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# Four Species of the Subfamilies Tryphoninae and Xoridinae (Hymenoptera: Ichneumonidae) New to South Korea

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## INTRODUCTION.

The family Ichneumonidae belongs to the order Hymenoptera, class Insecta, and includes over 60,000 species in 39 subfamilies. They occurs around the world and this family is parasitoids of immature holometabolous insects, Coleoptera, Lepidoptera, Diptera, Hymenoptera, Trichoptera ect.. Tryphoninae Shuckard, 1840 is a moderately medium-sized subfamily of Ichneumonidae, cosmopolitan subfamily more than 1,293 described species in 57 extant genera (Yu et al., 2016; Broad et al., 2018). Most species of Tryphoninae are known as a ectoparasitoid of Lepidoptera. The second subfamily Xoridinae Shuckard, 1840 is a small group, includes more than 225 valid species in 4 genera (Yu et al., 2016). Also, they are known as a ectoparasitoid wasps. Among them, we report two species of Tryphoninae and two species of Xoridinae from South Korea.

In this study, diagnoses and photographs of four newly recorded species, *Orthomiscus uncinatus* (Holmgren, 1857), *Thymariscus tener* (Gravenhorst, 1829), *Odontocolon rufum* (Uchida, 1928), and *Xorides iwatusensis* (Uchida, 1928), from South Korea are provided.

## Taxonomy

**Order Hymenoptera Linnaeus, 1758**  
**Family Ichneumonidae Latreille, 1802**  
**Subfamily Xoridinae Shuckard, 1840**

### *Odontocolon rufum* (Uchida, 1928)



#### Diagnosis.

Ovipositor long, longer than whole body(head, mesosoma and metasoma). Malar space 0.8 times as long as basal width of mandible; temple 1.43 times as wide as eye in lateral view. Frons with vertical ridge between antennal sockets; occipital carina present; lower part of pronotum glabrous, tegula brown. Propodeal spiracle oval, connected pleural carina; median longitudinal carinae weak but distinct; lateral and pleural carina strong; basal area, areola and petiolar areas not separated. Fore leg brown, mid and hind legs dark brown to black. Metasoma dark reddish brown.

#### Diagnosis.

Generally dorsal part of body brown, ventral part of body yellow. Face yellow, polished; clypeal margin truncate; temple 1.8 times as wide as eye in lateral view. Antenna with 26 flagellomeres. Mesoscutum polished, with notauli; pronotum with epomia, upper half of this brown, lower half of pronotum yellow. Mesopleuron upper area brown, lower part of mesopleuron yellow. Scutellum glabrous, with only lateral carina in basal part; postscutellum yellow. Propodeal spiracle circle, reaching pleural carina. Hind wing with seven distal hamuli; fore wing with small areolet with petiole.

**Order Hymenoptera Linnaeus, 1758**  
**Family Ichneumonidae Latreille, 1802**  
**Subfamily Tryphoninae Shuckard, 1840**

### *Orthomiscus uncinatus* (Holmgren, 1857)



### *Thymariscus tener* (Gravenhorst, 1829)



#### Diagnosis.

Face black, clypeus reddish brown to yellow; inner orbits convergent ventrally. Antenna with 33 flagellomeres, flagellar 9-14 with white bands. Malar space 4.0 times as long as basal width of mandible. Mandible, palpi pale yellow; occipital carina complete. Mesoscutum with strong notauli, propodeum with distinct median longitudinal, lateral and pleural carinae. Areola and petiolar area not separate, spiracle touching to pleural carina. Fore wing without areolet, hind wing with five distal hamuli. Ovipositor as long as hind tibia. Hind tarsal claw simple. Metasomal tergite 1 and 2 with longitudinal striae.

### *Xorides iwatusensis* (Uchida, 1928)



#### Diagnosis.

Generally black. Face black, densely punctate and convex; clypeus flat; between antennal sockets with vertical ridge. Malar space 0.6 times as long as basal width of mandible; occipital carina distinct. Mesoscutum with notauli; mesoscutum to propodeum closely and reticulately punctate. Propodeum with confused median longitudinal carinae at anterior part; tegula white. Fore and mid coxae reddish brown, with white spot in outer area. Tergite 3 to tergite 7 with white narrow lines apically. Hind wing with seven distal hamuli; fore wing without areolet.