

## ***Ancyrona diversa* New to Korea (Coleoptera: Cleroidea: Trogossitidae), with a Key to the Palaearctic Species of the Genus**

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### **ABSTRACT**

The family Trogossitidae Latreille occurs worldwide, including some Pacific islands. The family contains about 50 genera and 600 described species, and the group was recently classified by Kolibáč into three subfamilies, Lophocaterinae, Peltinae and Trogossitinae. Among the lophocaterine genera, a genus *Ancyrona* Reitter includes 62 species in most parts of the world except the Nearctic region, and is divided into five informal species groups by Kolibáč. In this study, the genus *Ancyrona* and its a single species, *A. diversa* (Pic), is newly reported in the Korean fauna. A diagnosis, habitus photographs, and illustrations of female diagnostic characters are provided, with a key to Palaearctic species of the genus *Ancyrona*.

**Keywords:** Coleoptera, Cleroidea, Trogossitidae, *Ancyrona diversa*, Korea

### **INTRODUCTION**

The genus *Ancyrona* Reitter, 1876 includes 62 species worldwide (Kolibáč, 2013; Yoshitomi and Asakawa, 2018). In the Palaearctic region, seven species are distributed in Japan and one in Russian Far East (Kolibáč, 2013; Yoshitomi and Asakawa, 2018). Up to the present, *Ancyrona marginata* is the only species recorded in the Korean Peninsula. Members of this genus have been known to be collected from dry branches or on fallen timber, where they hunt for other insects (Kolibáč, 2013).

While working on diversity of Korean beetles, the genus *Ancyrona* and one species of the genus, *A. diversa* (Pic, 1921), are identified for the first time in the Korean Peninsula. We present a habitus photograph, diagnosis and illustrations of diagnostic characters along with a key to Palaearctic species of *Ancyrona*.

### **MATERIALS AND METHODS**

All two Korean specimens were collected from under bark of *Quercus* sp. and one of which is deposited in the National

Institute of Biological Resources (NIBR), Incheon, Korea (specimen number EOWQIN0000013458).

### **SYSTEMATIC ACCOUNTS**

Order Coleoptera Linnaeus, 1758  
Family Trogossitidae Latreille, 1802  
Subfamily Lophocaterinae Crowson, 1964  
Tribe Ancyronini Kolibáč, 2006

#### **Genus *Ancyrona* Reitter, 1876**

*Ancyrona* Reitter, 1876: 51. Type species. *Ancyrona lewisi* Reitter, 1876.

See Kolibáč (2013) for the detailed synonymy

**Diagnosis.** Body more or less flattened; head quite prognathous; gular sutures narrow, subparallel at apex; eyes large and prominent laterally; antenna 10-articled; antennal club slightly asymmetrical, sensorial fields absent; labrum free; lacinia with hooked pigmented spurs, not fused mediostipes; tarsal formula 5-5-5; tegmen open laterally or ventrally; coxistae with irregular pubescence at apex (Kolibáč, 2007, 2013).

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**Distribution.** Worldwide (except the Nearctic region).

**Remarks.** *Ancyrona haroldi* Reitter and *A. lewisi* Reitter have been suspected and treated by several researchers as the same species (Miyatake, 1985; Yoshitomi and Asakawa, 2018), but have not yet been formally treated as a synonym. Therefore, the both species are included in this key.

**Key to Palearctic species of the genus *Ancyrona* Reitter**

1. Dorsal surface matt, with color pattern formed by scales or rigid setae..... 2
  - Dorsal surface glossy and unicolor, with long and simple pubescence..... 4
2. Body broad and circular, less than 1.4 times as long as wide; pronotum about 5.0 times as long as elytra; known only from Japan..... *Ancyrona shibatai*
  - Body oval, more than 1.6 times as long as wide; pronotum about 3.0 times as long as elytra..... 3
3. Body fairly straight on the side; known only from Japan..... *A. haroldi*
  - Body slightly curved on the side; known only from Japan..... *A. lewisi*
4. Body with relatively large punctures on dorsal surface; lateral margin of pronotum and elytra without serration, elytra widest near middle, convex apically..... 5
  - Body with small punctures on dorsal surface; lateral margin of pronotum and elytra with minute serration, elytra widest in apical 1/3, broadly round apically..... 6
5. Body length 6.5–7.3 mm, dorsal surface with inconspicuous and short pubescence; postero-lateral margins of pronotum distinctly angled; known only from Japan..... *A. higonia*
  - Body length 3.5–4.8 mm, dorsal surface with conspicuous and long pubescence; postero-lateral margins of pronotum slightly angled; known from Japan and Taiwan..... *A. marginata*
6. Body relatively elongate, dorsal surface with conspicuous and long pubescence; anterior margin of pronotum distinctly emarginate; known from Korea and Russian Far East..... *A. diversa*
  - Body relatively broad, dorsal surface with inconspicuous and short pubescence; anterior margin of pronotum slightly emarginate; known from Japan and Europe (Bulgaria, Hungary, Slovakia)..... *A. japonica*

<sup>1</sup>\* *Ancyrona diversa* (Pic, 1921) (Figs. 1, 2)

*Ostoma diversa* Pic, 1921: 1.

*Ancyrona diversa*: Kolibáč, 1993: 17.

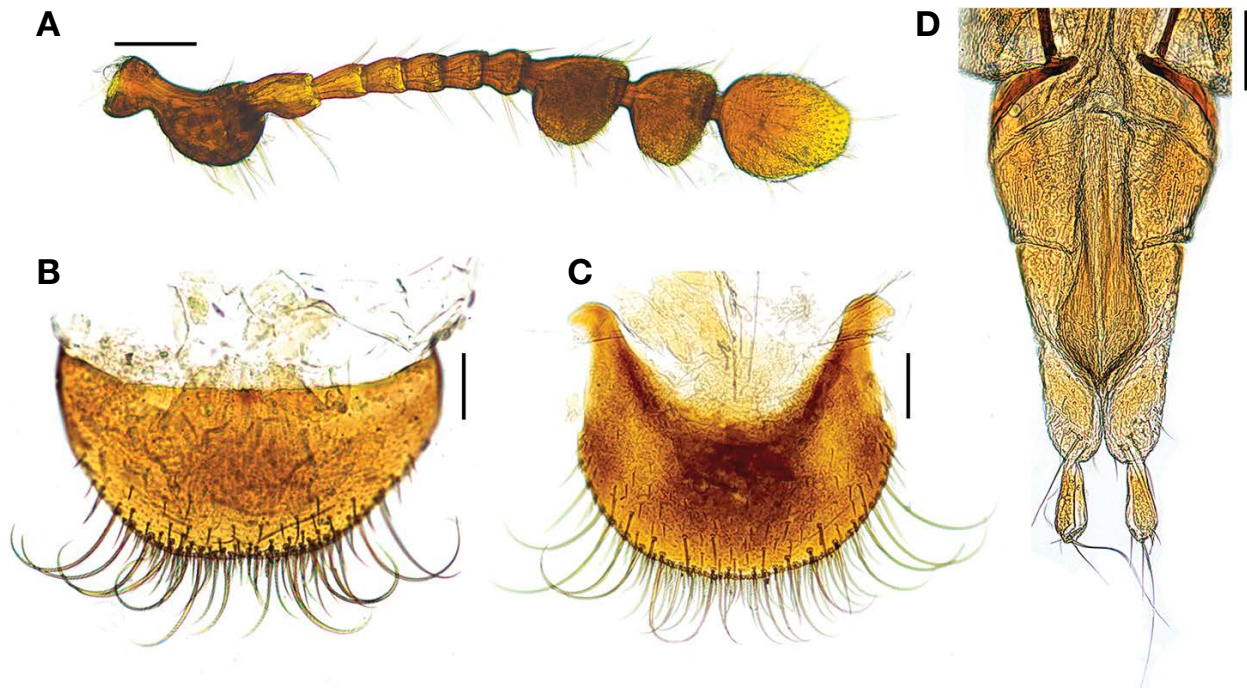
See Kolibáč (2013) for the detailed synonymy

**Material examined.** 2♀♀, Korea: Gyeonggi-do: Paju-si, Gwangtan-myeon, Yeongjang-ri, 126°54'57.56"N, 37°45'21.74"E, 258 m, 23 Jun 2012, Lee SG, under bark of *Quercus* sp.

**Diagnosis (female).** Length about 4.5 mm; body (Fig. 1) slightly elongate, about twice as long as wide; dorsal surface dark brown with long and simple pubescence, paler color along lateral margin of pronotum and elytra; antennae, mouth parts and legs paler brown. Head slightly transverse, 1.25–1.30 times as wide as long; distance between eyes slightly shorter than antennal length. Antennomeres 1–3 elongate, 1 large and swollen, 2 distinctly longer and wider than 3, 4–7 quadrate to subquadrate, 7 slightly transverse, 8–10 distinctly clubbed and larger than 1, 8 about 1.30 times wider than long, 9 about 1.45 times wider than long, 10 about 1.2 times wider than long (Fig. 1A). Pronotum transversely triangular, 2.30–2.55 times as wide as long, widest at base, slightly narrower than elytral width; basal margin almost straight; apical margin slightly emarginate; lateral margins depressed and explanate, with minute serra-



**Fig. 1.** Habitus of *Ancyrona diversa* (dorsal aspect). Scale bar = 1.0 mm.



**Fig. 2.** Diagnostic charaters of *Ancyrona diversa* (female). A, Antenna; B, Sternite VIII (ventral aspect); C, Pygidium (ventral aspect); D, Ovipositor (ventral aspect). Scale bars: A–D=0.1 mm.

tion. Procoxal cavities open posteriorly; prosternal process complete and widen at apex. Mesocoxal cavities open laterally; mesoventral process elongate, distinctly longer than metaventral process. Elytron about 2.80 times as long as wide, widest at apical 1/3; surface with punctures arranged in longitudinal striae and decumbent pubescence; outer margins depressed and explanate, with minute serration. Posterior margin of pygidium convex and round (Fig. 1C); sternite VIII slightly convex, posterior margin subtruncate (Fig. 1B). Ovipositor as in Fig. 1D.

**Distribution.** Korea (new record) and Russian Far East.

**Remarks.** This species is similar to *A. japonica* (Reitter), but can be distinguished by the characters provided in the key and different shape and structure of genitalia.

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## CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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