-1989, Tsaiteiku near Liukuei, Kaohsiung Hsien, K. Baba leg.

Distribution. Formosa, Hong Kong, China, Ryukyus, and Japan.

**Subfamily Xoridinae*****Xorides (Moerophora) immaculatus*** (Cushman)

*Xorides immaculatus* Cushman, Insecta Matsumurana 8: 4, 1933.

Specimen examined. 1♂, 31-vii-1989, Liukuei, Kaohsiung Hsien, K. Baba leg.

Distribution. Formosa.

**Subfamily Cremastinae*****Temelucha philippinensis*** Ashmead

*Temelucha philippinensis* Ashmead, Jour. N. Y. Ent. Soc. 12: 18, 1904.

Specimen examined. 1♂, 5-vi-1987, Lungluan Lake near Heng Chung, Southern Formosa, K. Baba leg.

Distribution. Formosa, China, Thailand, Malaysia, and Philippines.

## Subfamily Metopiinae

*Metopius (Ceratopius) dissectorius taiwanensis* Chiu

*Metopius (Ceratopius) dissectorius taiwanensis* Chiu, Bull. Taiwan Agr. Res. Inst. 20: 11, 1962.

Specimen examined. 1 ♀, 3-4-x-1986, Tienchi 2,100-2,200 m, Kaohsiung Hsien, K. Baba leg.  
Distribution. Formosa.

The present specimen agrees well with the original description of *taiwanensis*, but it differs from it in having the following features: —

♀. Maxillary and labial palpi entirely infuscate to black; apical part of scutellum narrowly tinged with dark brown; postscutellum yellow; 1st tergite entirely dark brown; 2nd tergite dark brown on about basal 5/6, yellow on about apical 1/6; 3rd tergite dark brown on about basal 5/9, yellow on apical 4/9; 4th tergite dark brown on about basal 1/2, yellow on about apical 1/2, the yellow area widely expanded near the base of its tergite on median area.

*Triclistus globulipes* (Desvignes)

*Exochus globulipes* Desvignes, Catal. Brit. Ichneumon 1856: 45, 1856.

Specimen examined. 1 ♀, 29-vi-1986, Neishan-Tinchi, 800-2,300m, Kaohsiung Hsien, K. Baba leg.

Distribution. Formosa, Japan, and Europe.

*Exochus oshimensis* Uchida

*Exochus oshimensis* Uchida, Jour. Fac. Agr. Hokkaido Imp. Univ. 25: 268, 1930.

Specimen examined. 1 ♂, 2-vii-1986, Toonah near Maoling, Kaohsiung Hsien, K. Baba leg.  
Distribution. Formosa and Japan.

The present specimen agrees well with the original description<sup>8)</sup> and Kusigemati's redescription<sup>3)</sup> of this species based on the Japanese and Formosan materials, but it differs from those in having the following features: —

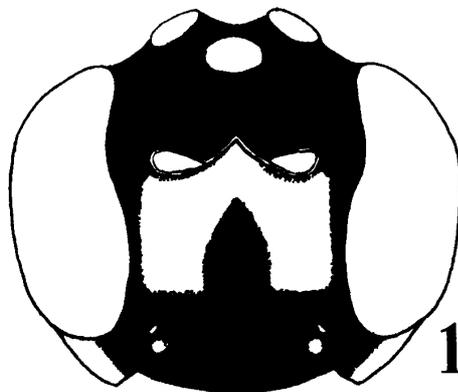


Fig. 1. Colour pattern of head in frontal view, *Exochus oshimensis* Uchida, ♂.

♂. Head with face having a pair of very small yellow markings just below clypeal foveae; yellow marking of face widely expanded (Fig. 1); malar space yellow on posterior half, black on anterior half; front and middle coxae pale yellow, dark brown at extreme base; hind coxa yellowish brown to infusate, paler apically, darker basally.

### Subfamily Anomalinae

#### *Therion rufomaculatum* (Uchida)

*Exochilum circumflexum* var. *rufomaculatum* Uchida, Jour. Fac. Agr. Hokkaido Imp. Univ. 21: 237, 1928.

Specimen examined. 1 ♀, 3-vi-1987, Yakuo, 2,700 m, South Formosa, K. Baba leg.  
Distribution. Formosa and China.

#### *Heteropelma amictum* (Fabricius)

*Ichneumon amictum* Fabricius, Systema Entomologiae, 1775: 341, 1775.

Specimens examined. 2 ♂♂, 6-vi-1987, Mt. Senpei near Liukuei, Kaohsiung Hsien, K. Baba leg.

Distribution. Formosa, China, Philippines, Indonesia, Burma, Nepal, India, Japan, and Europe.

#### *Agrypon facetum* Enderlein

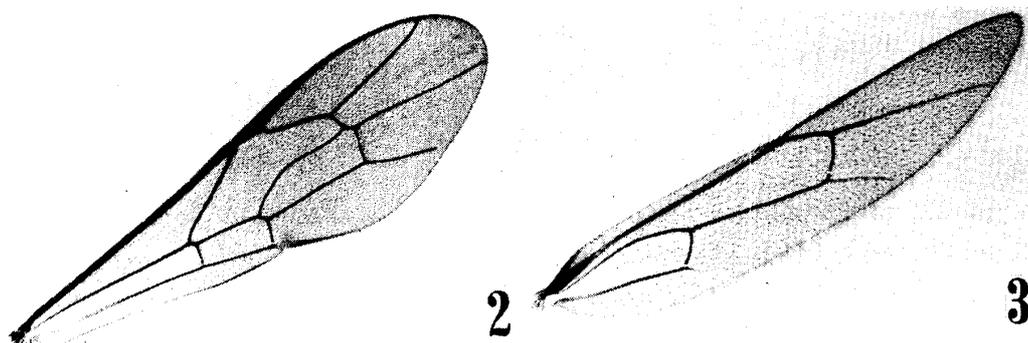
*Agrypon facetum* Enderlein, Stettiner Ent. Ztg., 82, 14, 1921

Specimen examined. 1 ♀, 2-viii-1989, Liukuei, Kaohsiung Hsien, K. Baba leg.  
Distribution. Formosa, Ryukyus, Hong Kong, Philippines, Indonesia, and Sumatra.

#### *Agrypon megahemicyclon* sp. nov.

♀. Face 1.3-1.4 times as wide as high at level of lower margin of antennal socket, finely and rather densely punctate, the punctures becoming sparser laterally; clypeus weakly convex, with very sparse and fine punctures, its apical margin rather strongly convex, without a median point; inner margin of eyes rather strongly convergent ventrad; eyes bare; malar space narrow, about 1/3 as long as basal width of mandible; mandible moderately stout, almost parallel-sided, with sparse hairs, the upper tooth about 1.5 times as long as the lower one; distance between lateral ocelli and eyes 1.7-1.8 times as long as diameter of an ocellus; temple weakly swollen, 1/3 as long as eye in lateral view, moderately densely punctate, bare along eye margin; frons weakly convex, rugoso-punctate, reticulate-rugose on median dorsal portion, weakly and rather sparsely punctate on lateral portion, with 2 longitudinal striae just behind antennal socket; vertex weakly and sparsely punctate; occipital carina strong and complete, its lower part weakly sinuate, and its lower end reaching base of mandible; yellow marking at top of eye large, semicircular. Flagellum with 35-39 segments; 1st flagellar segment 6.4-6.7 times as long as wide at apex; 2nd flagellar segment

about  $1/2$  as long as 1st one and 1.1-1.2 times as long as the 3rd. Pronotum with 8-10 vertical striae, and with a polished, finely and very sparsely punctate area on subdorsal portion; epomia distinct, sinuate, reaching dorsal margin of pronotum, its upper part curved forward; mesoscutum rugose on median portion and along notaulus, elsewhere strongly and densely punctate; notaulus distinct, replaced by rugae, reaching basal  $2/3$ - $3/4$  of mesoscutum; scutellum faintly concave, strongly reticulate-rugose, its lateral carina reaching apex; lower corner of propleurum strongly bending backward and separated with a weak transverse carina; mesopleurum and speculum vertically striate-punctate; prepectal carina weak but distinct, its upper end close to anterior margin of mesopleurum and ending at lower  $1/2$  of hind edge of pronotum; mesosternum very finely and rather densely punctate; postpectal carina complete, the median part rising as a high lamella; metapleurum strongly reticulate-rugose. Propodeum strongly reticulate-rugose; propodeal spiracle small, long oval; apex of propodeum a cylindric neck that reaches about to apex of hind coxa; prolongation of propodeum with several transverse striae, the striae weaker apically. Wings (Figs. 2 and 3) with nervulus postfurcal by about  $1/3$  of its own length; portion of cubitus between intercubitus and 2nd recurrent vein about  $1/2$ - $2/3$  as long as intercubitus; postnervulus intercepted at its upper  $1/6$ ; 2nd recurrent vein vertical to weakly reclivous; nervellus not intercepted; discoidella absent; brachiella present on about basal  $1/2$ . Leg with hind femur 5.4-5.5 times as long as wide in lateral view; hind tibia 8.0 times as long as wide at apex including hairs; longer spur of hind tibia 1.7-1.9 times as long as the shorter spur; hind tarsus not swollen; basitarsus of hind leg 11.4-11.5 times as long as wide at apex, 2.6-2.9 times as long as the 2nd hind, and a little shorter than the 2nd to 5th segments together except claws; front coxa weakly convex below, its under side partly margined by a sharp carina, the carina fading out apically; all tarsal claws rather weakly pectinate. Abdomen with 1st tergite 8.5-8.8 times as long as wide at apex; postpetiole 1.9-2.1 times as long as its basal width; laterodorsal side of 1st tergite edged on about  $1/2$  of petiole; 2nd tergite 1.1 times as long as the 1st and 1.8 times as long as the 3rd; epipleurum of 2nd tergite narrow, and separated by a crease; ovipositor sheath 1.1-1.2 times as long as apical depth of abdomen.



Figs. 2 and 3. Fore(2) and hind(3) wings, *Agrypon megahemicyclon* sp. nov., ♀.

Black. Face, clypeus, mandible except for blackish apical teeth, about lower  $1/3$  of temple, malar space, palpi, marking at top of eye, and lower corner of frons, yellow. Scape and pedicel light yellowish brown; flagellum reddish brown basally, infusate apically. Propleurum more or less tinged with dark reddish brown. Tegula light yellowish brown. Prolongation of propodeum reddish brown. Front leg with coxa and trochanter yellow; femur, tibia and tarsus, yellow to light yellowish brown. Middle leg a little darker than the front one. Hind leg ferruginous; blackish

on about apical 2/7 of tibia. Abdomen ferrugineous; dorsal side of 2nd tergite on about apical 1/2 and dorsal side of 3rd tergite except for basal part blackish; 5th and 7th tergites except for ventral part blackish. Ovipositor sheath reddish brown. Wings weakly tinged with yellowish brown.

Length: Body 10.1-13.1 mm., forewing 5.2-6.7 mm.

♂. Unknown.

Holotype (♀): Chialoshui near Kenting, Kaohsiung Hsien, 16-ii-1987, K. Baba leg. Paratype, 1♀, 19-ii-1987, Liukuei, Kaohsiung Hsien, K. Baba leg.

Host. Unknown.

Distribution. Formosa.

This species is readily distinguished from any other congeneric Formosan<sup>1,4,5,7,9,10)</sup> and Chinese<sup>11,12)</sup> species by the rather strongly convex clypeus without an apicomedian tooth of the clypeus, the long prolongation of the propodeum, the antennae which is clearly shorter than the body, and the long ovipositor sheath.

### Subfamily Acaenitinae

#### *Ishigakia exetasea* Uchida

*Ishigakia exetasea* Uchida, Jour. Fac. Agr. Hokkaido Imp. Univ. 25: 33, 1928.

Specimens examined. 1♀, 10-vi-1987, Meifon 2,350 m near Hohuanshan, Nantou Hsien, K. Baba leg. 2♂♂, 12-vi-1987, Mt. Kuantoushan, Nantou Hsien, K. Baba leg.

Distribution. Formosa.

#### *Yezoceryx purpurata* (Sonan)

*Sphimedia purpurata* Sonan, Trans. Nat. Hist. Soc. Formosa, 26: 250, 1936.

Specimen examined. 1♀, 14-viii-1987, Palin, Taoyuan Hsien, K. Baba leg.

Distribution. Formosa.

### Summary

Five species of Ephialtinae belonging to 2 genera, 1 species of Xoridinae, 1 species of Cremastinae, 3 species of Metopiinae belonging to 3 genera, 4 species of Anomalinae belonging to 3 genera, and 2 species of Acaenitinae belonging to 2 genera are reported from Formosa. Of those, 1 species, *Agrypon megahemicyclon*, is new to science.

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